International Science Programme (ISP)
Annual report 2025

Appendices



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Cover photo: Myanmar MSc student Ms Wine Htet Soe on internship training on fabrication of perovskite solar cells at Southern University of Science and Technology, China, from March to July 2025 (IPPS MYA:01).

Appendix 1: ISP´s IMPACT

1.1 Gender equality

Gender activities for 2025 are listed country wise.

Bangladesh

The gender balance among the Board of ANRAP (60% Female and 40% male) remains consistent compared to previous years. However, the participation of women in ANRAP regional seminar and other programmes has shown an upward trend, reaching 60% in 2025. The gender balance in ANRAP activities is actually higher than in different other scientific organisations of Bangladesh. A recent report of University Grant Commission (published in 2024) says that nearly 49% female students enrolled in the undergraduate programmes in the public universities of Bangladesh. The Ministry of Education of Bangladesh reported that gender balance in primary, secondary and higher secondary education is even better than that of tertiary level education. (IPICS ANRAP)

ANRAP is trying its best to have more female members in all its activities whenever there is a possibility. ANRAP also takes necessary initiative for accommodation of female participants who do not reside in Dhaka city during the ANRAP seminar & workshop or training period. (IPICS ANRAP)

Although NITUB generally does not waive training fees for its training programs, for applicants paying training fees from his/her personal money, NITUB considers a partial waiver of the training fee, which, when possible, applies especially for female applicants. (IPICS NITUB)

In 2025, the research group implemented gender equality measures in line with institutional and ISP principles, ensuring equal access to research opportunities, supervision, and resources for all students. Female students were encouraged to fully participate in laboratory work, data analysis, and academic activities. To address practical needs and support academic continuity, laptop facilities were provided to female students when required. These measures aimed to reduce structural barriers and promote an inclusive and supportive research environment. (IPICS BAN:05)

The BAN:02/2 research group demonstrates a steadfast commitment to gender inclusivity in STEM, ensuring that female students are given special consideration at every level. Even under resource constraints, no female student has ever been denied the opportunity to work with the group. A review of student enrollment and degree completion within the BAN:02/2 programme reveals a consistently strong and encouraging representation of female participants across all academic levels. To date, a total of 35 students have successfully been awarded their degrees under the program. Among them, 12 are female and 23 are male, resulting in a male-to-female ratio of approximately 1.92:1. While this indicates a higher number of male graduates, the continued presence of female students at this level remains a positive indicator of gender participation. (IPPS BAN:02/2)

Data from the BAN:02/2 program indicate a drop-out rate of under 10%. Of particular note is the lower drop-out rate among female students—an encouraging indicator of gender-inclusive support and program effectiveness. (IPPS BAN:02/2)

Currently, the programme supports 35 ongoing students, comprising 13 female and 22 male researchers. This corresponds to a male-to-female ratio of 1.69:1, reflecting sustained female engagement at the master's or equivalent level. Notably, at the doctoral level, gender parity has been achieved in 2025. Among the 8 ongoing PhD students, there is an equal split—4 females and 4 males—resulting in a perfect 1:1 male-to-female ratio. This is a significant and encouraging milestone, demonstrating that female researchers are actively pursuing and sustaining advanced research careers within the program. To further support female participation, the female students are preferentially supported with the ISP funds

by providing essential chemicals, consumables, and logistical support for their research activities. (IPPS BAN:02/2)

Beyond academic activities, members of the group actively engage in social platforms promoting women in science and engineering. Dr. S. M. Hoque was invited as a Panel Discussant at the workshop "*SheSTEM Conclave: Bridging Gaps, Building Futures*" held on June 23, 2025, organised by Aspire to Innovation (a2i) programme, ICT Division, Government of Bangladesh, in partnership with the Embassy of Norway. (IPPS BAN:02/2)

Dr. Rimi Rashid, serving as a Member of the Executive Committee, Women Engineers Chapter, The Institution of Engineers Bangladesh, participated as a Moderator and Panel discussant in the day long program, "*Empowering Women Engineers: Overcoming Barriers and Shaping the Future of Bangladesh*". This kind of concerted efforts—ranging from direct academic support to high-level advocacy—underscore the group's unwavering dedication to achieving gender parity in STEM education and research, both within the institution and in society. (IPPS BAN:02/2)

Recognising that geographical and economic barriers often hinder access to quality research opportunities, the group proactively utilises IPPS funding to provide conveyance support for female students residing outside Dhaka, as well as those from economically challenged backgrounds. This assistance ensures that financial or logistical constraints do not become obstacles to their continued participation and growth in scientific research. Beyond material support, the group places strong emphasis on creating a congenial and respectful research culture—one where female students can work alongside male scientists and peers in a professional, collaborative, and harassment-free atmosphere. This inclusive environment has directly contributed to a steady increase in the number of female researchers within the group. The growing presence of women in the laboratory, engaged in meaningful scientific inquiry alongside their male counterparts, stands as a testament to the group's successful efforts in normalising and advancing gender integration in STEM. Through a combination of targeted financial support, a nurturing institutional culture, and visible mentorship, BAN:02/2 continues to champion the cause of gender equity, ensuring that female students are not only participants but active contributors to the scientific enterprise. (IPPS BAN:02/2)

Gender mainstreaming was integrated into our activities by ensuring equitable participation in training, research involvement, and dissemination efforts. (IPPS BAN:04)

Among the staff, female representation remains relatively low and unchanged compared to the previous year. Recruitment of faculty members in the department is conducted through institutional processes and is therefore beyond the direct control of our research group. However, in recent years, several talented female graduates have completed their studies in this field, and they may be considered for faculty positions in the near future, which could contribute to improved gender balance. In recruiting research staff, particularly research fellows engaged in field studies, we have actively emphasised the inclusion of female researchers. Nevertheless, due to funding constraints, we were required to reduce the number of research fellows. This reduction limited our ability to make significant improvements in gender balance at the staff level during the reporting period. (IPPS BAN:04)

Traditionally, the enrollment of female students in the Master's program has been relatively low, with some fluctuations in recent years. The group is actively working to attract and encourage talented women to pursue Master's and PhD programmes in this field. In 2025, of the nine students who successfully completed their Master's degrees, five were female. Among the 13 students who newly enrolled in the Master's program in 2025, four are female. An encouraging trend is observed in the ongoing PhD and MPhil programs, where female representation is comparatively higher. Currently, five out of six students enrolled in these programs are female. This reflects our personalised and inclusive approach in selecting candidates during PhD admissions, where particular attention has been given to encouraging and supporting qualified female researchers. (IPPS BAN:04)

In 2025, we provided a small financial support from the ISP grant to three female Master's students who were facing difficulties in continuing their thesis work. With this support, all three students successfully completed their Master's degrees. (IPPS BAN:04)

The group has improved the facilities in the female common room and nursing room to provide a more supportive and comfortable environment for female students and researchers. Of the three female Master's students who were facing financial hardship while carrying out their thesis research, were provided with financial support. With this assistance, all three successfully completed their degrees. (IPPS BAN:04)

This shift towards a more balanced representation is a direct result of our group's commitment to providing an inclusive and supportive environment for all researchers. By reaching parity (50% female and 50% male), we have fostered a more diverse academic dialogue, which has positively impacted our collaborative spirit and research output. (IPPS BAN:05)

Bolivia

The gender balance in the group has remained similar to previous years, with a higher proportion of female students and researchers. This pattern continued even as we recruited students from many different disciplines, such as Chemical and Environmental Engineering, and even when we opened calls for applications countrywide. We do not exclude male participation, but we also do not actively promote it to achieve a more even gender balance, since we recognise that women often face more barriers when pursuing scientific careers after graduation, so we are pleased that our lab is female-skewed. For this reason, we aim to maintain a supportive and inclusive environment that encourages women to stay involved in research over the long term. We remain committed to promoting their participation while keeping the group open to all interested students. (IPICS BOL:01)

We ensured consistent female representation in our activities, especially in science communication initiatives such as the podcast and the "Ciencia Express" sessions, where female researchers were frequently invited to present their work and share their experiences. In addition, we produced a podcast episode specifically focused on women in science, addressing the challenges they face and the importance of supporting their scientific careers. (IPICS BOL:01)

Burkina Faso

Among the current active members of the network, 23 out of 60 staff members are women, corresponding to 38% of the staff. The ratio between the number of male students and females' students at Master and PhD level between 2024 and 2025 is fluctuating from one year to another. Interestingly, at MSc level the number of female students is above 50% in both years, see table below).

	MSc graduated students in 2024	MSc graduated students in 2025
Number of students	22	20
Number of women	12	11
% of women	54,55%	55%
	PhD graduated in 2024	PhD graduated in 2025
Number of students	19	23
Number of women	09	6
% of women	47,37%	26%

(IPICS RABiotech)

The coordinating institution of the network, i.e University Joseph Ki-Zerbo (UJKZ) has strategy for gender balance in science. For instance, the university has an Association of Women in Science lead by Dr

Monique OUATTARA and has also hosted, since 2002, an UNESCO chair for Gender, Science, Society and Sustainable Development. The experience of the association is used to ensure gender balance. In Burkina Faso, as well as in many RABiotech member universities, women scientists have joined the caucus of African Women in Science, which is a lobby group for affirmative action. At UJKZ, admission cut-off points for female students is lower than for male students, thus encouraging the women gender. Female students are given preference for housing on campus, where the ladies halls of residence are more than for the men. There is a staff recruitment policy of either gender, thus increasing the positions occupied by women. (IPICS RABiotech)

Since its creation in 2002, the RABiotech placed special emphasis on the recruitment of women in its training program to improve women at Master and PhD level in biotechnological sciences. To succeed this policy, we have granted certain favors to female students in terms of material support for their study, laptops, and participation to symposiums in Africa and in Europe. (IPICS RABiotech)

In the management of the network for 2025-2027, Prof Ramatou SIDIKOU from the University Abdou Moumouni of Niger, and Dr Laurencia OUATTARA/SONGRE from National Research Center of Burkina Faso (DTA-IRSAT-CNRST) will be responsible for gender issues. In addition, Prof Kinyua from Eldoret University is a new member of RABiotech endeavors to mentor female students and to share the experience of English-speaking countries. **Interestingly, appointed in 2025, Prof Ramatou SIDIKOU is currently the Ministry of Population, Social Action and National Solidarity of Niger.** (IPICS RABiotech)

The network organised the ANFEC Outreach at IUPAC Global Women's Breakfast 2026 and the Society of Environmental Toxicology and Chemistry (SETAC) Global Award (14 February 2025). The goal of this engagement was to connect ANFEC's research on food and environmental contaminants with global initiatives in responsible chemistry and sustainable environmental management. As a Member of the SETAC Global Award Committee and Board Member of SETAC Asia-Pacific, Prof. Mohammad Shoeb contributed to strategic discussions on environmental toxicology. He also participated in IUPAC leadership meetings to finalise the theme of the IUPAC Global Women's Breakfast 2026 and support the implementation of the IUPAC Guiding Principles of Responsible Chemistry. This involvement enhances ANFEC's international visibility, aligns its research with global standards, and strengthens opportunities for collaboration and policy-relevant impact. (IPICS ANFEC)

Capacity development for young doctors (early career researchers), PhD and master students is an important goal of the group and we kept training them in 2025. Three masters' students in organic chemistry (two females and one male) were under the supervision of the group leader. The females will defend their master thesis in 2026 and the male who was starting his master will defend in 2027. However, the new PhD student (female) does not yet have financial support, which does not allow her to fully dedicate herself to her research. Securing financial support for her remains a challenge that we must address. (IPICS BUF:01)

Cambodia

The Cambodian Chemical Society (CCS) does not have problem with gender both in the staff and the members of the society, where men and women are equaly represented. (IPICS CCS)

East Africa

The network aims to attract talented young scientists with a gender equity distribution to train and work in their respective countries, to solicit resources for carrying out the network's activities, to provide an avenue for international collaboration, to promote joint research ventures and sharing of critical research facilities, as well as promoting research results dissemination. For the staff, though, the female representation in the network is still very low. However, a slight improvement in female students' enrolment is noted in different nodes of the network. This is due to different supportive activities, including affirmative action in awarding of scholarships, sensitisation and mentoring. (IPPS MSSEESA)

Implementation of a Mathematics Camp (MATHCAMP) designed to nurture talent, build confidence, and provide structured mentorship for students, with a strong emphasis on supporting girls in mathematics. The camp created an engaging and inclusive learning environment where participants explored problem-solving, critical thinking, and collaborative learning beyond the traditional classroom. Through a combination of interactive sessions, guided instruction, and mentorship from experienced educators and role models, the camp helped demystify mathematics and inspired greater interest in STEM pathways. It also provided a supportive space for girls to develop self-confidence, strengthen their academic abilities, and envision future opportunities in science-related careers. (ISP EANWoBAS)

Ethiopia

In 2025, the primary gender-related support within our department was the continued participation of the sole female MSc candidate in the university's female scholarship program, which was originally established to address gender imbalance among graduate students and to enhance female participation in advanced studies. This initiative directly targets the underrepresentation of women at the postgraduate level by providing financial support that facilitates retention and progression.

(IPICS ETH:01)

Although notable progress had been observed in female representation at the undergraduate level in previous years, the 2025/26 academic year has shown no improvement in female enrollment in the MSc program. A slight reduction in the proportion of female candidates has also been recorded in the PhD program during the same period. Our research group's strategy to improve gender balance builds on existing institutional and national initiatives that have already contributed to increased female participation in higher education. The female scholarship scheme introduced by Addis Ababa University has been instrumental in encouraging women to enroll in MSc programs, while the Ministry of Education's policy of prioritizing female applicants in public higher education institutions has also yielded positive outcomes. These measures have led to a noticeable rise in female enrollment within the College of Natural and Computational Sciences. Despite improvements at the institutional level, achieving gender balance within our research group remains challenging. One contributing factor is the tendency of many MSc candidates, including female students, to prefer analytical chemistry, largely due to its perceived stronger employment prospects in the current national economic context. As industries increasingly demand analytical expertise, students often view this specialization as offering more immediate career opportunities, which limits the pool of female candidates interested in organic and physical chemistry, where our research group is primarily engaged. To address this imbalance, our strategy focuses on understanding and responding to the factors that influence specialization choices among female students. This includes examining how employment prospects, career progression opportunities, personal interests, and broader societal expectations shape their academic decisions. By gaining deeper insight into these drivers, we aim to design more targeted and responsive recruitment and support mechanisms. Planned actions include raising awareness of career opportunities in organic and physical chemistry through seminars, career-oriented workshops, and the dissemination of success stories of alumni working in diverse chemistry fields. We also intend to strengthen mentorship support by linking female students with experienced academics, female role models, and professionals, potentially in collaboration with the Chemical Society of Ethiopia. In addition, we will promote interdisciplinary and collaborative research activities that demonstrate the relevance of organic and physical chemistry to real-world applications, thereby making these fields more attractive to female candidates. (IPICS ETH:01)

The gender balance changed from previous years, shifting towards a higher number of male members. One of our female staff left to continue her studies abroad. To address this issue, priority is given to female graduate students in the competition of students for the stipend support. Moreover, to attract students to our field at their early college life, senior staff are now assigned to offer the introductory courses in Pharmacognosy and related subjects. (IPICS ETH:02)

In the MSc and Bachelor level, the gender balance has been improved and there are a good number of female MSc students and female students in the BSc level. One main reason for this is that, Addis Ababa

University is giving a scholarship for talented female students. This scholarship has a positive impact in the PhD program and currently there are six female PhD students. (IPMS ETH:01)

Together with the Physics Department we have persuaded the female faculty member and her female PhD student to give motivational talks to BSc female students, encouraging them to create awareness about physics among future university students. (IPPS ETH:01)

The group conducted outreach activities over six weeks for 30 high school students (14 females and 16 males) to promote science in general, and physics in particular. The outreach program included short sessions designed to familiarise students especially female students with research in physics. The eleventh "batch" received this training during the summer of 2025. The training focused on introducing students to scientific research, with the overarching objective of encouraging high school students, particularly females, to pursue science, and physics in particular, when they enter university. Although a formal assessment of the program's impact has not yet been conducted, it is evident that the program has gained recognition among senior secondary schools in Addis Ababa. There is currently high demand for the training from both students and their teachers and parents. (IPPS ETH:01)

The gender distribution in 2025 is slightly lower compared to 2024, as we did not admit any new PhD students in the previous year. Currently, female students make up over 42% of the total PhD students in Physics, down from 50% in 2024. Unfortunately, it remains very challenging to recruit female PhD students in our field or in other physics- and science-based disciplines. This difficulty is largely due to low salaries for PhD holders nationwide and ongoing security concerns at Bahir Dar University. (IPPS ETH:03)

The group leader made interaction and shared experience on Grant writing among other, for female staff researchers. (IPPS ETH:03)

Kenya

Overall, compared to previous years, gender balance has improved at the doctoral level but remains uneven at the MSc level. Structural financial barriers continue to affect enrolment and gender equity, while the presence of highly qualified female faculty provides a strong foundation for mentorship and future improvements in gender balance. (IPPS KEN:01/2)

Gender balance among students has varied over the past decade, particularly at the MSc level. Male-to-female enrolment ratios have fluctuated significantly across academic years. Overall, female participation at the MSc level remains inconsistent. Following the covid-19 pandemic, institutional and financial reforms at the University of Nairobi led to a substantial increase in MSc tuition fees, significantly affecting enrolment. A clear trend has emerged in which most MSc students enroll only when supported by scholarships. Financial barriers continue to influence access and gender participation. (IPPS KEN:01/2)

At the PhD level, gender representation has improved. Of the ten (10) currently enrolled PhD candidates, five (5) are female and five (5) are male, reflecting gender parity. However, overall PhD enrolment remains low, likely due to high tuition and research costs. All PhD candidates are supported through scholarships, sandwich programmes, or partial funding. (IPPS KEN:01/2)

Among academic staff, the Nuclear Science and Technology programme has seven (7) faculty members, comprising five (5) male and two (2) female staff. Both female faculty members hold PhD qualifications. While women remain underrepresented among staff overall, their doctoral-level qualifications strengthen research leadership and provide important mentorship and role models for female students. (IPPS KEN:01/2)

Due to limited funding, the research group did not implement dedicated gender-focused activities during 2025. However, female faculty members and students participated in gender-related initiatives organised at *t*he Faculty of Engineering level. These activities aimed to promote gender inclusion in STEM

fields, provide mentorship and peer support, and address challenges affecting female participation and retention in engineering and technology programmes. Participation in these faculty-level initiatives helped address key needs, including strengthening mentorship networks, enhancing visibility of women role models in science and engineering, and encouraging female student engagement and retention. Continued access to such initiatives remains important for supporting gender equity within the programme. (IPPS KEN:01/2)

Laos

The group maintains a well-balanced gender ratio among both staff and students, consistent with previous years. We promote an inclusive research environment where all members are given equal opportunities to participate based on their voluntary commitment and expertise. There have been no significant changes in this balance, as gender equality remains a core principle of our recruitment and collaboration process. (IPICS LAO:01)

The research group has a good gender balance, with about 60% of staff being female. However, the number of female students is about 30% of all students. The percentage of females in direct supported students is 30%. For gender balance for master students, we are trying to increase the number of females by encouraging and providing the necessary information. (IPICS LAO:04)

In 2025, the research group implemented gender equality measures in line with institutional and ISP principles, ensuring equal access to research opportunities, supervision, and resources for all students. Female students were encouraged to participate fully in laboratory work, data analysis, and academic activities. To address practical needs and support academic continuity, laptop facilities were provided to female students when required. These measures aimed to reduce structural barriers and promote an inclusive and supportive research environment. The group plans to further strengthen gender balance by actively encouraging female student participation in future MSc and PhD research projects and ensuring an inclusive and supportive research environment (IPICS LAO:04)

Mali

Among staff, there is no change in gender balance while at Master level, we had one more female student. In 2025 the group provided assistance to 2 females bachelor students in physics to accomplish their programme. (IPPS MAL:01)

The group had adopted a strategy that we will continue to implement by undertaking actions toward the few female students in science at bachelor level to give them self-confidence and guidance to pursue in physical science. Awareness campaigns showing examples of women scientists are made with support courses to fill certain gaps. (IPPS MAL:01)

Myanmar

Female staff and students are significantly more numerous than males, similar to previous years. About 90% of the staff and students are female, while only 10% are male. One reason for this difference is that many men choose to work or run their own businesses instead of attending university as regular full-time students. Because of their low income, they often prefer to earn their BSc degrees through universities of distance education. These universities require students to attend classes on campus for only one month per year. For the rest of the year, they study independently at home while continuing their work or business activities. (IPPS MYA:01)

During 2025, our gender activities targeted the root causes of gender imbalance in our research group, recognising it as part of a broader trend in Myanmar's Arts and Science Universities. We focused on two key issues: limited post-graduation employment opportunities and the lack of entrepreneurship skills in university education. These factors have historically drawn more male students toward institutions like Defense Services Academy and medical/technical universities, where job prospects are perceived as better. To address this, we prioritised recruiting and retaining male staff and students through targeted

training programs that develop 21st-century skills aligned with industry demands, enhancing their employability. We also fostered a supportive environment to encourage sustained engagement. When male applicants were unavailable despite our efforts, we adapted by recruiting from the available pool, which occasionally consisted entirely of females. These activities aim to gradually correct the imbalance by making our research group more attractive and relevant to male researchers and students.
(IPPS MYA:02)

Nepal

Gender balance remains a long-term challenge for the group. In 2025, the enrollment of female students remained extremely low, reflecting both the overall decline in MSc-level admissions and limited engagement of women in physics research. Efforts to attract female students have been constrained by reduced funding, which curtailed gender-focused initiatives and outreach activities. As a result, no significant improvement in gender representation among staff or students has been observed compared to previous years. (IPPS NEP:01)

Rwanda

The group conducts visits to high schools to sensitise girls to choose STEM subjects in higher education.
(IPMS PDEAPP - Rwanda)

Our strategi to achieve gender balance is: to assist postgraduate candidates in the application process for tuition fees. Discussions with postgraduate students about the funders who are gender sensitive and assist them in writing their application for tuition fees. Also, the University of Rwanda has a gender policy. In undergraduate programs, female students have priority to get accommodation, admission, and a government bursary. Link: https://ur.ac.rw/documents/UR%20Gender%20Policy.compressed.pdf
(IPICS RWA:01)

Gender balance is still a challenge. In undergraduate programs, the number of females who joined chemistry programs increased. However, at postgraduate programs and in the staff community, nothing has changed. Among the main reasons for this is the lack of financial assistance for students to pay both tuition fees and their living expenses on campus. Both females and males are joining undergraduate programs at satisfactory rates, as the government helps pay their tuition fees and assists them with their stays on campus. For postgraduate programs, this favor doesn't exist; a student should pay him/herself, which complicates their lives, and they prefer not to join the program. Another reason is that females fear the pure sciences and prefer to study the social sciences. To overcome this, we visited different secondary schools, explained to females the utility of sciences, and asked them to apply for chemistry and other sciences. Unfortunately, this activity has been stopped from 2024 to the present, due to limited financial means to reach these schools. (IPICS RWA:01)

Tanzania

Secondary school girls from various schools across Tanzania attended a short seminar at the University of Dar es Salaam focusing on science-related subjects. However, many more girls from different regions have expressed interest in participating in the science camp for high school students. Experience has shown that only a limited number of students can be invited due to funding constraints. Those who have participated have subsequently demonstrated greater confidence and improved performance in physics and physics. The training was targeted to familiarise the difficult areas in mathematics/physics and to prepare them to join the university level. About 50 girl's students participated in the workshop.
(IPMS CoRE-Math UDSM)

Two female postgraduate students were supported by ISP to participate in the 2025 EAUMP–ICTP Summer School held at the University of Rwanda. Although we intended to sponsor more than two female students, funding constraints limited participation to only two. The students who attended have successfully applied the knowledge gained from the summer school to develop suitable research problems. (IPMS CoRE-Math UDSM)

The node strategy to achieve gender balance is based on the following measures:

- Transitioning from the PhD sandwich mode to local training will allow more female students to enroll in the PhD programme within the limited available funding.
- Creating awareness among lower-level female students about the importance of mathematics by developing a prototype that illustrates its applications in everyday life.
- The department will continue writing proposals targeting capacity building to enhance student support. For example, in 2024, Sida PHASE II helped many female students access such support.
- The limited funds received from ISP should be allocated equally between female and male students. This approach will make it easier for female students to continue and complete their studies. (IPMS CoRE-Math - UDSM)

The 2025 annual meeting of the Department of Mathematics at UDSM and the Mathematics Association of Tanzania (MAT) took place in Singida, Tanzania, from 31 August to 6 September, 2025 and had 260 participants of whom 100 women. Efforts will be made to further increase the number of female teachers at upcoming seminars. (IPMS CoRE-Math - UDSM)

In 2025, the group made school visits to 10 secondary schools in Dar es Salaam and Pwani regions to encourage and sensitise female students to take STEM subjects, particularly physics. Some members of staff also organised a Robotics Boot camps involving secondary school students in robotics projects in Dar es Salaam. (IPPS TAN:01/2)
(IPPS MSSEESA)

Uganda

The team has continued its efforts of improving gender balance. The proportion of women compared to men has remained four female members and four male members with the deputy leader being a female. Ms. Medron Balengesya was brought on the team as a techinical staff to replace Ms. Patience Natumanya, whose contract expired and is yet to be renewed. The team continues with its internal policy of improving the gender balance by recruiting more female trainees. It is anticipated that in the long run, more female scientists will be recruited as more are trained. There were no major gender activities carried out in 2025 mainly due to limited funding. (IPICS UGA:01)

In the previous years, the research group was dominated by male academic members of staff, and majority of students supported under the project were male. However, we have made effort to ensure gender balance among the staff and students working in our research group. Currently, our research group has two male and two female senior members of staff. We have two male and one female graduate student. During 2026, another graduate student will be recruited and priority will be given to a female student. (IPICS UGA:02)

The group had started an Undergraduate Research Assistantship Programme (URAP), to specifically, encourage female students to undertake research under the mentorship of our research group members. However, with the recent drastic budget cuts this initiative was suspended. We only take on undergraduate final year research projects that fit within the research capacity that we have in our lab. During 2026, the group intends to recruit a graduate student and priority will be given to a female student. (IPICS UGA:02)

Makerere University and Government of Uganda put in place measures to promote gender equality in students enrollment; for example during undergraduate admissions, the University introduced an affirmative action policy that assigns extra points to female students to enable them qualify for competitive courses that were being dominated by male students. This policy has contributed to narrowing of the gender disparity gap at Makerere University, especially for the science undergraduate programmes. However, male students still dominate in numbers at graduate level because graduate study is privately sponsored. (IPICS UGA:02)

The group now has 17 academic staff members of which 14 are males and 3 are females. All the female staff members are PhD holders. One of our former female PhD student is recruited as academic staff at Kabale University and we are collaborating through research and supervision of graduate students. (IPPS UGA:01)

The gender activities carried out at Makerere University during the year 2025 were organised by Prof. Betty Nannyonga under her project, the Eastern Africa Women in Basic Sciences, EANWoBAS. These activities include School Visits, Math Camps, Run4MATH, which targeted high school students and primary school pupils, especially girls, in order to arouse their interest in Mathematics and Science in general. (ISP EANWoBAS)

Celebration of the International Day of Mathematics in Uganda with a RUN4MATH marathon in Tororo Girls School, organised by Busitema University. This activity continued to raise national awareness and participation in the mathematical sciences. The event brought together students, educators, and stakeholders, fostering enthusiasm for mathematics while reinforcing its relevance in education and everyday life. This initiative contributed to the growing national momentum in recognising and celebrating the importance of mathematics across diverse communities. (ISP EANWoBAS)

In line with its mission, the Association for Women in Mathematics in Africa (AWoM) organised and conducted a one-day mentorship and support visit to St. Bruno Kanjuki RIC Primary School in Kayunga District. The visit combined inspirational mentorship, needs assessment, material support, and community engagement, with a particular focus on improving the learning experience and welfare of the girl child in a rural school setting. Specifically, the visit sought to:

- Inspire learners through mentorship and role modelling.
- Encourage girls to remain in school and value education.
- Assess the learning and sanitation environment.
- Provide practical support to address urgent welfare needs.
- Strengthen collaboration between AWoM and rural school communities.

As part of AWoM's holistic approach to supporting the students at St. Bruno Kanjuki RIC Primary School, shoes were provided to all learners from Primary One to Primary Seven. This intervention addressed a critical and previously identified challenge: prior to the visit, an assessment revealed that 89% of the children did not have shoes. Walking barefoot to and from school and in the classroom exposed students to a variety of health and hygiene risks, particularly in a rural setting. AWoM mobilised shoes from well-wishers and ensured that all learners got shoes. (ISP EANWoBAS)

The Association for Women in Mathematics in Africa (AWoM) conducted a mentorship and outreach visit to Kasumba Nursery and Primary School in Mubende District on 2 August 2025 as part of its ongoing efforts to identify, support, and nurture young mathematical talent in Uganda. This outreach specifically targeted students who had previously participated in the Uganda Mathematical Society (UMS) Examinations, which serve as a national platform for identifying high-potential learners who may progress to advanced regional and international competitions such as the Pan African Mathematics Olympiad (PAMO) and the International Mathematics Olympiad (IMO). While academic performance formed an important focus of the visit, the outreach was driven by a broader and more urgent need expressed directly by the students during earlier UMS engagements. Many learners, particularly girls, had voiced a strong desire to meet, interact with, and receive mentorship from female mathematicians. Students highlighted the limited visibility of women in mathematics-related leadership and mentorship roles and expressed that this gap often contributes to reduced confidence, persistence, and aspiration among female learners. In response, the AWoM outreach was intentionally designed not only to recognise and encourage mathematical excellence but also to address gender disparities in representation and mentorship within mathematics. The visit created a supportive and interactive environment in which students could engage with female mathematicians, hear personal academic and

career journeys, ask questions, and openly discuss challenges they face in pursuing mathematics.
(ISP EANWoBAS)

The Association for Women in Mathematics in Africa (AWoM) conducted a comprehensive mentorship and outreach session at Makindye Secondary School, a mixed day and boarding institution in Kampala, on 11 July, 2025. This visit coincided with the school's annual Careers Day, an event designed to expose students to diverse academic and professional pathways and to help them make informed decisions about their future careers. The central theme for the day was to encourage students to appreciate and engage with mathematics from the earliest levels of secondary school, recognising that a strong foundation in the subject is critical for success in both further studies and professional life. The AWoM outreach was designed to achieve multiple objectives: to inspire students by providing them with visible female role models in mathematics, to build confidence and self-efficacy in the subject, and to emphasise the wide-ranging relevance of mathematics across careers and academic disciplines. By engaging learners at both lower and upper secondary levels, the initiative aimed to cultivate a culture of enthusiasm and curiosity around mathematics, demonstrating that the subject is not only accessible but also essential for solving real-world problems. The outreach also had a mentorship function, highlighting practical strategies for academic excellence, encouraging persistence in mathematical studies, and motivating students, particularly girls, to consider advanced studies and careers in STEM fields. Through interactive sessions, discussions, and sharing of personal journeys, AWoM sought to challenge entrenched stereotypes that mathematics is male-dominated, showing students that success in the subject is attainable regardless of gender or background. In doing so, the initiative contributed to the broader goal of fostering a generation of mathematically confident, ambitious, and empowered learners capable of pursuing diverse and meaningful career paths. (ISP EANWoBAS)

One of AWoM's flagship outreach activities is the annual Mathematics Run, which is held every March in celebration of the International Day of Mathematics (IDM). The Mathematics Run combines physical activity with mathematics awareness, mentorship, and community engagement. Each year, the event is organised under a different theme aligned with the goals of the International Day of Mathematics and focuses on inclusivity, inspiration, and the promotion of mathematics beyond the classroom. A visit to Nakaseke International College School was conducted as part of AWoM's early engagement strategy with host institutions. The primary objective of the visit was to initiate discussions with the school administration and teaching staff regarding the hosting and organisation of the 2026 Mathematics Run. The specific objectives of the visit were to:

- Officially introduce the Mathematics Run concept to the school leadership and staff.
- Sensitise teachers about the goals, activities, and structure of the Mathematics Run.
- Clarify the expected roles and responsibilities of the host school.
- Assess the suitability of the school's physical facilities, particularly the playground and surrounding areas.
- Discuss possible running routes and safety considerations.
- Explore strategies for mobilising participation from other schools.
- Discuss advertising and communication strategies for the event.
- Propose the inclusion of a mentorship session during the Mathematics Run.

Teachers were encouraged to view the Mathematics Run not only as a one-day event, but as an opportunity to inspire long-term interest in mathematics among students. (ISP EANWoBAS)

Through its outreach and engagement activities in schools, EANWoBAS identified a significant gap in the teaching and application of mathematics, particularly in connecting classroom learning to problem-solving, critical thinking, and real-world contexts. Interactions with both students and teachers revealed a need for more structured platforms that challenge learners beyond routine curricula and nurture high-potential talent. In response, EANWoBAS, in collaboration with key stakeholders, agreed to initiate and strengthen the Uganda Applied Mathematics Olympiad (UAMO) as a strategic intervention. The UAMO provides a nationally recognised platform for identifying, training, and mentoring mathematically gifted

students, while promoting excellence, creativity, and analytical thinking. Importantly, it also creates opportunities to increase the participation of girls in advanced mathematics, address gender disparities, and build a pipeline of future scientists and innovators capable of contributing to national and regional development. UAMO will be officially launched in 2026. Through these initiatives, EANWoBAS - working alongside platforms such as UAMO - continues to expand access, visibility, and participation in the basic sciences, while strengthening pathways for young people, especially girls, to pursue careers in STEM.

(ISP EANWoBAS)



Photo 1. Giving out reusable sanitary pads to girls in Kanjuki Primary School Kayunga, Uganda (ISP EANWoBAS)



Photo 2.. Outreach activity at Makindye SSS Kampala (ISP EANWoBAS)

Zambia
The network prioritised gender inclusion by encouraging increased female participation in mathematics-related careers. To reach this, career talks and mentorship programmes in secondary schools were conducted to promote female engagement in STEM fields. (IPMS CoRE-Math - UNZA)

During 2025, several gender-focused activities were implemented to address the underrepresentation of women in mathematics and related fields. The network's strategy to promote gender balance focuses on three main areas:

- Mentorship and Early Engagement: Expanding mentorship and outreach programmes for female secondary school and undergraduate students to build a strong pipeline for postgraduate studies.
- Research and Professional Development: Encouraging female postgraduate students and early-career researchers to participate in network seminars, workshops, and collaborative projects to enhance visibility and skill development.
- Institutional Support: Advocating for targeted scholarships, flexible supervision, and support structures to reduce attrition among female students and staff.

Within the university, female postgraduate students were provided additional academic support and research exposure through network seminars, collaborative projects, and participation in regional EAUMP workshops. These activities were designed to address issues of limited access to research networks, low visibility in academic forums, and motivational barriers. (IPMS CoREMath - UNZA)

There is an imbalance in terms of gender distribution, with higher number of males than females. By means of affirmative action in awarding scholarships, we managed to increase the number of females in the group. In 2025, three females graduated, and enrolled one female and one male. Among the staff, we only have two females, an ISP alumnus, and the rest are males. (IPPS ZAM:01)

Zimbabwe
In 2025, the staff gender distribution consisted of four males and three females, resulting in a slight deviation from a 50:50 balance, while student enrolment was evenly divided between two males and two females. Despite this, the objective remains to achieve equal representation of male and female staff and postgraduate students. We continue to seek additional male and female staff and postgraduate students to expand the research group while maintaining gender balance. As the target gender balance for both staff and students is 50:50, the group continues to seek female collaborators to join the team. In addition, both female and male students are actively encouraged to join the group in order to maintain an equal gender balance. (IPICS ZIM:02)

The gender balance within the research group remains skewed toward male participation, particularly at staff and doctoral levels. This pattern reflects broader trends in geophysics and applied physics disciplines nationally, where the female representation has historically been low. There has not been a substantial shift in staff composition compared to previous years. At postgraduate level, however, there has been a positive development. The current MSc cohort includes a greater proportion of female students than in previous intakes. This represents a gradual but encouraging improvement in participation and at the entry of postgraduate level. While it is too early to determine whether this trend will be sustained, it indicates increasing interest and visibility of geophysics and geo-energy themes among female graduates. (IPPS ZIM:01)

During 2025, gender-related activities were integrated primarily through mentorship and academic engagement rather than through standalone programmes. Female postgraduate students were encouraged to participate actively in fieldwork, research discussions, and technical training activities to ensure equitable exposure to applied geophysical practice. Informal mentoring and academic advising were provided to support retention and progression within the programme. While no dedicated gender

workshops were organised during the year, gender inclusivity remains embedded within routine supervisory and recruitment practices. (IPPS ZIM:01)

1.2 Research findings and the SDGs

Research findings for 2025 are listed country wise.

Bangladesh

SDG 3 – Good Health and Well-Being *Chemical physics*
SDG 11– Sustainable Cities and Communities *Materials physics*
Rice-husk silica hybrid thin films for gas sensing

This study investigates the room-temperature detection of ammonia (NH_3), methanol (CH_3OH), and ethanol (C_2H_5OH) using spray-pyrolyzed thin films of annealed SiO_2 and SiO_2–$MnFe_2O_4$ hybrid materials. Amorphous silica (SiO_2) was derived from rice husk by a hydrothermal method and characterised by X-ray diffraction (XRD), Transmission Electron Microscopy (TEM), Energy Dispersive X-ray Analysis and Fourier transform infrared spectroscopy (FT-IR). A crystalline silica was obtained by annealing the amorphous silica at 500°C, identified as the condition that balances structural ordering and hydroxyl density for stable physisorption-based sensing. SiO_2–$MnFe_2O_4$ thin films were developed by spray pyrolysis to examine their performance as a gas sensor. $MnFe_2O_4$ contributes strong chemisorption activity at the Fe^{3+}/Mn^{2+} sites. Combining these mechanisms in a silica–$MnFe_2O_4$ film yields synergistic performance, achieving high NH_3 sensitivity (Ra/Rg of 1098 at 1000 ppm), fast response (20 s), and strong selectivity (S_{nh3}/SCH_3OH of 64.1 at 100 ppm) over methanol and ethanol. Conversely, reversing the layer sequence significantly reduces sensitivity, confirming that surface-accessible active sites are essential for governing analyte interactions. These findings establish interface-engineered heterostructures incorporating rice-husk-derived silica as a scalable, energy-efficient platform for selective room-temperature gas sensing. (IPPS BAN:02/2)

SDG 6 – Clean Water and Sanitation *Chemical physics*
Graphene-based nanocomposites for photocatalytic degradation of textile dyes

The photocatalytic degradation of the Rhodamine B (RhB) dye was investigated using graphene oxide-based zinc-substituted nickel stannate (GO-$Ni_{1-x}Zn_xSnO_3$) nanocomposites. Nanocomposites with varying Zn content (x = 0.05–0.20) were synthesized via a hydrothermal and ex situ sonication method. Characterizations by X-ray diffraction (XRD), Fourier-transform infrared spectroscopy (FTIR), Transmission electron microscopy (TEM) and Energy-Dispersive X-ray Spectroscopy (EDX), confirmed the formation of a perovskite structure, a successful Zn doping, and the uniform anchoring of nanoparticles on GO sheets. Photocatalytic tests under dark, visible, and UV light revealed that the performance was highly dependent on Zn concentration and light source. The 15% Zn-substituted composite (GO-$Ni_{0.85}Zn_{0.15}SnO_3$) demonstrated superior activity under visible light, attributed to enhanced charge separation and transport, while Ni-rich composites demonstrated higher efficiency in ultraviolet-light-driven dye removal. (IPPS BAN:02/2)

SDG 7 – Affordable and Clean Energy *Materials physics*
Nanoparticles for photovoltaic applications *Solar energy*

The advancement of photovoltaic technology has paved the way for new material synthesis and the effect of various dopings on their electrical and optical properties. This research presents a method to produce $Zn_{1-x}Mg_{0.02}V_xO$ nanoparticles through sol–gel processing modifying their composition by changing the x values between 0 and 0.0075. Different techniques were used to examine the obtained nanoparticles including X-ray diffraction (XRD), scanning electron microscopy (SEM), transmission electron microscopy (TEM), and energy-dispersive X-ray spectroscopy (EDS), in addition to UV–Vis spectrophotometry, to study the structural, morphological, and optical properties of all the samples. X-ray diffraction combined with transmission electron microscopy analysis proved that the Mg and V ions were inserted into the crystal structure of wurtzite ZnO nanoparticles. The structural properties revealed a wurtzite material structure with crystallite dimensions of 25 nm, and a vanadium-related secondary

phase was detected. The research discusses particle formation techniques and presents analysis in comparison with modern studies. The co-doping of V–Mg nanoparticles resulted in improved photovoltaic performance. (IPPS BAN:02/2)

SDG 9 – Industry, Innovation and Infrastructure *Magnetism*
Manganese-doped zinc ferrite thin films for advanced sensing and electronics *Materials physics*
Manganese-substituted zinc ferrite ($Mn:ZnFe_2O_4$) thin films were synthesized via chemical bath deposition to explore their multifunctional properties. X-ray diffraction (XRD) confirmed the Mn^{2+} incorporation into the spinel lattice, inducing lattice expansion and strain. Film thickness decreased systematically with Mn doping. Optical analysis showed increased absorbance and a non-monotonic band gap shift, indicating modified electronic transitions. Magnetic measurements revealed doping-dependent changes in saturation magnetization and coercivity. For gas sensing, Mn incorporation enhanced the response and recovery times for both NH_3 and CO_2 detection, although $MnFe_2O_4$ showed a slightly slower NH_3 response. The tunable structural, optical, magnetic, and sensing properties establish these films as promising candidates for advanced gas sensors, spintronic, and optoelectronic devices. (IPPS BAN:02/2)

SDG 3 – Good Health and Well-Being *Nanophysics*
Rare-earth–doped $CoFe_2O_4$ for cancer treatment *Magnetism*
This study investigates rare-earth (La^{3+}, Er^{3+}, Tm^{3+})-doped cobalt ferrite ($CoFe_2O_4$) nanoparticles, surface-functionalized with chitosan, for combined magnetic hyperthermia and drug delivery. Structural and magnetic characterization confirmed ferrimagnetic behavior, with Er and Tm doping significantly enhancing saturation magnetization and magnetocrystalline anisotropy due to strong spin–orbit coupling. The chitosan coating improved stability without compromising magnetic properties. All formulations demonstrated high loading efficiency (>97% for pure and La-doped samples) of doxorubicin, a chemotherapy drug widely used in cancer treatment. In vitro assays showed excellent biocompatibility with normal Vero cells and potent anticancer activity against HeLa cells (assays used to assess the effectiveness of candidate anticancer therapies) when loaded with doxorubicin. Theoretical calculations indicated that Er- and Tm-doped nanoparticles possess a superior specific absorption rate, suggesting enhanced heating efficiency for hyperthermia. This synergistic strategy paves the way for advanced $CoFe_2O_4$ nanotherapeutics capable of in situ dual-mode therapy, which could significantly reduce the required dosage of chemotherapeutic drugs. (IPPS BAN:02/2)

SDG 3 – Good Health and Well-Being *Nanophysics*
Ferrite nanoparticles for cancer treatments *Biophysics*
Several types of magnetic nanoparticles, including ferrite nanoparticle, are of high interest for biomedical applications like for example in magnetic hyperthermia in cancer therapy. In this study magnetic nanoparticles of iron (II,III) oxide, ferrite (Fe_3O_4) nanoparticles, were synthesized using a co-precipitation method from $FeCl_2$ and $FeCl_3$ solutions where the particle size was controlled by the pH of the solutions. The nanoparticles were then coated with dextran (a biocompatible sugar polymer) to enhance their biocompatibility and stability. The XRD measurements indicated that the samples were crystalline and that nanoparticles with different sizes in the range of 6-17 nm had been fabricated. The size of the particles was measured by TEM images and the Physical Properties Measurement System determined magnetic parameters such as saturation magnetization, coercivity and remnance. The coated nanoparticles were applied in a hyperthermia process to cultured cancer cells, where an alternating magnetic field induced localised heating, targeting cancerous tissues. The specific loss power of hyperthermia depended on the nanoparticles structural and magnetic properties. (IPPS BAN:02/2)

SDG 7 – Affordable and Clean Energy *Materials physics*
Engineering nanoparticles for electrochemical energy conversion *Nanophysics*
In recent years two-dimensional layered transition metal dichalcogenides (TMDs) have attracted significant interest in electrochemical energy storage and optoelectronics research due to their tuneable electronic band structure, high surface area with abundant active sites, and efficient charge transport

properties. Vanadium disulfide (VS_2) is an important member of the transition metal dichalcogenide (TMD) family and can effectively be synthesized using the hydrothermal method. In this study Mo-doped VS_2 nanosheets ($V_{1-x}Mo_xS_2$, with x = 0%, 3%, 5%, 7%, and 9%) were synthesized by a hydrothermal process. The Ammonium metavanadate (NH_4VO_3), Thioacetamide (C_2H_5NS) and Ammonium molybdate tetrahydrate ($(NH_4)_6Mo_7O_{24}.4H_2O$) were used as sources of V^{4+}, S^{2+} and Mo^{6+} ions respectively. X-ray diffraction (XRD) analysis confirmed the formation of a crystalline layered structure. Fourier transform infrared (FTIR) spectroscopy revealed characteristic absorption peaks around 522 cm^{-1} and 980 cm^{-1} corresponding to S–V–S stretching vibrations, while additional peaks confirmed successful substitution of vanadium by molybdenum. Field emission scanning electron microscopy (FESEM) images showed the presence of Mo within the VS_2 structure. These results demonstrate successful Mo incorporation into the VS_2 lattice, suggesting potential for applications in electrochemical energy conversion and optoelectronic devices. (IPPS BAN:02/2)

SDG 9 – Industry, Innovation and Infrastructure *Chemical physics*
Synthesis and Characterization of a Piezocatalyst *Materials physics*
This research aims to develop advanced (1-x)KNN–xBBAFO-based piezo-activated catalysts: here KNN is potassium sodium niobate and BBAFO is barium- and aluminum-modified bismuth ferrite that are relevant for applications in hydrogen production and wastewater treatment. The synthesis involves solid-state sintering (powder consolidation technique) for KNN and a sol–gel method for BBAFO, followed by solid-state sintering to fabricate the KNN–BBAFO heterostructures. Hybrid nanoparticles with varying BBAFO content will be prepared and characterized using X-ray diffraction (XRD), scanning electron microscopy (SEM), and UV–Vis spectroscopy to analyze their structural, morphological, and optical properties. The band alignment of these materials will be investigated to enhance the piezocatalytic performance. The piezocatalytic mechanism relies on the material's ability to generate electric charge under mechanical stress, thereby facilitating redox reactions. This capability enables both the splitting of water for hydrogen production and the degradation of organic pollutants in wastewater. (IPPS BAN:02/2)

SDG 9 – Industry, Innovation and Infrastructure *Materials physics*
SDG 3 - Good Health and Well-being *Nanophysics*
Novel magnetic nanocomposites for heavy metal detection
This project focused on wastewater treatment processes, with an emphasis on nanoscale materials. For this purpose, magnetically active P(S-DVB-AA)/Fe_3O_4 composite (a magnetic plastic-like material with embedded iron oxide nanoparticles) particles were synthesized and their physical and structural properties were characterized by Fourier Transform Infrared Spectroscopy (FTIR), X-ray Diffraction (XRD), Vibrating Sample Magnetometry (VSM), and Transmission Electron Microscopy (TEM). The electrochemical response of the materials was evaluated using differential pulse voltammetry in an aqueous solution of sodium arsenate. The nanomaterial-modified electrode exhibited a higher electrical response toward arsenic compared to the bare electrode, indicating its potential effectiveness for the detection of heavy metals in wastewater. (IPPS BAN:02/2)

SDG 3 – Good Health and Well-Being *Medical physics*
Computational methods bioimpedance analysis
Monitoring fluid accumulation in the lungs is critical in conditions such as pulmonary edema and pneumonia and current diagnostic modalities, either involve ionizing radiation or are not suitable for continuous long-term monitoring. This study investigated the feasibility of a non-invasive, non-ionizing electrical impedance–based approach for continuous assessment of pulmonary fluid accumulation using computational modeling. CT (computed tomography)-derived thorax models were segmented in Materialise Mimics and analyzed in COMSOL to compute tetrapolar transfer impedance under baseline and fluid-accumulation conditions. Fluid presence caused a clear impedance reduction, particularly at lower-lobe electrode positions. Impedance exhibited a strong linear relationship with fluid volume (R^2 = 0.9972 for the left lung and R^2 = 0.9998 for the right lung), with sensitivities of −466.74 mΩ/100 mL and −754.75 mΩ/100 mL, respectively. For ≥300 mL accumulation, impedance changes exceeded 2 Ω, and frequency-domain analysis (5–1000 kHz) confirmed consistent contrast across the range. These results

suggest that electrical impedance measurements have the potential for continuous monitoring of pulmonary fluid changes and provide a foundation for future experimental validation in human subjects. (IPPS BAN:04)

SDG 3 – Good Health and Well-being *Computational physics*

Critical Care Stay and Discharge Prediction

Predicting patient discharge outcomes and hospital Length of Stay (LoS) in critical care settings is essential for improving patient care and optimizing resource utilization. This study presents a hybrid machine learning and deep learning pipeline developed using a dataset of 10,732 records, each containing 20 features, to predict two key outcomes: (i) discharge type (death or survival) and (ii) hospital LoS. The proposed framework integrates CatBoost (Categorical Boosting) a machine learning algorithm for discharge classification and a custom deep regression model, INSightRNetLOS, for LoS estimation. The pipeline includes advanced data preprocessing and addresses class imbalance through a combination of SMOTE (Synthetic Minority Over-sampling Technique) and undersampling techniques to improve classification accuracy. On the validation set, the model achieves a DTscore (Discharge Type score) of 2.60 and an LScore (Length-of-Stay score) of 9.29 days, resulting in a combined GLscore (Global score) of 11.89. These results demonstrate the potential of combining structured data modeling with deep learning to support data-driven decision-making in clinical environments and improve healthcare delivery efficiency. (IPPS BAN:04)

SDG 3 – Good Health and Well-Being *Computational physics*

Brain metastasis origin prediction using radiomics

Brain metastases, secondary tumors that spread to the brain from cancers such as lung, breast, or melanoma, are the most common intracranial malignancies in adults and Magnetic Resonance Imaging (MRI) can detect these lesions but provides limited information about their primary origin. Radiomics, by extracting quantitative descriptors from MRI scans, combined with machine learning, offers a non-invasive approach to address this gap. In this study, radiomic features, provided by the Open Brain Tumor AI (OpenBTAI) dataset were employed to classify the primary tumor origin of metastatic lesions, with the broader goal of supporting timely, non-invasive diagnosis and guiding patient-specific treatment strategies. A total of 1,132 features were computed from segmented lesions, and after correlation filtering and fused ranking, the top 50 were retained for classification. Twelve machine learning models including Logistic Regression (LR), Random Forest (RF), Extra Trees Classifier (ETC), Extreme Gradient Boosting (XGBoost), Categorical Boosting (CatBoost), Adaptive Boosting (AdaBoost), k-Nearest neighbors(k-NN), Multi-Layer perceptron (MLP) were trained and tested using stratified 5-fold cross-validation and an independent hold-out set. Among them, the CatBoost classifier achieved the most balanced performance, with 84.7% accuracy, 84.15% weighted F1-score, and 94.18% area under the receiver operating characteristic curve (AUC). Explainability was assessed using Shapley Additive Explanations (SHAP), which quantify the contribution of each feature to model predictions. The analysis revealed that first-order intensity measures, tumor shape descriptors, and texture-based radiomic features consistently had the highest influence on classification across tumor types. These findings demonstrate that radiomics-based machine learning can provide reliable and interpretable prediction of BM origin, reducing reliance on invasive biopsy. (IPPS BAN:04)

SDG 3 – Good Health and Well-Being *Biophysical modeling*

LED thermal response of the human eye

This work is carried out to study the thermal effect of the human eye with diverse external lenses (Corning Gorilla Glass 6, Schott NBK7, PMMA, and Polycarbonate) exposed to LED lights (410 nm, 525 nm, 630 nm). The use of LED light is increasing day by day in our lives. The LED light illuminates three types of rays, such as red, green and blue. The LED exposed to the human eye can increase the temperature of the corneal layer, eye lens, retina, sclera and choroid differently for different wavelengths. This study showed that blue light raised the temperature the most, with the cornea warming by about 0.9 °C. Green light caused a smaller rise of about 0.85 °C, and red light caused the least, only about 0.45 °C. The back of the eye, including the retina, stayed close to normal blood temperature (~37 °C) because blood flow helped remove heat. Glass lenses allowed most light to pass

through and reduced heating, while plastic lenses absorbed more energy and caused higher heating, especially with blue light. (IPPS BAN:04)

SDG 3 – Good Health and Well-Being *Biophysics*

Biopolymer sponges for rapid hemostasis

Chitosan-based biopolymer sponges are characterized by biocompatibility, biodegradability, and antimicrobial properties, where chitosan is a biodegradable, biocompatible material derived from shellfish. The porous structure of the sponges enables rapid fluid absorption and cell migration, while polymer blending enhances mechanical stability and overall performance, making them promising materials for bleeding control. This study presents a comparative evaluation of two chitosan-based sponge systems—CS/PVA/GA/DH and CS/Gel/GA/DH—fabricated through freeze-drying with optimized blends of chitosan (CS), polyvinyl alcohol (PVA), gelatin (Gel), glutaraldehyde (GA), and doxycycline hyclate (DH). Structural and physicochemical characterizations confirmed distinct morphological and crystallinity patterns, with CS/PVA/GA/DH exhibiting crystalline features and CS/Gel/GA/DH displaying an amorphous nature. Cytocompatibility assessment using Vero cell lines demonstrated >95% cell survival with no observable cytotoxic effects, confirming their safety for biomedical use. Swelling, degradation, and blood clotting studies revealed statistically significant differences between the systems, with CS/PVA/GA/DH exhibiting superior hemostatic potential (BCI (Blood Clotting Index) = 77.78%) compared to CS/Gel/GA/DH (BCI = 97.69%), where a lower BCI indicates a stronger hemostatic effect. In vitro drug release studies further revealed contrasting profiles: CS/PVA/GA/DH achieved rapid release suitable for acute therapeutic interventions, while CS/Gel/GA/DH provided sustained delivery advantageous for long-term treatment. (IPPS BAN:04)

SDG 3 – Good Health and Well-Being *Biophysics*

Sustainable biomaterials for diabetic insoles

Diabetic neuropathy causes loss of protective sensation in the feet, increasing the risk of injuries, infections, and chronic ulcers that may lead to amputation. Insoles that redistribute pressure and prevent microbial colonization are essential, yet conventional materials such as EVA (Ethylene-Vinyl Acetate) and PU (Polyurethane) lack inherent antimicrobial properties and long-term stability. To address this limitation, a cellulose–chitosan–tannic acid composite film was developed and evaluated as a potential biomaterial for diabetic insole applications. The composite film was prepared using cellulose and chitosan, with tannic acid incorporated as a natural cross-linker and antimicrobial agent. The material was characterized using Ultraviolet–Visible Spectroscopy (UV–Vis) spectroscopy, Attenuated Total Reflectance–Fourier Transform Infrared (ATR–FTIR) spectroscopy, Scanning Electron Microscopy (SEM), Energy-Dispersive X-Ray Spectroscopy (EDX), and Antifungal assay. UV–Vis analysis showed distinct absorbance peaks at 284 nm for cellulose (1.07 AU), 225 nm for chitosan (0.67 AU), and 201 nm for the composite (1.80 AU), indicating molecular interactions and enhanced electronic transitions. ATR–FTIR confirmed hydrogen bonding and cross-linking among the components, while SEM revealed a smooth, uniform morphology, suggesting effective film formation. EDX validated the incorporation of cellulose, chitosan, and tannic acid through elemental analysis. Overall, the results indicate that the cellulose–chitosan–tannic acid composite film combines biocompatibility, antifungal activity, and structural stability, making it a strong candidate for use in diabetic insoles. (IPPS BAN:04)

SDG 6 – Clean Water and Sanitation *Materials physics*

Desalination of coastal water in Bangladesh

This research addresses the critical water scarcity in Bangladesh's coastal regions, where the combined threats of rising salinity, pollution, and climate change have made clean water a rare commodity. Our goal is to enhance the photocatalytic efficiency of TiO_2 nanostructures for effective treatment of brackish and seawater. Building on our previous theoretical and computational simulations of copper-doped TiO_2 nanotubes, we have moved into the experimental phase. Our models showed that copper doping reduces the TiO_2 band gap, improving pollutant degradation. Guided by these results, TiO_2 nanotube arrays were successfully fabricated on titanium foil under standard laboratory conditions, consistent with

the predicted stability. A detailed Scanning Electron Microscopy (SEM) and Atomic Force Microscopy (AFM) characterization confirmed the quality and morphology of these structures. (IPPS BAN:05)

SDG 7 – Affordable and Clean Energy *Materials physics*

Magnetocaloric properties of perovskites

This study investigates the structural, electrical, and magnetic properties of Pb-doped perovskite manganites $(La_{1-x}Pb_x)_{0.8}Ba_{0.2}MnO_3$ (where x = 0 to 0.15) to enhance their magnetocaloric performance. Using X-ray diffraction and dielectric spectroscopy, the samples were confirmed to maintain a rhombohedral structure while exhibiting frequency-dependent dielectric behavior consistent with Maxwell–Wagner polarization. Results show that Pb doping significantly improves conductivity and increases the Curie temperature (T_C) from 214K to 314K, shifting the ferromagnetic transition toward room temperature. Magnetic analysis revealed a suppression of the Griffiths phase and a transition to second-order ferromagnetic behavior. These findings suggest that Pb-doped manganites are highly effective candidates for applications in magnetic refrigeration and high-performance dielectric resonators. (IPPS BAN:05)

SDG 7 – Industry, Innovation and Infrastructure *Materials physics*

Defect-engineered heterostructures

A simple hydrothermal process was employed to synthesize MnS-incorporated molybdenum disulfide (MoS_2) nanoflowers, i.e. nano-scale structures growing in a shape resembling a flower. Morphological analysis confirmed a defect-rich, flower-like structure. The incorporation of MnS induces lattice strain and modifies the structural properties of the MoS_2 nanoflowers. Raman analysis indicates strong interfacial interaction and n-type doping in the nanocomposite. The incorporation of MnS also reduces the optical band gap of the composite material. Density Functional Theory (DFT) calculations revealed a red-shifted and enhanced absorption spectrum, extending absorption into the visible and infrared regions. This work provides a new way for fabricating defect-engineered MoS_2/MnS nanocomposites for various optoelectronic applications. (IPPS BAN:05)

SDG 7 – Industry, Innovation and Infrastructure *Nanophysics*

Magnetic nanocomposites for lead removal

The group synthesized an MGO@CA composite, which is a magnetic graphene oxide–alginate composite for efficient lead removal from contaminated water. The characterization could confirm the integration of graphene oxide, magnetic iron oxide, and cross-linked sodium alginate. Adsorption tests for Pb^{2+} showed strong pH-dependent performance, with a maximum capacity of 270.27 mg g^{-1} at pH 6. The adsorption data followed both Langmuir and Freundlich isotherms and pseudo-second-order kinetics, indicating heterogeneous surface interactions. The high performance is attributed to the large surface area and strong negative surface charge. Overall, MGO@CA demonstrates excellent stability and effectiveness for rapid lead removal from wastewater. (IPPS BAN:05)

SDG 3 – Good Health and Well-Being *Natural products*

Exploring the healing potential of aqueous extract of Baccaurea ramiflora leaves in inflammation: A cytokine and prostaglandin modulator

Baccaurea ramiflora is a common edible nutritious plant that has been associated with a variety of medicinal attributes. This study investigated the anti-inflammatory effects of the aqueous extract of B. ramiflora leaves (BrLAE) in a complete Freund's adjuvant (CFA) induced inflammatory model. BrLAE was prepared by the cold maceration process and screened for phytochemical and antioxidant analyses. Health risk assessment of metals in antidiabetic herbal preparations. The findings revealed that BrLAE had significant antioxidant activity and a remarkably high amount of tannins, saponins, flavonoids, phenols along with a trace amount of alkaloids, steroids, and terpinoids. BrLAE significantly reduced paw edema levels and improved hematological (RBC, WBC, Hb, PLT, and ESR) and biochemical (ALT, AST, and CRP) parameters. doi.org/10.1155/2024/6507185 (IPICS ANRAP)

SDG 3 – Good Health and Well-Being *Natural products*

Elucidation of phytochemicals and antidiabetic activity of methanolic ex-tract of Piper betle leaves on nSTZ-induced type 2 diabetic model

Piper betle is an evergreen plant that has been claimed to possess various therapeutic properties including diabetes for a long period of time. The present study was undertaken to evaluate the antidiabetic effects of Piper betle (100% methanolic extract) on neonatal streptozotocin (nSTZ) induced type 2 diabetic (T2DM) model rats. P. betle methanolic extract preparation and phytochemicals screening test were done by following standard methods. The findings of their study suggest that P. betle possesses significantly hypoglycemic and insulinomimetic properties due to the abundant sources of phytochemicals. 10.34104/ejmhs.025.04280441 (IPICS ANRAP)

Bolivia

SDG 3 – Good Health and Well-Being *Ecological chemistry*
SDG 13 – Climate Action
SDG 15 – Life on Land

Zoonotic diseases and wildlife in Latin America: A necessity for implementing the one health approach

Piper betle is an evergreen plant that has been claimed to possess various therapeutic properties including diabetes for a long period of time. The present study was undertaken to evaluate the antidiabetic effects of Piper betle (100% methanolic extract) on neonatal streptozotocin (nSTZ) induced type 2 diabetic (T2DM) model rats. P. betle methanolic extract preparation and phytochemicals screening test were done by following standard methods. The findings of their study suggest that P. betle possesses significantly hypoglycemic and insulinomimetic properties due to the abundant sources of phytochemicals. doi.org/10.1079/onehealthcases.2025.0016 (IPICS BOL:01)

SDG 3 – Good Health and Well-Being *Ecological chemistry*
SDG 13 – Climate Action
SDG 15 – Life on Land

Dominance of Capsicum minutiflorum (Solanaceae) pollen in stingless bee hives: An insight into protein composition and foraging behavior by four Meliponini species of the Bolivian-Tucumano forest

Stingless bees (Apidae: Meliponini) primarily feed on nectar and pollen from a wide diversity of flowering plants. By doing so they pollinate these flowers thus contributing to biodiversity and ecosystem stability. The pollen they collect provides essential nutrients for brood rearing and colony growth. This study aimed to characterize the floral resources available to stingless bees in a Tucumano-Boliviano Forest, including their pollen protein content and, through construction of an interaction network and preference analysis, understand their foraging behavior. Only 8 out of 25 pollen types sampled within the study site around the meliponaries were collected by the bees. Pollen pots also contained many types of pollen not from to plant species in the study area. Pollen from Capsicum minutiflorum (Solanaceae) was dominant in almost every hive (up to 98.7% of pollen composition). Additionally, protein content of Capsicum minutiflorum pollen (67% w/w) was the highest of all species present at the study site and explained almost 100% of the protein content in the hives of Tetragonisca angustula, and Scaptotrigona depilis, and almost 80% and 75% of the protein content in those of Scaptotrigona polysticta and Melipona rufiventris, respectively. These results suggest that stingless bees preferentially collect pollen with higher protein content. doi.org/10.3897/jhr.98.138703 (IPICS BOL:01)

Burkina Faso

SDG 9 – Industry, Innovation and Infrastructure *Materials chemistry*
SDG 6 – Clean Water and Sanitation

Effectiveness of raw and activated laterite in removing lead and copper from aqueous solutions: A kinetic and thermodynamic study

The growing interest in local materials as natural adsorbents stems from their abundance, low cost, and eco-friendliness, offering an effective, economical, and sustainable alternative to commercial options. The present work investigates the removal performance of lead (Pb^{2+}) and copper (Cu^{2+}) ions from synthetic aqueous solutions using both raw and activated laterite (KN-Ac) under batch conditions. The

diffusion model-adjusted data revealed that adsorption occurred rapidly at the beginning, with fast adsorption on the outer surface followed by slower adsorption controlled by intraparticle diffusion. The KN-Ac, designated KN-Ac, proved to be highly effective in removing both heavy metals, achieving removal percentages of 97.81 ± 0.23% (4.07 ± 0.01 mg/g) for Pb^{2+} and 94.24 ± 0.18% (1.18 ± 0.02 mg/g) for Cu^{2+} at an initial concentration of 10 mg/L. Doi: 10.36922/AJWEP025380292 (IPICS BUF:02)

SDG 3 – Good Health and Well-Being *Materials chemistry*
SDG 6 – Clean Water and Sanitation
SDG 9 – Industry, Innovation and Infrastructure

A manganese phthalocyanine histidine composite-modified carbon paste electrode as a biomimetic sensor for bisphenol A determination

A biomimetic sensor was prepared from carbon paste electrode (CPE) modified with manganese phthalocyanine (MnPc) and histidine (His), and used for the determination of bisphenol A (BPA). The electrochemical biomimetic sensor (MnPc-His-CPE) gave significant current responses for BPA oxidation in comparison with CPE and MnPc-CPE, individually. The proposed sensor was found to be highly selective for BPA. In addition, the reproducibility and stability of the sensor were found to be satisfactory. The accuracy of the electrochemical biomimetic sensor was compared with HPLC method. The sensor has been successfully applied for the determination of BPA from real water samples with a good recovery, ranging from 91.40% to 106.30%. doi.org/10.1016/j.rechem.2024.101927 (IPICS BUF:02)

East Africa

SDG 9 – Industry, Innovation and Infrastructure *Astrophysics*

The impact of selection criteria on the properties of green valley galaxies *Cosmology*

This study aimed to evaluate the selection effects of the most commonly used green valley galaxy selection criteria. Green valley galaxies are galaxies whose star formation activity lies between that of actively star-forming galaxies (the “blue cloud”) and quiescent galaxies (the “red sequence”). They are important for understanding how galaxies stop forming stars and evolve over time. The focus is to understand how these criteria affect the identification of green valley galaxies, their properties, and their impact on galaxy evolution studies. Using the Sloan Digital Sky Survey (SDSS) optical data and Galaxy Evolution Explorer (GALEX) ultraviolet data at redshift z< 0.1, the eight most commonly used criteria were selected based on colours (without and with Gaussian fittings), specific star formation rate, and star formation rate versus stellar mass. The properties of the green valley galaxies (e.g., their stellar mass, star formation rate, specific star formation rate, intrinsic brightness, morphological and spectroscopic types) were studied for each selection criterion. The results showed that when using different criteria, UV–optical colour-based selections tend to select more massive galaxies, with lower star formation rates, and with higher fractions of composite and elliptical galaxies than criteria based only on optical colours. The results also show that the colour-based criteria are the most sensitive to galaxy properties, rapidly changing the selection of green valley galaxies depending on the specific colour definition used. (IPPS EAARN)

Ethiopia

SDG 7 – Affordable and Clean Energy *Materials chemistry/Solar Cell*
SDG 9 – Industry, Innovation and Infrastructure

Thermally stable direct arylation derived terthiophene-isoindigo copolymer for organic solar cell application

The lifetime of organic solar cells (OSCs) remains a significant challenge for their commercial viability. In this study, we successfully synthesized a low band gap copolymer, P3T-IID, with an energy gap (E_g) of 1.61 eV, and HOMO and LUMO levels of −5.43 eV and −3.78 eV, respectively, using direct heteroarylation polycondensation (DAP) copolymerization of a terthiophene donor moiety with an isoindigo acceptor moiety. We investigate the stability of pristine P3T-IID copolymer films under conditions of 75% relative humidity, UV light illumination, and an elevated temperature of 85 °C for over 50 h. The results reveal significant absorbance loss due to UV-irradiation-induced processes, such as chain scission and chemical reactions involving free radicals, while the polymer integrity remains largely unaffected by high humidity

and elevated temperatures. Interestingly, the copolymer demonstrates excellent thermal stability with a high decomposition temperature of 390 °C. Doi: 10.36922/AJWEP025380292 (IPICS ETH:01)

SDG 7 – Affordable and Clean Energy *Materials chemistry/Battery*
SDG 9 – Industry, Innovation and Infrastructure
N-doped activated carbon derived from Water Hyacinth for ultra-stable metal-free bifunctional electrode for zinc-air battery
Activated N-doped carbon derived from water hyacinth leaves (WHL) was prepared and investigated as metal-free bi-functional catalyst for oxygen reduction and evolution (ORR/OER) in zinc-air batteries (ZABs). Scanning electron microscopy (SEM), X-ray photoelectron spectroscopy (XPS) and Brunauer–Emmett–Teller (BET) methods were used to examine the morphology, elemental composition and the specific surface area of the samples, respectively. The electrochemical studies reveal that N-doped porous carbon from N-WHLs exhibited remarkable electrocatalytic activity for ORR, with an onset potential of 0.95 V and half-wave potential of 0.88 V comparable to commercial Pt/C catalyst. The percentage of hydrogen peroxide produced was significantly low, with average electron transfer number value of 3.94 at 0.8 V for N-WHL. doi.org/10.4314/bcse.v39i3.14 (IPICS ETH:01)

SDG 3 – Good Health and Well-Being *Natural products*
Natural products with potent antimycobacterial activity (2000–2024): A review
Tuberculosis (TB), an infection caused by Mycobacterium tuberculosis, affects nearly one-third of the world's population. It is estimated that TB infects around ten million people worldwide, with no less than two million fatalities annually. It is one of the treatable infections due to improved diagnostic tools and therapeutic agents. However, the disease remains a threat to humankind due to the emergence of multidrug- and extensively drug-resistant strains of M. tuberculosis. This has driven many researchers to look for new antitubercular medications with better efficacy, safety, and affordability. The review discusses 36 naturally occurring compounds from various classes, isolated from both terrestrial and aquatic organisms, including higher plants and microorganisms. Current TB drugs have become less effective; therefore, natural products such as hapalindole A and rufomycin I, owing to their potent activity, selectivity, and novelty, are increasingly recognized as potential lead compounds against TB. doi.org/10.3390/molecules30183708 (IPICS ETH:02)

SDG 3 – Good Health and Well-Being *Natural products*
Purification of α-amyrin-acetate and phenylpropanoïd compounds from Ficus umbellata Vahl (Moraceae) stem bark and evaluation of their anti-breast cancer potential
The aim of this work was to determine the bioactive constituents of F. umbellata Vahl, which is used to treat cancer. Previous studies have shown its cytotoxic potential on mammary and ovarian cancer cells, and its chemopreventive potential against ovarian cancer in rats. F. umbellata stem bark extract was partitioned and bioguided-fractionation was performed using MTS assay on breast (MDA-MB-231 and MCF-7) and ovarian (Hey, Hey-Cis, PA-1 and OAW-42) cancer cell lines. Further, isolates were purified, characterized and tested. The most active compound was investigated on cell growth, cell proliferation, formation of clones, cell death mechanisms, caspase-3 activity, wound healing, chemotaxis and cell adhesion. α-amyrin-acetate was found to be, at least partly, responsible for F. umbellata cytotoxic effect mediated through proapoptotic response and protection against Epithelial-to-mesenchymal transition. doi.org/10.1016/j.sajb.2024.12.015 (IPICS ETH:02)

SDG 7 – Affordable and Clean Energy *Materials physics*
First-principles study of cathode materials for LFP batteries *Computational physics*
$LiFePO_4$ (LFP) is a prominent cathode material for lithium-ion batteries (LIBs). In this study, the properties of LFP were analyzed using Density Functional Theory (DFT) combined with the Hubbard U correction (DFT+U). Structural optimization confirmed that LFP adopts a stable olivine-type crystal structure, consistent with experimental observations. The analysis of the optical properties indicates significant absorption in the visible spectral range, suggesting potential for photoactive applications in addition to electrochemical energy storage. The investigation of the magnetic properties reveals that LFP exhibits

antiferromagnetic ordering, which plays an important role in the stability of the material during lithium insertion and extraction (cycling). The structural, electronic, optical, and magnetic characteristics of LFP examined in this work highlight its viability as an effective cathode material for next-generation lithium-ion batteries and multifunctional energy-related applications. (IPPS ETH:01)

SDG 7 – Affordable and Clean Energy *Materials physics*

Effect of ozone plasma treatment on the electronic properties of PEDOT:PSS

The performance of PEDOT:PSS film-based optoelectronic devices can be improved by enhancing the electrical and surface properties of the film through UV–ozone (UVO) and ozone (O_3) plasma treatments. PEDOT:PSS is a conductive polymer composite widely used as a transparent conducting material in organic and flexible electronics. In this study, the group investigated the conductivity, work function, and surface wetting properties of PEDOT:PSS films after exposure to UVO/O_3 treatments for short durations (0, 4, and 8 minutes). The results show that the treatments enhance the electrical conductivity across the entire temperature range of 100–350 K, with the most significant improvement observed for 8-minute exposures. In addition, UVO/O_3 treatment increases the surface energy of the film, as indicated by a reduction in the water contact angle, and also increases the work function of the polymer. The UVO treatment was more effective in reducing the water contact angle, indicating a stronger increase in surface energy. In contrast, O_3 treatment produced a more pronounced enhancement in the electrical conductivity and work function of the PEDOT:PSS film. These results demonstrate that controlled ozone-based plasma treatments can effectively tune both the electronic and surface properties of PEDOT:PSS, thereby improving its suitability for optoelectronic device applications. (IPPS ETH:01)

SDG 7 – Affordable and Clean Energy *Materials physics*

Nanoparticle-enhanced thin-film organic solar cells *Chemical physics*

Thin solar absorber layers improve photon capture in Thin-Film Organic Solar Cells (TFOSCs) and enhance the performance of photonic devices. In this study, potassium sulphide doped with silver (K_2S/Ag) nanoparticles was incorporated into the solar absorber layer of TFOSCs at different concentrations. Nonfullerene acceptor (NFA)-based solar cells were fabricated in an inverted device structure, using an active layer composed of the donor PTB7-Th polymer and the nonfullerene organic molecule acceptor ITIC-Th. The highest device performance was obtained at a 1% nanoparticle concentration. These results indicate that the incorporation of K_2S/Ag nanoparticles into the polymer absorber layer enhances both the electrical and optical properties of the films, leading to improved photon harvesting and overall device performance. (IPPS ETH:01)

SDG 11 – Sustainable Cities and Communities *Seismology*

Monitoring seismic and volcanic activity in Ethiopia

The group recorded and analysed seismic data caused by dike intrusion and volcanic eruptions during 2024 and 2025. The events studied are the Fentale - Dofen seismic activity caused by dike intrusion that began in September 2024 and continued until March 2025 and the eruption in the Erta Ale volcanic system of the Afar Rift in July 2025. The event was recorded by the group's seismic station network and resulted in publications using InSAR (Interferometric Synthetic Aperture Radar) data, as well as in extensive outreach activities. The protracted emissions of ash and gases were accompanied by lava flows from the southern caldera rim on 15 – 16 July. Another event studied was the Hayli Gubbi volcano eruption that occurred in Ethiopia and drifted over the Red Sea on 23 November 2025 (NASA/Handout/ Reuters). This volcanic ash from the eruption was transported by the wind and went as far as China, affecting the Indian air space and causing economic damage to the flight industry. (IPPS ETH:02)

SDG 7 – Affordable and Clean Energy *Computational physics*

Modeling Photovoltaic modules performance in Ethiopia

This study examined the effects of site location, tilt angle, and orientation on photovoltaic (PV) module performance in Ethiopia. Optimal tilt angles were derived across multiple time scales using global horizontal radiation data and decomposition–transposition models. Optimal tilts increased with latitude, ranging from 0° to 47.9° on a monthly basis and 14.1° to 21.5° annually, with seasonal optima of 29.2°

(winter), 21.65° (autumn), 12.34° (spring), and 8.8° (summer). Performance comparisons showed that dual-axis tracking provided the highest energy gain (44.89%), while north–south tracking caused substantial losses (28.46%). These findings support improved PV system design, energy assessment, and forecasting in Ethiopia. DOI: 10.3389/fenrg.2024.1519725 (IPPS ETH:03)

SDG 7 – Affordable and Clean Energy *Materials science*

Light and ozone effects on materials for solar cells

This study examined the effects of visible light and ozone exposure on the electrical conductivity of PEDOT:PSS films by varying the following parameters: (i) illumination time, intensity, and wavelength for light-based exposure, and (ii) treatment duration for UV–ozone (UVO) and ozone (O_3). Conductivity was measured using a four-point probe over a temperature range of 250–350 K. The conductivity increased with light exposure time up to 180 minutes, beyond which no further enhancement was observed, indicating saturation of photoinduced processes in the PEDOT component. It also increased with light intensity and showed a clear wavelength dependence, with blue light producing higher conductivity than white light, while dark conditions yielded the lowest values. However, a different trend was observed for UVO and O_3 treatments. These findings highlight the role of photon energy and exposure conditions in modulating PEDOT:PSS conductivity, providing insights for improving the performance of electronic and optoelectronic devices such as organic and hybrid photovoltaic cells and LEDs.
DOI: 10.1088/2053-1591/adf60c, DOI: 10.1063/5.0278845. (IPPS ETH:03)

SDG 7 – Affordable and Clean Energy *Materials science*

Improving perovskite solar cell films

Fabrication of narrow-bandgap (NBG) Pb–Sn perovskites (1.1–1.3 eV) is challenging because rapid and inhomogeneous crystallization leads to poor film morphology and limited reproducibility. In this study, gas quenching (GQ) was employed as an alternative to conventional antisolvent (AS) quenching to better control crystallization kinetics. GQ enabled slower and more uniform crystallization, resulting in improved film quality and higher reproducibility. Devices fabricated using GQ exhibited enhanced performance, achieving a power conversion efficiency of 19.1% compared to 18.3% for AS-processed devices, along with a higher open-circuit voltage. These results highlight the simplicity, environmental friendliness, and effectiveness of GQ for producing high-quality NBG Pb–Sn perovskite films, making it a promising approach for efficient perovskite solar cells. DOI: 10.1002/solr.202500713 (IPPS ETH:03)

SDG 3 – Good Health and Well-being *Analytical electrochemistry*

Detecting norfloxacin in milk and pharmaceuticals

Norfloxacin (Nor) is a fluoroquinolone antibiotic widely used to treat bacterial infections in humans and animals, but improper use can lead to bacterial resistance. In this study, a Cu(II)-chrysine complex ($[Cu(Chr)_2Cl]Cl$) was synthesized and used to modify a pencil graphite electrode (PGE) through potentiodynamic electropolymerization for the electrochemical determination of Nor in pharmaceutical products and milk samples. The modified electrode was characterized using Electrochemical Impedance Spectroscopy (EIS), Ultraviolet–Visible Spectroscopy (UV–Vis), Cyclic Voltammetry (CV), digital optical microscopy, and contact angle measurements. The method showed a linear dynamic range of 1–100 µM, a detection limit of 0.096 µM, and a slope of −0.511 µA/µM. Nor recoveries ranged from 93.7–109.9 % in pharmaceuticals and 81.8–91.1 % in milk, even in the presence of potential interferents such as caffeine and paracetamol. These results demonstrate that the developed sensor is sensitive and selective, and represents a promising alternative for detecting Nor in different types of samples.
doi.org/10.1016/j.sbsr.2025.100904 (IPPS ETH:03)

SDG 3 – Good Health and Well-Being *Analytical electrochemistry*

Electrochemical sensors for antibiotic detection

This study reports the synthesis and characterization of sodium tetraresorcinolatocuprate(II) ($Na_2[Cu(HR)_4]$) and its use in modifying a glassy carbon electrode for the sensitive detection of ciprofloxacin (CPF), an important antibiotic. The compound was characterized using spectroscopic (Ultraviolet–Visible Spectroscopy (UV–Vis), Fourier Transform Infrared Spectroscopy (FT-IR), Inductively

Coupled Plasma Optical Emission Spectroscopy (ICP-OES)) and analytical techniques, and electrochemical tests confirmed the successful formation of a polymer film on the electrode surface, which significantly improved its activity.The modified electrode lowered the oxidation potential of ciprofloxacin and increased the current response eightfold compared to the unmodified electrode, indicating enhanced detection sensitivity. Using differential pulse voltammetry, CPF was detected over a wide concentration range, with very low detection and quantification limits. The method showed high accuracy (98–100 %) in pharmaceutical analysis, high spike recoveries *(99–100 %)*, and low interference from other substances *(<4.6 %)*. These results demonstrate that the developed sensor is reliable for detecting electroactive compounds in complex samples and holds promise for advanced electrochemical sensing applications. doi.org/10.1016/j.ijoes.2025.100937 (IPPS ETH:03)

Kenya

SDG 7 – Affordable and Clean Energy *Nuclear physics*

Electrode stabilizer for Mg and Transition metal-ion Batteries from algae

This work focused on developing sustainable and affordable battery materials for rechargeable energy storage to support renewable energy deployment, circular economy practices, and e-mobility. Alginate biopolymer (an inexpensive and environmentally friendly material derived from brown algae) was selected due to its ability to cross-link multivalent cations and immobilize them within a stable polymer matrix. The polymer was synthesized using iron (Fe), manganese (Mn), and magnesium (Mg) as cross-linking cations. Material characterization using Fourier Transform Infrared Spectroscopy (FTIR), X-ray Photoelectron Spectroscopy (XPS), X-ray diffraction (XRD), and Mössbauer spectroscopy confirmed structural integrity and complex bonding behavior. Electrochemical cells were fabricated to evaluate performance, with cyclic voltammetry and charge-discharge tests used to assess electrode behavior. Results showed strong coordination between alginate and Fe and Mn ions, with higher oxidation states indicating complex bonding interactions. Even without optimization, iron and manganese alginate electrodes demonstrated promising cycling efficiencies of 98% and 69%, respectively. A magnesium alginate electrolyte was also synthesized and characterized, exhibiting behavior similar to a “water-in-salt” system. Ionic conductivity measured via electrochemical impedance spectroscopy (EIS) showed 1.8 mS/cm for a 2 wt% magnesium electrolyte. It was concluded that the ability of alginate to cage multivalent cations and form hydrogels in aqueous environments presents a promising pathway for developing safe, low-cost, and environmentally sustainable electrochemical energy storage systems. (IPPS KEN:01/2)

SDG 9 – Industry, Innovations and Infrastructure *Nuclear physics*

Non-destructive testing of Concrete Structures

A study focused on non-destructive testing measurements of concrete compressive strength using a laboratory pre-calibrated Schmidt rebound hammer, while rebar diameter, location, and cover were measured using a Profometer 5+ Covermeter. Laboratory calibration involved the preparation of 60 concrete cube specimens of five different classes of concrete mix proportions. The compressive strengths of these cubes were assessed using a Denison Compressive Testing Machine. The Profometer was able to locate the exact position of the bar with a high level of accuracy. The equipment was also able to measure the size of the reinforcement bars and their cover, provided that they were located at a depth of 60 mm or less from the measuring surface. These methods were later used to conduct structural tests in two residential and three commercial buildings within Nairobi city. Higher compressive strengths were recorded in commercial buildings compared to the residential ones. (IPPS KEN:01/2)

Laos

SDG 12 – Responsible Consumption and Production *Geophysics*

SDG 9 – Industry, Innovation and Infrastructure

Geophysical Investigation of Houaphan Province, Laos

A geophysical survey was conducted in Houaphan Province, Laos, integrating multiple methods to characterize the subsurface. The primary investigation employed 2D Electrical Resistivity Tomography (2D-ERT) along six parallel profiles, each 275 meters long and spaced 100 meters apart. Data were

acquired using a SuperSting R8/IP resistivity meter with a pole–dipole array. With an electrode spacing varying from 5 to 30 meters and an n-factor of 8, the survey achieved an estimated investigation depth of 50 to 85 meters. The data were processed using AGI EarthImager 2D software to generate resistivity models. To complement the ERT survey, five seismic refraction profiles were conducted along selected ERT lines to help identify subsurface features such as the water table and potential aquifers. A 12-channel Geometrics SmartSeis ST seismographwas used, with a geophone spacing of 5 meters and a 6.5 kg sledgehammer as the energy source. Additionally, a magnetic survey was carried out over geothermal areas. The objectives were to map subsurface structures such as faults and fractures (tectonics) and to differentiate rock types (stratigraphy). (IPPS LAO:01)

SDG 12 – Responsible Consumption and Production *Geophysics*
SDG 9 – Industry, Innovation and Infrastructure
Iron Ore Exploration in Xaysomboun Province, Laos
A geophysical investigation was conducted in Xaysomboun Province, Laos, to further examine subsurface structures, particularly iron ore bodies or contacts identified from prior magnetic measurements. The magnetic data were processed and interpreted using Oasis Montaj software to delineate the iron ore targets. To characterize these targets in greater detail, a 2D Electrical Resistivity Tomography (2D-ERT) survey was carried out along five profiles, each 275 meters long. Measurements were performed using a SuperSting R8 resistivity meter with 56 electrodes with a dipole–dipole electrode array. The collected data were processed and interpreted using the RES2DINV software to generate subsurface resistivity models, providing detailed imaging of the geology and potential ore-bearing structures.
(IPPS LAO:01)

SDG 3 – Good Health and Well-Being *Agricultural chemistry*
Quantification of Catechin, Caffeine and Antioxidant in Local Tea Products of Lao PDR
This study aims to analyze the concentration of Gymnemic acid I in *Gymnema sylvestre* leaves collected from 3 regions of 2 provinces: Tharat Village, Yommalat District, Khammouan Province (KM), Phonphapao Village, Sisattanak District (ITM) and Samsaard Village (Vernkham), Xaythany District (VK), Vientiane Capital. Three plant samples were collected by collecting leaves and shoots in July 2023. The samples collected from the 3 areas had different Gymnemic acid I concentrations, which may be due to different environmental conditions and cultivation methods in each area.
https://ljst.sjnl.la/index.php/ljst/article/view/115 (IPICS LAO:01, LAO:04)

SDG 3 – Good Health and Well-Being *Agricultural chemistry*
The energy-health-environment nexus: assessing the transboundary impacts of coal-fired power plants *Environmental chemistry*
Point source emissions from large coal-fired power plants are pivotal in the energy-health-environment nexus, impacting energy security, air quality, and public health outcomes. Despite this, there is a lack of interdisciplinary prospective studies focusing on the effects of power plant emissions on the population residing downwind. To address this gap, a comprehensive, multicenter, interdisciplinary study on a transboundary scale (India and Bangladesh) has been launched, which includes modeling power plant emissions, seasonal collection of particulate matter and its chemical analysis, socioeconomic surveys of the case (downwind) and control (upwind) populations, lung health assessments, and transcriptomic analyses of blood samples. The outcomes will provide quantitative estimates of power plant impacts on air quality, lung health, and blood markers associated with pulmonary complications. This approach comprehensively assesses the population health impacts of power plant emissions. Moreover, by conducting lung tests in patients on-site, the health team captures an actual snapshot of air pollution. The study establishes causality between power plant emissions, particulate matter characteristics, and population exposure levels while accounting for social, demographic, and economic factors, the study establishes. By integrating diverse techniques, quantitative and qualitative methods, and perspectives, this study aims to enhance scientific understanding of the health and environmental risks and the socioeconomic burden associated with coal-based energy generation in developing limit. (IPICS ANFEC)

Mali

SDG 13 – Good Health and Well-Being *Atmospheric physics*
SDG 11 – Sustainable Cities and Communities
Predictability of extreme precipitation events in the Sahel
Two extreme flood-inducing precipitation events in two Malian cities are investigated with respect to rainfall structures, dynamical forcings, and the ability of the ICOsahedral Nonhydrostatic (ICON) model to simulate them. Two sets of experiments, with convective parameterization enabled and disabled, are conducted for each case. Simulated rainfall fields are tested against the satellite-based precipitation dataset Integrated Multi-satellitE Retrievals for Global Precipitation Measurement (IMERG). Although our simulation with explicitly resolved convection captures the rainfall distribution better than the parameterised one, it strangely fails to organize convection in the moisture-laden extreme case. The results stress the continued need for more research into capturing the complex convective dynamics in order to better forecast extremes of Sahelian rainfall. (IPPS MAL:01)

SDG 13 – Good Health and Well-Being *Atmospheric physics*
SDG 11 – Sustainable Cities and Communities
Assessment of high-resolution regional climate models
This study evaluated nine Regional Climate Models (RCMs) within the Coordinated Regional Climate Downscaling Experiment–Africa (CORDEX-Africa) to assess their performance in simulating climate patterns over West Africa from 1970 to 2005. Key climate variables, including precipitation, air temperature, and evaporation, were analyzed using statistical parameters such as the correlation coefficient, mean bias (Mbias), and root mean square error (RMSE). The CORDEX RCMs show an underestimation of precipitation, variable estimates of evaporation, and an overestimation of temperature, while maintaining strong correlation coefficients for all variables. (IPPS MAL:01)

SDG 13 – Good Health and Well-Being *Atmospheric physics*
SDG 11 – Sustainable Cities and Communities
Analysis of potential strategies for abandoned rural mini-grids
Abandoned mini-grids (localized electricity generation and distribution systems) in rural areas have been studied to identify potential strategies for repurposing. Through a qualitative assessment of abandoned cases, technical failure and the development of the main grid were identified as the primary reasons behind this issue. The study reveals that in Mali, post-interconnection options are cost-effective due to the tariff levels and low interconnection costs, with a current Levelized Cost of Energy.(LCOE) of 5.09 €ct/kWh and a maximum value of 8.80 €ct/kWh. These findings underscore the importance of national policies and regulatory frameworks in supporting the repurposing of mini-grids. (IPPS MAL:01)

SDG 7 – Affordable and Clean Energy *Computational physics*
Optimal installation of solar photovoltaic power plants in rural areas of Mali
This study aims to analyze the extent to which photovoltaic solar energy can be a viable solution for electrifying Mali's rural areas not connected to the national grid, based on an assessment of the country's solar potential. The evaluation of the available electrical energy potential involved four hundred and nine (409) communes, identified and deemed suitable for solar photovoltaic installations following a quantitative analysis. The analysis reveals that the available solar production potential far exceeds the identified electricity needs, leading to the conclusion that Mali has significant potential in terms of solar resources, capable of meeting its energy needs over the long term. (IPPS MAL:01)

SDG 13 – Climate Action *Chemical physics*
Assessing geoengineering approach for climate change solution *Atmospheric physics*
We use the IPSL-CM5A-LR climate model, under two forcing scenarios to investigate the effects of artificial injection of sulfur dioxide (SO_2) into the stratosphere to induce cooling climate in the Sahel. These findings indicate that SO_2 injection could help stabilize precipitation regimes and reduce climate extremes in the Sahel. However, further research is crucial to gaining a deeper understanding of the long-term implications of this method and optimizing its application. (IPPS MAL:01)

Myanmar

SDG 7 – Affordable and Clean Energy *Materials physics*
SDG 9 – Industry, Innovation and Infrastructure *Nanophysics*

Optimization of α-$NaFeO_2$ Cathode Materials for Sodium-Ion Batteries

Sodium iron oxide ($NaFeO_2$) is abundant, low-cost, non-toxic, and environmentally friendly. In this project α-$NaFeO_2$ nanoparticles were synthesized using the sol–gel method. The molar ratio of sodium acetate trihydrate, iron (III) nitrate nonahydrate, and citric acid was maintained at 1:1:1. The resulting pre-calcined powders were allowed to cool naturally in air and then calcined at 600°C for different durations (2 h, 8 h, 16 h, and 24 h) using a digital muffle furnace.According to the SEM results, the sample calcined for 24 h exhibited the most uniform particle distribution with a rough surface texture, which is favorable for achieving a high surface area and facilitating sodium-ion diffusion. According to the Energy-Dispersive X-ray Spectroscopy (EDS) results, the sample calcined for 8 h exhibited elemental compositions closest to the ideal stoichiometry of α-$NaFeO_2$, indicating more effective elemental incorporation at this duration. In the XRD analysis, the sample calcined for 24 h showed a well-defined layered α-$NaFeO_2$ structure with high crystallinity and the largest crystallite size (36.9 nm), which is beneficial for sodium-ion intercalation and electrochemical performance. These outcomes highlight the importance of optimizing calcination duration to tailor α-$NaFeO_2$ cathode materials for improved sodium-ion battery performance.

(IPPS MYA:01)

SDG 6 – Clean Water and Sanitation *Materials physics*
SDG 9 – Industry, Innovation and Infrastructure

Temperature effects in redox flow desalination systems

This project focused on the effect of redox-electrolyte temperature on the desalination performance of a Redox Flow Desalination (RFD) system, which is a desalination device that removes salt from water using electrochemical redox reactions in a circulating electrolyte, using the ferri/ferrocyanide redox couple $[Fe(CN)_6]^{3-}/[Fe(CN)_6]^{4-}$ (a reversible iron-based electrochemical reaction commonly used as a redox mediator). At a redox electrolyte temperature of 50°C, the system achieved a high salt removal rate (112 μg cm^{-2} s^{-1}) and low energy consumption (195.06 kJ mol^{-1}) at a current density of 2 mA cm^{-2} (corresponding to a current of 4.5 mA for a 2.25 cm^2 active electrode area). An optimal operating temperature window was identified at 50°C, resulting in a 9.7% improvement in salt removal rate and a 32.8% enhancement in energy efficiency compared to the baseline temperature of 24°C at 1 mA cm^{-2}. Overall, these findings demonstrate that selective thermal regulation of the redox electrolyte is an effective strategy for optimizing redox flow desalination systems and provide guidance for improving the efficiency of electrochemical desalination technologies. (IPPS MYA:01)

SDG 3 – Good Health and Well-Being *Experimental Nuclear physics*
SDG 2 – Zero Hunger

Heavy metal contamination and health risk assessment in rice

Our study investigated the heavy metal concentrations of Fe, Zn, Cu, Pb, Cd, and As in rice grains and downstream paddy fields near Mandalay Industrial Zone II, Myanmar. Atomic Absorption Spectroscopy (AAS) was employed for metal analysis, and the Transfer Factor (TF), Estimated Daily Intake (EDI), Hazard Quotient (HQ), and Hazard Index (HI) were used to assess metal mobility and the potential non-carcinogenic health risks associated with rice consumption. Results showed that Fe was the most abundant metal in both soils and rice grains across all sites. Zn and Cu were detected at moderate levels, while Pb concentrations were highest at the industrial site in soils and at the downstream site in rice grains. Cd was present at low concentrations in both soil and rice grains, whereas As was not detected in any samples. Transfer factor analysis revealed that Cd exhibited the highest TF values, indicating strong bioaccumulation potential, followed by Zn, while Fe showed minimal translocation from soil to rice. Estimated daily intake values indicated higher contributions from Fe and Zn, whereas Pb and Cd posed greater toxicological concern despite lower intake levels. All individual HQ and combined HI values were below unity (HI = 0.33–0.50), suggesting no immediate non-carcinogenic health risk from rice consumption. However, elevated TF and HQ values for Cd and Pb near industrial and downstream areas

highlight the need for continuous monitoring and improved management practices to ensure long-term food safety and environmental sustainability in the study region. (IPPS MYA:01)

SDG 4 – Quality Education *Nuclear physics*
SDG 9 – Industry, Innovation and Infrastructure *Theoretical Physics*
Numerical Study of the 3D Quantum Harmonic Oscillator
In this work, low lying energy levels of a 3D quantum harmonic oscillator are calculated by using both variational principle and Numerov method. The results are compared with corresponding analytical solutions. For variational calculation, taking a linear combination of gaussian basis as trial wave function demonstrated that a basis size of twelve is sufficient to accurately reproduce the low-lying levels of this system up to N = 15. The variational parameters chosen in this work are bi = 1.41 and mi starts from 0 to 11. The energy values computed by using Numerov method showed good agreement with analytical results for all considered states. Wave functions of the first six low lying energy levels are also plotted, comparing the results obtained from variational method with Numerov method and analytical results. Since the variational results provide similar energy eigenvalues as the analytical results, the wave functions appear to coincide. The study demonstrates that two numerical techniques can reliably calculate the quantum energy levels and wave functions of a system, producing results that match the exact solution. (IPPS MYA:01)

SDG 3 – Good Health and Well-Being *Materials physics*
SDG 6 – Clean Water and Sanitation *Chemical physics*
Isolation and optimization of electroactive bacteria for bioanodes
The performance of Microbial Desalination Cells (MDCs) is highly dependent on the efficiency of the electroactive biofilm on the anode. This project aimed to isolate native electroactive bacteria from local soil samples to create a robust and high-performance mixed consortium for MDC applications. The electroactive bacteria were collected and cultured from soil samples obtained from Inya Lake near the University of Yangon. Isolated strains were mixed with known exogenous electroactive strains to optimize electron transfer rates. The optimized consortium was then immobilized on the surface of carbon-based anodes. Three distinct electroactive bacterial strains were isolated and among them the anaerobic bacteria, which generate electrons that flow to the bioanode, were separated. Anaerobic bacteria congregate and live as a biofilm layer on the electrode surface and, instead of using oxygen, they utilize the electrode as an electron acceptor to break down organic materials. The electrons generated from this breakdown process are then transferred to the electrode, thereby creating a system that produces electricity. Immobilization of the consortium on the anode surface resulted in stable biofilm formation within 7 days. Electrochemical Impedance Spectroscopy (EIS) revealed a significant reduction in charge transfer resistance, confirming enhanced bio-electrochemical activity. (IPPS MYA:02)

SDG 3 – Good Health and Well-Being *Materials physics*
SDG 6 – Clean Water and Sanitation *Chemical physics*
Fabrication and characterization of polymer-based ion exchange membranes
The efficiency and longevity of Microbial Desalination Cells (MDCs) are limited by the cost and performance of commercial ion exchange membranes. This project focused on fabricating low-cost, high-durability Anion Exchange Membranes (AEM) and Cation Exchange Membranes (CEM) using polytetrafluoroethylene (PTFE) polymer to improve MDC scalability. MDC chambers were constructed, and custom AEM and CEM membranes were fabricated. These membranes were subjected to a battery of tests, including mechanical strength analysis (tensile testing), electrochemical performance (ion exchange capacity and conductivity), and material characterization (FTIR and TGA). The fabricated PTFE-based membranes exhibited a 25% increase in mechanical tensile strength compared to standard commercial membranes. Electrochemical testing showed an ion exchange capacity of 1.2 meq/g for the CEM, with low electrical resistance. Material characterization confirmed the successful integration of functional groups and thermal stability up to 250°C, making them highly suitable for long-term MDC operation. (IPPS MYA:02)

SDG 3 – Good Health and Well-Being *Materials physics*
SDG 6 – Clean Water and Sanitation *Chemical physics*
Polymer-graphite composite electrodes for MDC cathodes
Cost-effective and efficient cathode materials are crucial for the overall energy balance of Microbial Desalination Cells (MDCs). This project aimed to develop novel Polymer-Graphite (PG) electrodes using a simple fabrication method to replace expensive metal-based catalysts. PG electrodes were synthesized using a solution casting method with PVC resin and ketone as the primary solvent. The structural and electrochemical properties of the fabricated electrodes were analyzed using X-ray Diffraction (XRD) and Scanning Electron Microscopy (SEM). SEM analysis revealed a highly porous and uniform distribution of graphite particles within the polymer matrix, providing an ample surface area for oxygen reduction reactions. XRD patterns confirmed that the crystalline structure of the graphite was preserved during the casting process. Electrochemical testing demonstrated that the PG electrodes achieved a stable current response, proving their viability as a low-cost alternative for MDC cathodes. (IPPS MYA:02)

Nepal
SDG 3 – Good Health and Well-Being *Materials physics*
SDG 9 – Industry, Innovation and Infrastructure *Computational physics*
Thin films as gas sensors
Density functional theory investigations of pristine, adsorbed, and doped ZnO monolayers revealed non-magnetic behavior in undoped systems and induced magnetism upon doping. In particular, Al–ZnO demonstrated favorable adsorption characteristics for toxic gases such as HCN and H_2S, highlighting its suitability for gas-sensing applications. Parallel studies on aluminum oxide, copper oxide, and Ga-doped SnO_2 monolayers exhibited similar trends, while Al-doped CuO systems further confirmed the tunability of electronic and sensing properties through controlled doping. (IPPS NEP:01)

SDG 3 – Good Health and Well-Being *Materials physics*
SDG 9 – Industry, Innovation and Infrastructure *Computational physics*
Technological properties of nanolaminated layered materials
First-principles calculations on MAX-phase compounds, i.e. materials combining metallic with ceramic properties, including Ti_2CdC and Ti_2SC, demonstrated their potential for applications in optoelectronic devices, sensors, photonic devices, infrared imaging, solar thermal collectors, thermal insulation, nuclear technologies, and energy dissipation systems. This work was extended to a broader family of MAX-phase materials such as Ta_2AlN, Ti_2AlN, Ti_2GaN, Sc_2AlC, Ta_2AlC, and Ta_2CdC, whose computed properties indicate strong prospects in thermoelectric, optoelectronic, electromagnetic shielding, energy storage, and sensing applications. (IPPS NEP:01)

Rwanda
SDG 9 – Industry Innovation and Infrastructure *Cosmology*
The Accelerated Expansion of the Universe
This study proposes a framework for explaining the universe's current accelerated expansion through large scale structure formation within modified Gauss–Bonnet gravity (a theory involving a special combination of spacetime curvature terms). Using the 1+3 covariant formalism (a relativistic approach that splits spacetime into one time dimension and three spatial dimensions to study cosmological perturbations), the project studied cosmological perturbations in an f(G) model containing a stiff fluid (a hypothetical cosmic fluid with pressure equal to its energy density) and two variants of Chaplygin gas (an exotic fluid often used in cosmology to model dark energy or unified dark matter–dark energy scenarios), defining gradient variables to derive energy overdensity perturbation equations in redshift space. Solving these equations for a chosen f(G) form and each Chaplygin model, we examine the evolution of the energy overdensity contrast. Numerical results show that in both Chaplygin gas scenarios the contrast decays with redshift, suggesting enhanced large scale structure formation and highlighting the potential of this combined fluid–gravity system in addressing cosmic acceleration. (IPPS RWA:01)

SDG 9 – Industry Innovation and Infrastructure *Cosmology*

Methods for Analyzing Cosmological Perturbations

This study analyzes cosmological perturbations in a viscous modified Chaplygin gas model using the 1+3 covariant formalism (a relativistic method that separates time and space to study cosmic perturbations). Covariant and gauge invariant gradient variables are constructed, and after applying scalar and harmonic decomposition together with redshift transformation, the corresponding energy overdensity perturbation equations in redshift space are obtained to study large scale structure formation. Numerical solutions in both long and short wavelength limits reveal that the overdensity contrast decays with redshift, but perturbations including viscous Chaplygin effects deviate significantly from ΛCDM behavior. When viscosity is removed, the results reduce to those of ΛCDM, highlighting the distinct influence of bulk viscosity in modified Chaplygin gas cosmology. The method helps understanding how cosmic viscosity in the universe could affect the formation of galaxies and large-scale structures. (IPPS RWA:01)

SDG 9 – Industry Innovation and Infrastructure *Astrophysics*

Coronal Mass Ejections and Their Space Weather Impact

This study examines the space weather relevance of 39 limb coronal mass ejections (CMEs) (large eruptions of plasma and magnetic fields expelled from the Sun's outer atmosphere) linked to metric and decametric–hectometric (DH) type II solar radio bursts (radio emissions produced by shock waves propagating through the solar corona and interplanetary space) during Solar Cycle 24 (approximately from 2008 to 2019). By grouping the events into m-DH, m-DH-SEP, and m-DH-NonSEP categories (classifications based on the presence of specific radio bursts and solar energetic particle events), the analysis shows that events producing solar energetic particles (SEP)-associated CMEs are significantly faster (∼1203 km/s) and wider than non-SEP ones (∼333 km/s), with halo occurrence rising from 62.5% to 93%. CME speed correlates strongly with SEP peak intensity (CC = 0.76), and 87% of SEP-producing events originate from the magnetically well-connected western hemisphere. Moreover, 62.5% of western limb metric–DH bursts produced SEPs, compared to only 13% lacking DH counterparts, suggesting that the presence of DH radio bursts is a strong indicator of efficient particle acceleration. These results demonstrate that fast and wide CMEs accompanied by DH type II bursts are efficient accelerators of high-energy particles, and therefore can serve as reliable early indicators for forecasting SEP-related space weather events that may affect satellites and communication systems. (IPPS RWA:01)

SDG 3 – Good Health and Well-Being *Atmospheric physics*

SDG 13 – Climate Action *Climate science*

Observed and future projections of seasonal extreme temperature indices in Rwanda

This study assesses historical variability, trends, and future changes in five standard climate indicators for extreme temperatures (ETCCDI: Expert Team on Climate Change Detection and Indices) across Rwanda. The project focused on 5 km gridded observations held in the years 1983–2021 and projections of the regional climate model simulations from the Coordinated Regional Climate Downscaling Experiment (CORDEX CORE) for 2026–2060 and 2066–2100 under a low greenhouse-gas emissions scenario (RCP2.6) and a high greenhouse-gas emissions scenario (RCP8.5). Future projections show that the Diurnal Temperature Range (DTR) is expected to increase in the southeast and northeast but decrease in other regions. The projection for the percentage of unusually cold nights (Tn10p) indicates a decline under the low-emission scenario RCP2.6 but an increase under the high-emission scenario RCP8.5 in the near future, with opposite patterns in the far future. In contrast, the percentage of unusually warm nights (Tn90p) increases consistently under both scenarios, with stronger increases under high emission scenario. For daytime indices, the percentage of unusually cold days (Tx10p) initially increases but later decreases depending on the season, while the percentage of unusually warm (Tx90p) days exhibits region-dependent changes across the country. Overall, increasing temperature extremes and spatial contrasts highlight the need for targeted adaptation in Rwanda's climate-sensitive sectors. (IPPS RWA:01)

SDG 3 – Good Health and Well-Being *Atmospheric physics*
SDG 13 – Climate Action *Climate science*

Precipitation Trends in Eastern Rwanda (1981–2021)

This study analyzes trends and change points in six agroclimatic indicators across 56 stations in Rwanda's Eastern Province from 1981–2021 using standard statistical trend and change-point detection methods. Results show predominantly decreasing rainfall trends in MAM (March–April–May, the main rainy season) (39 stations, eight significant) and mixed but mostly decreasing trends in SOND (September–October–November–December, the secondary rainy season), with regional trends being non-significant. Onset dates show widespread decreases (41 stations, 12 significant), while rainy season duration increases at most stations, significantly at the regional scale in SOND. Heavy rainy days exhibit a significant regional decline in MAM, and most change points appear between 2000–2020.
These shifts have affected agricultural practices and contributed to crop failures, underscoring the need for improved climate information services (better seasonal forecasts and weather information for farmers) and targeted adaptation strategies. (IPPS RWA:01)

SDG 6 – Clean Water and Sanitation *Applied Mathematics*
SDG 3 – Good Health and Well-Being *Numerical Analysis*
SDG 11 – Sustainable Cities and Communities

Modelling the dynamics of pollutants in rivers

Rivers are increasingly polluted by human activities such as littering, chemical disposal, and industrial discharge, which introduce hazardous substances into waterways and pose serious health risks. Traditional monitoring methods rely on measurements but fail to capture the dynamic behavior of chemicals in the environment. This interdisciplinary research project includes the University of Rwanda (UR/Mathematics, Environmental Engineering, Chemistry) and Umeå University (Sweden/Chemistry). The multiple objectives are (i) to Identify the important pollutants observed in Nyabugogo river in Rwanda (from its source) and select the ones to monitor; (ii) to develop models for the dynamics of these pollutants; (iii) to define variables and parameters for data collection and estimation of parameters; (iv) to validate the model and implement the results. Some of the activities have been carried out (i.e. data collection, identification of the pollutants, identification of the model (Advection Diffusion Equation (ADE) and the remaining activities are the estimation of the parameters, the validation of the model, numerical simulations. (IPMS PDEAAP-Rwanda)

SDG 3 – Good Health and Well-Being *Numerical Analysis*

Multispecies SIR reaction–diffusion model in a 3D domain

Understanding how diseases spread among various interacting competing species within ecosystems presents a significant challenge. In this study we have investigated an SIR (Susceptible, Infected, Recovered) epidemic model based on a system of non-linear reaction diffusion partial differential equations. This model demonstrates how a disease caused by a single pathogen can propagate through multiple species sharing the same environment. It also captures the dynamic interactions and competition among species, encompassing the stages of susceptibility, infection and recovery. The classic SIR model was advanced by incorporating multiple species within a confined three-dimensional ecosystem. The analytical properties of the system were established using fundamental principles such as the maximum principle, fixed point theorems, and the quasi-positivity of the reaction terms. The findings confirmed the existence, uniqueness, boundedness, and non-negativity of the solutions, ensuring that the model is well-posed and biologically relevant. Furthermore, the study states of the system were analyzed and the basic reproduction number R0 which helps determine whether the disease will continue to spread or eventually diminish. Some numerical simulations to illustrate the temporal and spatial propagation of the infection, as well as the effects of species interactions and competition, were computed to thereby reinforce the theoretical conclusions. (IPMS PDEAAP-Rwanda)

SDG 3 Good Health and Well-Being *Mathematical Modelling*
SDG 4 Quality Education *Biomedical Engineering*

Web tools for human health modelling in Rwanda

The project (full title: Matlab-Server and Web-Based Graphical User Interface Design of Mathematical models of human Cardiovascular-respiratory and Glucose -Insulin system in Rwanda) aims to design and implement a web-based graphical user interface (GUI) that utilizes mathematical models of the cardiovascular–respiratory system (CRS) and glucose–insulin system (GIS), that are implemented on a MATLAB server. It further seeks to design and develop a web-based GUI tailored to the Rwandan context, based on mathematical models of the CRS and GIS, and to assist medical professionals and other experts by enabling the estimation of non-measurable parameters of these systems through computational modelling. The project also supports the computation and simulation of the mathematical models, facilitating analysis and interpretation of physiological processes, and aims to inform decision-makers by providing tools for testing scenarios and improving the health of the Rwandan population. In addition, it contributes to training and mentoring postgraduate students and to building the research capacity of junior staff at the University of Rwanda. The project resulted in the development of two well-designed web-based graphical user interfaces integrated with MATLAB. It established a strong foundation for technology-driven healthcare solutions related to cardiovascular–respiratory and glucose–insulin systems in Rwanda and beyond, while also contributing to capacity building through the training of junior staff at the University of Rwanda in mathematical modelling, web development, and MATLAB design. (IPMS CoRE-Math UR)

SDG 4 Quality Education *Mathematics education*
SDG 5 Gender Equality *Pure mathematics*
SDG 10 Reduced Inequalities

Mathematics capacity building in Rwanda

The project's aim is to recognise and strengthen the role, importance, and applications of mathematics in science, engineering, and technology. It focuses on training young students through a three-stage competition system to solve mathematical problems of varying levels of complexity, as well as awarding top performers and further preparing selected winners for participation in international competitions such as the International Mathematical Olympiad (IMO) and the East African Mathematical Olympiad (EAMO). The project also includes preliminary work towards establishing an International Mathematics Master's programme in Rwanda and seeks to encourage young students, particularly girls, to pursue studies and careers in STEM, which are central to Rwanda's development. The achievements of the project include the successful organisation of the Rwanda Mathematics Competition (RMC) and International Day of Mathematics (Pi Day) 2025, participation in the East African Mathematical Olympiad (EAMO) alongside coach training, the training of mathematics teachers and coaches to support students in competition preparation, the selection and participation of Rwanda teams in PAMO (Pan African Mathematics Olympiad) and IMO competitions, institutional visits and discussions on the feasibility of establishing an International Mathematics Master's programme at the University of Rwanda, and the organisation of the EAUMP/CoRE-Math summer school. (IPMS CoRE-Math UR)

SDG 4 – Quality Education *Algebra*

Modifying mathematical structures

This project strengthened postgraduate research in algebra by providing rigorous structural results for quasi-deformations of $sl_2(F)$, a mathematical object. Hom-Lie algebra structures induced by twisted derivations were constructed, and necessary and sufficient conditions for the twisted Jacobi identity were established. New families of quasi-deformed algebras were characterised, providing a solid theoretical foundation for further research and postgraduate supervision in abstract algebra within the network. (IPMS CoRE-Math UNZA)

SDG 4 – Quality Education *Financial mathematics*

Improving financial models

To address volatility limitations in the classical Black-Scholes model, a Bayesian dynamic calibration framework using option data was developed. Markov Chain Monte Carlo methods estimated time-varying volatility parameters and quantified uncertainty. Empirical results showed improved pricing accuracy and reduced calibration error, strengthening research capacity in financial mathematics and Bayesian inference. (IPMS CoRE-Math UNZA)

SDG 4 – Quality Education *Applied statistics*
SDG 2 – Zero Hunger

Childhood undernutrition trends in Zambia (2002–2018)

Using nationally representative data from the Zambia Demographic and Health Survey, logistic regression models accounting for survey design were applied to analyse determinants of stunting, underweight, and wasting. Stunting declined from 45.6% to 34.7% and underweight from 27.3% to 11.6%, while wasting remained stable. Low birth weight, poverty, and regional disparities were significant predictors. The findings provide policy-relevant evidence and demonstrate advanced statistical application to national development challenges. (IPMS CoRE-Math UNZA)

SDG 4 – Quality Education *Statistical theory*
SDG 9 – Industry Innovation and Infrastructure

Closed-form results in statistical theory

Closed-form expressions were derived for the moments of the nonnegative adjusted estimator of squared multiple correlation that were previously expressed as infinite series. Additionally, closed-form and bias-corrected estimators for the inverse Nakagami distribution were developed, with asymptotic properties established and performance validated through simulations and data applications. These contributions enhance computational efficiency and support advanced training in mathematical statistics. (IPMS CoRE-Math UNZA)

SDG 3 – Good Health and Well-Being *Atmospheric physics*
SDG 13 – Climate Action *Climate science*

Trends and variability of temperatures in Eastern Rwanda (1981–2021)

This study analyzes 1983–2021 air temperature trends and variability across the Eastern Province of Rwanda, with near homogeneous zones derived from k means clustering (a statistical method used to group locations with similar rainfall and temperature patterns) of gridded rainfall and temperature fields. Monthly, seasonal, and annual minimum, maximum, and mean temperatures were assessed using a dynamic linear state space model, complemented by variability analysis via standard deviation. Results show significant warming in annual minimum (up to 2.95°C) and mean temperatures (1.87°C), with all seasons exhibiting increases in minimum temperature, especially June–July–August (JJA, 3.37°C). Maximum temperature changes are largely insignificant. Minimum temperature trends show nonlinearity, with stability during 1990–2010 followed by marked warming. Across the Northwestern, Central, and Southeastern zones, significant increases in seasonal and annual minimum temperature occur mainly in the Northwestern and Southeastern zones, with the highest rise (4.07°C) in JJA in the Northwestern zone. The temperatire variability remains low (<1°C). These findings identify climate vulnerable areas and provide guidance for policy, resilience planning, and future climate research. (IPPS RWA:01)

SDG 3 – Good Health and Well-Being *Environmental chemistry*
SDG 6 – Clean Water and Sanitation *Water chemistry*

Characterization and treatment of academic wastewater using volcanic-gravel-constructed wetlands: A study in Rwanda

This study evaluated wastewater from eleven academic institutions. Horizontal subsurface flow constructed wetlands (HSFCWs) filled with locally sourced volcanic gravel were tested for treatment performance at a selected site, the University of Rwanda, College of Science and Technology (UR-CST).

Six HSFCWs operated continuously for four months: two planted with *Cyperus latifolius*, two with *Juncus effusus*, and two unplanted. Academic wastewater showed average concentrations of 715 mg/L COD, 54 mg/L NH_4^+-N, 9 mg/L NO_3^--N, and 32 mg/L PO_4^{3-}-P. A 4-day hydraulic retention time was effective for the treatment process. The HSFCWs achieved removal efficiencies of 69–82% (COD), 66–87% (NH_4^+-N), 69–90% (NO_3^--N), and over 90% for TSS and PO_4^{3-}-P, emphasizing the strong physical and chemical purification capacity of volcanic gravel as confirmed by XRF analysis. *Juncus effusus* outperformed *Cyperus latifolius* in biomass (6667 vs. 4389 g/m^2) and nutrient assimilation per unit area, removing 3.75× more TP and 1.46× more TN. The desorption capacity of the substrate enabled potential phosphorus recovery of up to 50%. Volcanic gravel-based CWs offer an effective, low-cost, and sustainable approach to wastewater treatment with potential for nutrient recovery.
doi.org/10.3390/w17223200 (IPICS RWA:01)

SDG 3 – Good Health and Well-Being *Water chemistry*
SDG 6 – Clean Water and Sanitation
Coffee pulp and husk-derived hydrochars and biochars absorb polyphenols and pesticides from wastewater
This study aimed to assist coffee producers by providing local waste management solutions by examining the adsorption efficiency of hydrochars and biochars derived from coffee pulps (CP) and coffee husks (CH) in removing polyphenols and pesticides from coffee processing wastewater (CPWW). These materials were tested for the adsorption of selected polyphenols and pesticides from CPWW. Hydrochars exhibited high removal efficiencies for polyphenols (up to 100 %), primarily via hydrogen bonding, while biochars effectively adsorbed hydrophobic pesticides (removal efficiencies up to ∼75 %) through hydrophobic interactions. Adsorption data fitted the Freundlich isotherm, indicating multilayer adsorption, and kinetic analyses suggested complex mechanisms involving both physisorption and chemisorption. These findings demonstrate the potential of coffee waste-derived chars to serve as sustainable adsorbents for mitigating pollution from CPWW, offering a promising local waste management strategy in coffee-producing countries. doi.org/10.1016/j.eti.2025.104739 (IPICS RWA:01)

Tanzania
SDG 9 – Industry Innovation and Infrastructure *Materials physics*
SDG 11 – Sustainable Cities and Communities
Thermochromic thin films for smart windows
This research focuses on developing thermochromic coatings based on vanadium dioxide (VO_2) that can be used in several applications like for example in smart windows. The study is a continuation of a previous project and the motivation was to improve the thermochromic properties, and particularly luminous transmittance, transition temperature and solar modulation, which would lead to better energy-saving smart windows. To achieve this, nanoparticle based VO_2 thin films were deposited by hydrothermal method. This is a new method for the group, and in 2025 the focus was to master the method and optimize deposition parameters. Nanoparticle-based VO_2 thin films produced by the hydrothermal method show thermochromic switching comparable to conventional VO_2 thin films, demonstrating that this fabrication approach is a viable alternative for developing thermochromic coatings. (IPPS TAN:01/2)

SDG 3 – Good Health and Well-Being *Materias physics*
SDG 7 – Affordable and Clean Energy *Chemical physics*
Thermal Energy Storage Materials (TESM)
In this project, the focus was on a tunable phase change thermal energy storage materials based on the binary mixtures of pentaerythritol (PE) and tris(hydroxymethyl)aminomethane (TAM), for box and parabolic solar cookers. The study determined the influence of coal particles inclusion and mass ratio on thermal physical properties like phase change temperature (PCT), enthalpy and thermal conductivity of coal-TAM/PE and its performance on a parabolic solar cooker. The 60%TAM/40%PE sample realised the highest total enthalpy at 98.84 J/g with PCTs 139.1 ℃ and 180.4 ℃ for TAM and PE, respectively. The

results indicated that an appropriate choice of the binary mixture of TAM and PE coupled with coal particles has great potential to be used as TESMs, particularly in solar cookers. (IPPS TAN:01/2)

Uganda

SDG 7 – Affordable and Clean Energy *Chemical physics*
SDG 3 – Good Health and Well-Being *Material physics*

Solar cookers with heat storage systems for domestic and institutional cooking applications.

The over dependence of woodfuel for cooking has resulted into increased rate of deforestation in Uganda, despite the region receives abundant sunlight that can be converted with appropriate technology and used for cooking applications. In this study, we designed and constructed a dual tank system integrated with an energy storage system for cooking applications. The system consists of a heat storage tank, a heating funnel and a cooking unit. The heat storage contains heat transfer oil and rock pebbles. The heating funnel was made in the form of a Y-shape which allow a small volume of oil to be heated faster to higher temperatures. The system is based on self-circulation and no pump is required. A 1.8 kW solar PV system generated electricity to supply a heater rated 1.2 kW mounted inside the heating funnel. The supply power was purely DC and no inverter was used. The heated oil in the funnel expands and overflows into the heat storage. It was observed that the oil in the heating funnel reached temperatures of above 150°C in less than 30 min and the thermal energy storage system can store up 9.0 kWh. Several cooking tests were demonstrated during charge and discharge processes. 10 L of water was boiled in 25 min consuming 0.986 kWh; 3 kg of rice was boiled in 1 h consuming 0.556 kWh and 1.26 kWh of energy was used for boiling and simmering of 3 kg of beans within 2–3 h. At the top of the cooker a high-temperature heat front was observed. During the discharge cycle, there is no mixing of cold and hot oil. A thermal charging efficiency of 57.4 % was obtained. Cooking efficiencies of 75.0 % and 59.4 % were obtained during charging and discharge cycles respectively. The system is highly scalable for indoor household and institutional solar cooking. (IPPS UGA:01)

SDG – 9 Industry Innovation and Infrastructure *Materials physics*

Uniformity of aluminium thin films on large-area glass

This study investigated the lateral heterogeneity of the structural, optical, and electrical properties of thermally deposited aluminium (Al) thin films on large-area glass substrates. Aluminium thin films are widely used in large-area applications such as smart windows, solar cells, and reflector mirrors, where uniform film properties are essential for reliable device performance. The motivation of this study was to investigate the effect of substrate position on physical properties of Al thin films while independently controlling film thickness and substrate inclination angle. The films were deposited using thermal evaporation and characterized using X-ray diffractometry (XRD), Ultraviolet-visible light- near-infrared (UV–Vis–NIR) spectrophotometry, and a four-point probe. Films of 200 nm thickness deposited over a lateral width of 0 – 5 cm at inclination angles between 0° and 60°showed no variation across the sample in any measured property—neither in crystal structure (orientation and crystallinity), nor in surface features, nor in optical behavior, nor in electrical resistance. Similarly, no lateral heterogeneity was observed for films with thicknesses of 150 nm and 250 nm deposited at a fixed inclination angle of 0°. In contrast, thinner films of 50 nm and 100 nm showed noticeable lateral heterogeneity in sheet resistance. Additionally, films deposited at a high inclination angle of 80° (200 nm thickness) exhibited pronounced lateral heterogeneity in structural, optical, and electrical properties. These results demonstrate that both film thickness and substrate inclination angle critically influenced the uniformity of Al thin films on large-area substrates, with thicknesses of 150 – 250 nm deposited at moderate inclination angles being optimal for large-area applications. (IPPS UGA:01)

SDG 3 – Good Health and Well-Being *Mathematical Epidemiology*

Modeling Covid-19 case distribution across age groups

The Covid-19 pandemic was one of the most devastating disease outbreaks in modern human history. In the early stages, absence of medical countermeasures meant that control primarily relied on Non-Pharmaceutical Interventions (NPIs) which proved socially and economically unsustainable in the long run. As pharmaceutical solutions became available, the need for implementing targeted measures

became increasingly urgent amid resource constraints. This situation required a thorough understanding of population heterogeneity and its effects on disease transmission to effectively control and mitigate both the current outbreak and similar ones in the future. This study aims to investigate the effects of age-based population heterogeneity on disease transmission dynamics. It further seeks to assess how the timing of mitigation measures influences outcomes across different model scenarios. A deterministic model based on a system of ordinary differential equations was formulated. To account for variations in contact patterns, the model incorporates contact matrices that differentiate between location, namely: home, school, workplace, and other settings. The model was analyzed for well-posedness, as well as the existence and stability of its equilibria. Numerical simulations were performed using a fourth-order Runge-Kutta scheme implemented in Python. The model analysis reveals that differential susceptibility is the leading driver shaping the pattern of case distribution, outweighing the effects of heterogeneous contact patterns and age-specific severity. The timing of interventions was also found to be critical: initiating mitigation measures 20 days earlier prevents approximately three times as many cases compared to implementation after 30 days. Furthermore, when heterogeneous contact is combined with differential susceptibility, the model predicts that early mitigation reduces cases among adults by more than half, yet has only a limited impact on individuals under 20 years of age. (IPMS CoRE-Math MAK)

SDG 4 – Quality Education *Algebra*

Multiplicative independence in the sequence of k-generalized Lucas numbers

Understanding arithmetic properties of recurrence sequences, such as Fibonacci- and Lucas-type numbers, plays an important role in number theory, with possible connections to algebra and cryptography. Let $k \geq 2$ be an integer. The sequence of k −generalized Fibonacci numbers is the sequence $\left(F_n^{(k)}\right)$ given by $F_n^{(k)} = F_{n-1}^{(k)} + \cdots + F_{n-k}^{(k)}$, where $n, k \in \mathbb{Z}$, with $F_1^{(k)} = 1$ and $F_i^{(k)} = 0$ for $i = 2 - k, 3 - k, \cdots, 0$. If one keeps the same recurrence relation (every term is the sum of the previous terms) but instead of the initial values being $0, 0, \cdots, 0, 1$ one starts with $0, 0, \cdots, 2, 1$, then one obtains the sequence of k −generalized Lucas numbers. When $k = 2$, these coincide with the classical sequences of Fibonacci and Lucas numbers. If a, b are nonzero integers then we say that they are multiplicatively independent if the only solution in integers x, y of the equation $a^x b^y = 1$ is $x = y = 0$ and multiplicatively dependent otherwise. Note that any pair of integers such that one of them is a pair of multiplicatively dependent integers. The main purpose of this project is to find all pairs of the k −generalized Lucas numbers that are multiplicatively dependent. The main result can be expressed as follows: l*et* $k \geq 2$ *and* $\left(L_n^{(k)}\right)_{n\in\mathbb{Z}}$ *be the sequence of* k *−generalized Lucas numbers. If* $n > m \geq 0$ *are integers with* $n \neq 1, m \neq 1$ *such that* $L_n^{(k)}$ *and* $L_m^{(k)}$ *are multiplicatively dependent then* $(k, m, n) = (2,0,3), (3,0,7)$. Results of this type contribute to the broader understanding of Diophantine equations. (IPMS CoRE-Math MAK)

SDG 7 – Affordable and Clean Energy *Materials chemistry/Energy*
SDG 9 – Industry, Innovation and Infrastructure

Carbon dioxide derived poly (propylene carbonate-propylene oxide) as electrode material for energy storage

This study presents an electrode material developed from poly (propylene carbonate-propylene oxide) (PPC-PO), which was produced from the co-polymerization of carbon dioxide (CO_2) and propylene oxide (PO). The PPC-PO copolymer was synthesized and characterized using Fourier transform infrared spectroscopy (FTIR), nuclear magnetic resonance (NMR), scanning electron microscopy (SEM), and thermal gravimetric analysis (TGA). The PPC-PO copolymer (Mn = 4.2 kg mol^{-1}, PDI = 2.2) was functionalized through solvothermal treatment to yield the FPPC-PO electrode material. FTIR analysis of the functionalized PPC-PO (FPPC-PO) showed that it retained key functional groups observed in the original PPC-PO copolymer. The FPPC-PO exhibited high thermal stability up to 229 °C, undergoing complete decomposition between 330 °C and 385 °C. The FPPC-PO electrode material exhibited excellent electrochemical properties including a specific capacitance of 68.47 F/g and a current density of 0.3 A/g. The FPPC-PO displayed good stability as an electrode material, with a capacitance retention rate of 98.5% up to 9000 cycles at current density of 1.0 A/g. (IPICS UGA:02)

West Africa

SDG 3 – Good Health and Well-Being *Material physics*

Correlative microscopy to characterize malaria infected erythrocytes

Early and reliable identification of malaria-infected erythrocytes (red blood cells) is essential for improving diagnostic accuracy and for understanding disease progression, motivating the use of advanced correlative microscopy approaches to overcome the limitations of individual imaging techniques. Several microscopy techniques have been employed, including phase-contrast microscopy, confocal microscopy, hyperspectral microscopy, Raman microscopy, white-light interferometry, atomic force microscopy (AFM), and focused ion beam–scanning electron microscopy (FIB-SEM). The images were analyzed using image processing and multivariate statistical analysis approaches. This study was used to confirm the data obtained with the multispectral and multimodal microscope. The results were used to distinguish clearly between infected and uninfected red blood cells where multispectral and multimodal microscope could not separate these cells. (IPPS AFSIN)

Zambia

SDG 7 – Affordable and Clean Energy *Materials physics*

Solar PV pumped hydro energy storage at Shiwang'andu, Zambia

The feasibility of incorporating a photovoltaic (PV) solar–based pumped hydro energy storage system at the Shiwang'andu Mini Hydropower Station in northern Zambia utilised the existing dam's upper excavation and proposed the development of a lower excavation to serve as a large water storage reservoir. Calculations revealed that a photovoltaic (PV) solar system operating for about six hours per day would enable sufficient energy for upward pumping, increasing the station's storage capacity by up to three times and achieving an annual energy capacity of approximately 452,600 kWh. Financial viability was assessed over a 25-year project lifetime using cash flow analysis, net present value, profitability index, and payback period. Assuming a 10% annual increase in electricity tariffs and a 5.68% Weighted Average Cost of Capital (WACC), the project was projected to generate returns exceeding its costs, yielding a positive Net Present Value (NPV) and a profitability index greater than one, with an investment payback period of about 16.2 years. Overall, the proposed PV-powered pumped hydro energy storage system was confirmed to be a clean and carbon-free energy storage solution, aligned with United Nations Sustainable Development Goal 7, which promotes affordable, reliable, sustainable, and modern energy for all. (IPPS ZAM:01)

Zimbabwe

SDG 7 – Affordable and Clean Energy *Geophysics*

SDG 9 – Industry, Innovation and Infrastructure

Development of an Integrated Geothermal Exploration Framework for Zimbabwe

Zimbabwe possesses documented geothermal manifestations but lacks a structured, context-appropriate exploration pathway. During 2025, the group refined a conceptual geothermal exploration framework following advanced technical training in geothermal resource assessment. The framework integrates geological mapping, magnetic surveys, electrical resistivity imaging, gravimetric analysis, and hydrogeological evaluation within a phased investigation strategy designed to progressively reduce uncertainty prior to drilling. Emphasis was placed on multi-parameter data integration and risk-based decision thresholds suited to Zimbabwe's geological setting. Although field implementation has not yet commenced, the development of this structured workflow represents a significant scientific outcome, providing a defensible methodological foundation for future geothermal feasibility studies. (IPPS ZIM:01)

SDG 9 – Industry, Innovation and Infrastructure *Geophysics*

Strengthening Applied Geophysical Infrastructure for Mineral and Energy Research

Access to specialised geophysical instrumentation remains limited nationally, constraining high-level applied research. During 2025, collaborative arrangements were initiated by the group to facilitate shared use of resistivity, magnetic, and seismic equipment housed at NUST for mineral exploration research conducted by a partner institution. The technical objective was to support integrated geophysical surveys targeting concealed ore bodies while promoting methodological standardisation and

efficient equipment utilisation. Although infrastructural in nature, this initiative contributes directly to strengthening national research capacity in both mineral and geothermal exploration by improving access to essential geophysical tools and fostering inter-institutional collaboration. (IPPS ZIM:01)

SDG 6 - Clean Water and Sanitation *Geophysics*

Regional Groundwater Surface Modelling in the Deka Basin, Zambia

Groundwater dynamics in semi-arid Zimbabwe are central to both water security and subsurface fluid circulation processes relevant to geothermal assessment. Static water level measurements were collected from 17 boreholes along the Deka River corridor and spatially interpolated using GIS-based modelling to generate a regional groundwater elevation surface. The model shows a consistent change in groundwater pressure toward the Deka River, with smooth contour lines that suggest the groundwater system is well connected across the basin within the weathered and fractured rock. The lack of abrupt changes in pressure indicates that groundwater flow is controlled at a regional scale, rather than occurring in small, isolated zones of trapped water. This dataset provides an important reference for the hydrogeology of the area and improves our understanding of underground water flow patterns that could affect future geothermal studies. (IPPS ZIM:01)

SDG 3 – Good Health and Well-Being *Natural products*

Evaluation of the antiproliferative, cytotoxic and phytochemical properties of Zimbabwean medicinal plants used in cancer treatment.

This study demonstrates that Agelenthus pungu, Carissa edulis, Leonotis ocymifolia, Leucas martinicensis and Viscum verrucosum have antiproliferative activity against Jurkat T and HL60 cell lines. Viscum verrucosum was the most potent. These findings emphasise the importance of medicinal plants as well as their potential use as sources of novel compounds in anticancer drug discovery. Flacourtia indica and Viscum verruscosum caused haemolysis of sheep erythrocytes at a concentration of 250 µg/mL for both plant extracts and 125 µg/mL for Viscum verrucosum. Cell viability increased on addition of 25 µg/mL of reduced glutathione to the extracts considered the most cytotoxic extracts, Agelenthus pungu and Viscum verrucosum. Agelenthus pungu, Carissa edulis, Leonotis ocymifolia, Leucas martinicensis and Viscum verrucosum significantly inhibited Jurkat T and HL60 cell proliferation. Viscum verrucosum was the most potent with the lowest half-maximum inhibitory concentration (IC50) values of 33 and 34 µg/mL on Jurkat T and HL60 cell lines respectively. The most dominant phytochemical classes were alkaloids, flavonoids and saponins. doi.org/10.1186/s12906-025-04883-1 (IPICS ZIM:01)

SDG 3 – Good Health and Well-Being *Natural products*

Antiproliferative activities of phytochemicals isolated from the leaves of Dolichos kilimandischaricus (Harms) ex Taub. (Fabaceae) on Jurkat and HL-60 leukemic cells.

This study has identified some of the phytochemicals that may be responsible for the antiproliferative activity in D. kilimandischaricus. These phytochemicals may provide leads in the development of compounds for treating cancer and related neoplastic diseases. Phytochemicals in the ethanol leaf extract were separated by column chromatography on silica gel. The structures of the compounds were elucidated using spectroscopic techniques, then compared with the reported spectral data. Cytotoxicity of the phytochemicals on HL-60 and Jurkat cells was assessed by the sulphorhodamine B (SRB) assay with chlorambucil as a positive control. Docking simulations were used to further understand the binding preferences of the isolated compounds. The isolated compounds were identified as 3β-stigmasterol (1) and α-spinasterol (2). The results showed that both compounds were more potent against HL-60 cells than Jurkat cells, with IC50 values of 9.49 and 8.66 µg/mL, respectively.
doi.org/10.1186/s12906-025-04977-w (IPICS ZIM:01)

1.3 Use of research results

Use of research results for 2025 are listed country wise.

Bangladesh

The group provided a service by performing measurements with their own equipment for other actors in society. In total, 620 samples were analysed with the BAN:02/2 equipment. The measurements provided were the following: Transmission Electron Microscopy (TEM): 148 samples, Physical Property Measurement System (PPMS): 102 samples, Fourier Transform Infrared Spectroscopy (FTIR): 141 samples, X-ray Diffraction (XRD): 50 samples, Dynamic Light Scattering (DLS): 53 samples, Zeta Potential Analysis: 41 samples, Ultraviolet (UV) Spectroscopy: 78 samples. In addition, 7 industrial attachments were conducted during the year. (IPPS BAN:02/2)

Bolivia

One important way in which our research and skills have been applied in practice is through our ongoing work with meliponiculturists within the stingless bee project. We conducted several field visits to rural communities to carry out interviews and better understand the local situation regarding bee management and pesticide use. In addition to training participants in proper sample collection, we organized workshops based on the interests and needs expressed by the producers themselves. These included training on meliponiculture practices, bee nutrition, good management practices, and the transformation of bee products, such as the production of honey-based soaps, to help diversify their products and improve local income opportunities. While these activities already represent a direct transfer of knowledge and skills to local communities, the most significant impact is expected in the coming year. We anticipate that the results of our ongoing research on the effects of pesticides on stingless bees will provide a scientific basis for proposing regulations and guidelines aimed at improving pollinator conservation and the sustainable commercialization of bee products. (IPICS BOL:01)

Burkina Faso

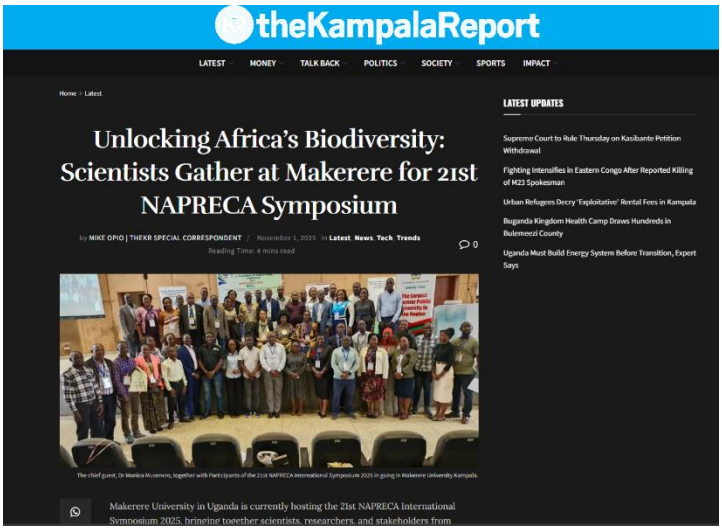
The group is involved in the bachelor's degree at the chemistry department. The graduation project of the bachelor's degree in chemistry is part of the dynamics of valorization of laterite materials present in Burkina Faso. A group of students became involved in this project. Local laterite materials were activated with acid in order to improve their adsorptive properties in view of the removal of zinc ions in aqueous solution. Activated laterite materials were then used in batch studies to evaluate the parameters the adsorption capacity. (IPICS BUF:02)

East Africa and Central Africa

The project "*Matlab-Server and Web-Based Graphical User Interface Design of Mathematical models of human Cardiovascular-Respiratory and Glucose-Insulin system in Rwanda*", lays a strong foundation for technology-driven healthcare solutions of Cardiovascular-respiratory system (CRS) and Glucose-insulin system (GIS) in Rwanda and through this junior university staff trained in mathematical modeling, Web and MATLAB design. (IPMS CoRE-Math UR)

The 21st International NAPRECA Symposium was held from November 1–3, 2025, at Makerere University in Kampala, Uganda. The event received high-level government backing, specifically from the Minister for Science, Technology and Innovation (STI). Dr. **Monica Musenero Masanza**, the Minister for STI, officially opened the symposium. Her support focused on shifting the scientific culture in Uganda toward tangible economic outcomes:

- Product Commercialization: She challenged scientists to prioritize the development of marketable products over academic publications, stating that researchers should aim for ventures that "generate income".
- Support for Natural Products: The Minister reiterated the government's commitment to supporting the development of herbal medicines and natural products, citing success stories like COVIDEX as a model for mainstreaming traditional medicine.
- Science Translation: She emphasized the need for scientists to translate complex research into local languages so it can be understood and utilized by the general population for social transformation.



The followings are some of the media coverages of the 21st International NAPRECA Symposium:
https://www.thekampalareport.com/latest/2025110156209/makerere-university-hosts-21st-napreca-international-symposium-2025-a-boost-for-natural-products-research-and-wealth-creation-in-africa.html
(IPICS NAPRECA)

Ethiopia

The earthquake catalogue that the group compiled is now being used to revise the national building code of the country. (IPPS ETH:02)

In 2025, our research group engaged in several outreach and community-focused activities, building connections with students, the broader public, and institutional stakeholders, for example:

- Prof S. Admassie continued coordinating an in-country university scholarship program funded by the Fitsum Bahru Memorial Foundation, which has supported many students from Addis Ababa University and Wollo University over recent years. In the 2025/26 academic year, 60 undergraduate students from Addis Ababa University, College of Natural and Computational Sciences (CNCS) received scholarships through this scheme.
- Prof. S. Admassie aserved as the secretary of the Natural Science Working Group of the Ethiopian Academy of Sciences. and as chairman of the committee responsible for evaluating the reputability of local journals established by Addis Ababa University.
- Prof S. Admassie delivered a public lecture to raise awareness about the dangerously high levels of lead found in cooking utensils used by communities in the northern part of the country. He also gave an invited lecture at the Virtual Summer School organized by the Ethiopian Professionals in STEM in North America, at KTH and Linköping, Sweden.
- Both Profs W. Mammo and S. Admassie contributed to university-wide initiatives, serving on committees linked to the 75th Anniversary celebrations of the university. They also participated in the committee established by the Director of Research to evaluate thematic research grant applications. In 2025, Prof. W. Mammo served on a committee set up by the Vice President for Research and Technology Transfer of the Addis Ababa University to establish core laboratories at the university.Prof. Admassie has been serving as Editor-in-Chief of the *Bulletin of the Chemical Society of Ethiopia* as of June 2025. (IPICS ETH:01)

Through our database, www.alnapnetwork.com, we have disseminated ethnopharmacological information about Ethiopian plants to the scientific community. (IPICS ETH:05)

Kenya

Both industry and private-sector clients increasingly seek the group's expertise for structural integrity assessment, safety evaluation, and environmental compliance monitoring. Demand for consultancy services has grown, particularly in Non-Destructive Testing (NDT) and environmental monitoring. (IPPS KEN:01/2)

The Institute of Nuclear Science and Technology (INST) serves as the technical consultant for the Clean Air Catalyst Project, implemented by the World Resources Institute (WRI) with funding from the IKEA Foundation. The project supports air quality monitoring in Nairobi to generate evidence for policy and regulatory action. INST successfully operated and maintained monitoring instrumentation and supported data generation. Training for county and national government personnel is planned to strengthen technical capacity in air quality management and data utilization. (IPPS KEN:01/2)

The University of Nairobi Off-Grid Energy Laboratory, managed by the Institute of Nuclear Science and Technology (INST) and supported by CLASP, continued its activity of strengthening regional capacity in off-grid product testing, and delivered a successful training to support the establishment and improvement of solar lighting testing laboratories in Ethiopia, Nigeria, Tanzania, and Zambia. (IPPS KEN:01/2)

Laos

The group members serve as trainers for the use of geophysical equipment and data processing at the Department of Geology, Ministry of Energy and Mines, as well as for private companies. (IPPS LAO:01)

The group members provide training on groundwater exploration for the Department of Water Resources. (IPPS LAO:01)

In the area of groundwater management, the group provided technical input on aquifer characterization, which directly supported the development of national groundwater regulations. This work has helped shape the framework for sustainable water resource management in the country. (IPPS LAO:01)

In mineral exploration, the group collaborated with the Department of Geology and Minerals to conduct geophysical surveys that identified and characterized mineral resources. This contribution has been formally recognized through its inclusion in the Department's 2026–2030 Development Plan, integrating the group's research into national strategies for resource development and economic planning. (IPPS LAO:01)

The chemistry research group is actively engaged in knowledge transfer and collaboration with various stakeholders to ensure that our scientific findings contribute to society and national development, for example:

- Stakeholder Engagement and Knowledge Dissemination: We organized and hosted the "Research Dissemination Seminar on Analysis of Chemical Contaminants in the Environment in Lao PDR." This event served as a vital platform for engaging with governmental organizations and relevant sectors. The seminar focused on exchanging research data, discussing environmental challenges, and exploring future cooperation to address chemical contamination at a national level.
- Technical Capacity Building and Training Workshops: Our group conducted several specialized workshops aimed at enhancing the technical skills of the academic community and young researchers, including:
    - Training Workshop on Sample Preparation: Practical sessions on the application of SPME, SBSE, and SPE techniques.
    - Analytical Chemistry Training: A workshop on the Application of HPLC for Organic Compound Analysis.
    - Advanced Scientific Seminar: A session on Multidimensional Gas Chromatography for applications in food authenticity and environmental monitoring.

- Consultation and Community Impact: Through our ongoing monitoring of wastewater quality in the Vientiane municipal area, we provide essential baseline data that can be used by local authorities for urban planning and environmental protection strategies. (IPICS LAO:01)

Mali

The renewable energy component of the group's laboratory serves as the reference facility for the Malian Alliance for Clean Cooking (MACC) to conduct cookstove efficiency tests for the awarding of the GWA+ quality label. In 2025 the group has tested the efficiency performance of nine brands of local made stove for their application of granting the quality label GWA+. (IPPS MAL:01)

Members of the group provide consultancy services as experts in trainings for professional and small private companies supported by the German International Cooperation (GIZ Mali) and The Netherlands Development Organization in Mali (SNV Mali). (IPPS MAL:01)

Nepal

The group implemented a pilot Lightning Early Warning System (LEWS) in Raksirang Rural Municipality. (IPPS NEP:01)

The group conducted feasibility studies for Lightning Early Warning Systems (LEWS) in Changunarayan municipality. (IPPS NEP:01)

The group provided technical input and advisory support to government bodies and humanitarian organizations on lightning and electrical hazard mitigation, contributing to improved awareness and safer practices. (IPPS NEP:01)

Rwanda

Laboratory services were delivered to our stakeholders, allowing them to improve their daily business (participants: Mr. Mardochee Birori, Mr. Vedaste Nyandwi, Mr. Emmanuel Nkurunziza, and Mr. Frodouard Hitimana) (IPICS RWA:01)

Prof. Theoneste Muhizi participated in various meetings of the National Commission for UNESCO as a board member, while Dr. Anaclet Nsabimana, Dr. Jean Felix Mukerabigwi, and Mr. Adrien Rutikanga acted as experts in the Rwanda Environmental Management Agency to help conduct some environmental assessments. Furthermore, Mr. Janvier Habinshuti, Dr. Gratien Habarurema, and Mr. Jean Bosco Nkuranga served as experts in Rwanda Standard Board. (IPICS RWA:01)

Uganda

The UGA:02 research group members have been involved in a number of activities with various stakeholders including policy makers, enforcement, regulators and the private sector. The research group initiated collaboration with the Uganda Cleaner Production Center (UCPC) to promote green chemistry and green industrial processing in Uganda. UCPC is working with the Centre for Green Chemistry and Green Engineering at Yale University and in partnership with the Department of Chemistry Makerere University, to promote green industrial processing in Uganda with support from the United Nations Industrial Development Organisation (UNIDO). Our research group members have also participated in several public and government activities. The project leader, Dr Tebandeke is the current Chair for the National Coordination Committee for the Review and Update of National Implementation Plan (NIP II) under the Stockholm Convention on Persistent Organic Pollutants. The UGA:02 group members are also engaged in a collaboration with an NGO Community Integrated Development Initiatives, to operationalize a mini solid waste treatment plant in Kampala City. (IPICS UGA:02)

The group periodically monitors the quality of the treated effluent and also the quality of the treated water. (IPICS UGA:02)

West Africa

RABiotech reported the following:

- RABiotech is still represented at the Scaling Up Nutrition (SUN), and has participated to several discussions with stakeholders to show how Agro-(Bio)technology contributions increase Food and Nutrition security in Burkina Faso as well as in several countries.
- Several members, involved with National Information Platforms for Nutrition
- RABiotech members are steel involved in updating of table of food compositions for FAO, WFP, and for the ministries of agriculture and environment;
- As usual the central laboratory LABIOTAN has performed several controls of food safety for industries, NGO and food traders for exportation;
- RABiotech members also very often participate to public debate in mass media to highlight people in the area of Food Technology, Biotechnology and Nutrition.
- RABiotech members were involved for the elaboration of strategic Plan of Nutrition in home country at the request of the government.
- RABiotech members got consultations with several NGOs.

(IPICS RABIOTECH)

Zambia

In 2025 the group was asked for consultancy to test for electrical performance of a defunct solar plant in the rural Zambia by the National Technology Business Council. (IPPS ZAM:01)

Zimbabwe

Field-based hydrogeological work in Hwange District involved direct interaction and discussions with local technical staff, which provided an opportunity to exchange knowledge on groundwater conditions, borehole performance, and sustainable water-resource management in semi-arid environments. The findings from the groundwater elevation modelling were shared informally with relevant local stakeholders, contributing to improved understanding of regional aquifer behaviour. (IPPS ZIM:01)

At national level, the group engaged with ZESA Holdings regarding the potential for geothermal energy development in Zimbabwe. Following technical discussions, the group contributed preliminary guidance on how geothermal feasibility assessment might be structured and the types of geophysical investigations required at early exploration stages. While still exploratory, this engagement represents an important bridge between academic research and national energy planning. (IPPS ZIM:01)

The group supports inter-university collaboration through shared access to specialised geophysical equipment for mineral exploration research. This contributes to strengthening national scientific capacity and fostering cooperative research culture within Zimbabwe's higher education sector. (IPPS ZIM:01)

Our research skills have resulted in other members from other Universities coming to request for antimicrobial tests. So we are now busy designing the SOPs for these tests coupled with the cost. In this case because of our skills in bioassays and the available sets of equipment, we are able to carry out various antimicrobial assays such as antifungal, antibacterial, antimycobacterial, and anti-proliferative assays. Main products were the development of an herbal creams based on extracts from medicinal plant extracts. (IPICS ZIM:01)

Prof. N. Basopo was selected to serve on a national technical committee mandated to develop soil quality standards for Zimbabwe. The committee's role is to establish scientifically sound, regulatory guidelines for assessing and managing soil health, including the identification of permissible limits for chemical contaminants and other pollutants. (IPICS ZIM:02)

1.4 Outreach and policy influence

Outreach and influence for 2025 are listed country wise.

Bangladesh

Dr. S. Manjura Hoque held the following appointments in 2025:

- General Body (GB) Member, Atomic Energy Centre Dhaka, as Head, MSD (since 2015)
- Convener, Cost Estimate Committee, Atomic Energy Centre Dhaka
- Convener, MOU Preparation Committee, Atomic Energy Centre Dhaka
- Convener, Evaluation Committee for Direct Purchase Method
- External Member, Research Innovation and Scientific Education (RISE) Projects, BUET
- Reviewer, RISE Projects, BUET
- Reviewer, BANBEIS Project, Ministry of Education
- President, BAEC Engineering Association
- Reviewer of different Elsevier journals
- Visiting Professor, Department of Materials and Metallurgical Engineering, BUET (Fall 2025)
- Life Fellow Member, Institution of Engineers Bangladesh (IEB)
- Panel Discussant, “SheSTEM Conclave: Bridging Gaps, Building Futures” (23 June 2025) organized by a2i, ICT Division, Government of Bangladesh and Embassy of Norway.

(IPPS BAN:02/2)

In the physics group:

- Dr. Rimi Rashid is the Executive Committee Member, Women Engineers Chapter, the Institution of Engineers Bangladesh and she served as Moderator and Panel Discussant at the meeting she organised "Empowering Women Engineers: Overcoming Barriers and Shaping the future of Bangladesh".
- Dr. Rimi Rashid is the Joint Secretary of Bangladesh Electronic Society
- Dr. F. M. Kamal, Dr. M. M. Haque, Dr. M. N. I Khan are members of GB since 2020.
- Drs. S. M. Hoque, M. N. I. Khan, M. Al-Mamun, H. Das, R. Rashid were appointed as the Examiner in the PhD and M.Sc. Committees at different divisions of BUET and DU.
- Dr. M. Nazrul Islam Khan is the Treasurer of Bangladesh Physical Society and General Secretary of Bangladesh Electronic Society.
- Dr. Harinarayan Das is the Executive Committee Member of Bangladesh Physical Society and Publication Secretary of Bangladesh Electronic Society.
- Dr. Rimi Rashid is the Joint Secretary of Bangladesh Electronic Society. (IPPS BAN:02/2)

A Seminar on "Equality in the Workplace for Engineers: Human Rights, Gender-Based Violence and Justice" organized by IEB Women Engineers Chapter, was held on 24 January 2026, Saturday at 02:30 PM at Council Hall, Shaheed Prokaushali Bhaban, IEB Headquarters, Ramna, Dhaka-1000. (IPPS BAN:02/2)

The group provides service and consultation to the industry and academia with the testing facilities such as TEM, DLS, PPMS, FTIR, Zeta Potential, and UV spectrometer. (IPPS BAN:02/2)

Professor KS Rabbani served as a member of the World Health Organization (WHO) Strategic and Technical Advisory Group for Medical Devices (STAG-MEDEV), an advisory body to the WHO on global policies and strategies related to medical devices and health technologies. It provides guidance to WHO on global priorities and emerging issues in the field. (IPPS BAN:04)

Dr. MA Kadir worked as a member of the Medical Device evaluation committee of the Directorate General of Drug Administration (DGDA), Government of the People's Republic of Bangladesh.

(IPPS BAN:04)

Dr. MA Kadir was involved in training MD residents at Bangladesh Medical University on the topic ‘Physics of Radiology and Imaging’. (IPPS BAN:04)

Dr. MA Kadir was invited by the Medical Device Innovation Center of National Cheng Kung University (Taiwan) to share experience on low-cost and portable medical device development. This exchange fostered international collaboration, and subsequently, Professor Fong-Chin Su, Founding Director of the Medical Device Innovation Center, visited the department to explore future cooperation. (IPPS BAN:04)

The Department of Biomedical Physics and Technology, in collaboration with BiBeat Ltd., organized a month-long free health camp from 19 January to 13 February 2025. During this program, Pulsed Electromagnetic Field (PEMF) and iontophoresis-based treatments were provided for the management of pain and related conditions, in addition to general health services and medical consultations which was given to about 250 individuals. The initiative aimed to extend affordable therapeutic services to the community and raise awareness about non-invasive treatment options. (IPPS BAN:04)

The Dhaka University Telemedicine Programme, operating since 2015, continued its activities throughout 2025 providing health consultations by qualified medical doctors to people in remote villages. It operates through partnerships with local entrepreneurs who establish Telemedicine Centers, enabling residents of surrounding rural areas to access medical services without traveling long distances. (IPPS BAN:04)

To ensure the effectiveness and sustainability of the telemedicine initiative, the department periodically organizes training programs for local telemedicine entrepreneurs. In 2025, two such training sessions were conducted (20–21 January and 15–16 July), during which five entrepreneurs received training. These sessions focused on improving service delivery, strengthening technical competence, and enhancing patient care outcomes. (IPPS BAN:04)

A workshop was organized on 26 July 2025 for postgraduate students to enhance their skills in research methodology and thesis writing. The program also addressed important topics such as plagiarism awareness, identification of predatory journals, and the responsible use of artificial intelligence in research. (IPPS BAN:04)

In collaboration with the Bangladesh Medical Physics Association (BMPA), the department co-organized an international conference on 16–17 October 2025. The event aimed to strengthen collaboration within the professional community, bringing together academics, scientists, medical physicists, and medical doctors to exchange knowledge and foster future partnerships. (IPPS BAN:04)

Professor Rabbani delivered several public lectures on innovating medical devices through appropriate technology and academia–industry collaboration, promoting sustainable and locally adaptable healthcare solutions. (IPPS BAN:04)

The group holds an annual Open House every July 1st, which consistently attracts a vibrant crowd of high school and college students. During this event, our Nanophysics research group—including current students and returning alumni—takes center stage to share their passion and explain the group latest research in an accessible way. This event is an opportunity to bridge complex science and the public while inspiring young minds to pursue careers in research. (IPPS BAN:05)

For each ANRAP national seminar or hands on training workshop an open circular is sent to the Vice Chancellors, deans, head of all science departments of universities, Principals of public and Private medical colleges, all heads of research institutes, chemicals and pharmaceuticals industries with a request to circulate amongst the faculties, scientists, graduate students and technical personnel of their organizations. The circular is also sent to all members of ANRAP for distribution to interested participants. Participation through personal interest and nomination from different organization’s is also taken into consideration. ANRAP national seminar and hands on training workshop training are very effective interactions with national, regional and international scientific communities. Participants acknowledged that ANRAP programmes are very helpful to strengthen their professional activities.

Certificates of ANRAP training workshop are highly evaluated by respective public and private organizations (IPICS ANRAP)

Applications for NITUB training programs are received both from individual persons and also from nominations of different public and private institutes. NITUB training programs provide a highly effective platform for interaction with national, regional, and international scientific communities. Participants consistently report that these programs significantly enhance their professional skills and research capabilities. Certificates awarded upon completion of NITUB training programs are well-recognized and highly valued to participants. (IPICS NITUB)

A few members of NITUB on top of their normal duties, are invited to act as members of different expert's committees of private and public organizations of Bangladesh. Their consultancy services are needed at different levels of procuring, maintaining, and repairing scientific equipment. The skills of instrument engineers, technical experts and members of NITUB are being used by different public and private institutes of Bangladesh. (IPICS NITUB)

Bolivia

During 2025, our group conducted several outreach activities aimed at engaging both the academic community and the broader public. We participated in major science and education fairs, including the "V Feria Nacional Universitaria de Investigación, Ciencia y Tecnología" in Potosi, as part of the initiative to highlight scientific work conducted in Bolivia organized by the "DICYT" (The research, science, and technology offices at each university, responsible for promoting and managing scientific activities across the entire institution) at national level. We also participated in the university "Feria Profesiográfica", to promote the different programs the university has and "Fexpo Sucre," where we presented our research lines and interacted with students, professionals, and the general public. These events provided opportunities to communicate our work, promote scientific careers, and raise awareness about the importance of our work. Also, our research findings were shared with local authorities, published in local social media, and featured on television and USFX's official social media platforms. (IPICS BOL:01)

We strengthened our science communication efforts through the continued production of our podcast and the launch of the "Ciencia Express" initiative, which offers open sessions where researchers present their projects followed by discussions with the public. Moreover, we gave several courses and workshops open to the university community in Sucre, providing training in statistics, introduction to R, native bees ecology, scientific writing and scientific English. (IPICS BOL:01)

As part of the project on pesticides and stingless bees, we conducted field visits to rural communities, where we trained meliponiculturists in sampling procedures and organized workshops on best practices in meliponiculture and agroecology. These activities fostered direct engagement with local stakeholders, contributed to knowledge exchange, and supported the adoption of more sustainable practices related to pollinator management and pesticide use. (IPICS BOL:01)

Burkina Faso

In collaboration with the national Academy of Sciences of Burkina Faso, the Burkina Faso node of the network held short debates on artificial intelligence and its possible applications for the development of the country. (IPPS BURK:01)

The coordinator of the network was the main moderator in a conference on space science for students and society, that was organized in collaboration with the Burkina Faso Academy of Sciences. (IPPS BURK:01)

The network and a Burkinabe mathematics students' club organize yearly some joint activities. In 2025 the activities were part of the celebration of the month of women mathematicians in memory to

Maryam Mirzakhani (an Iranian mathematician), and film screenings and debates on the resilience of black mathematicians in the USA were held. (IPPS BURK:01)

The research group members repeatedly participate in workshops organized by the National Council for Organic Agriculture (CNABio), where they provide their expertise as chemists. (IPICS BUF:01)

East and Central Africa

The members of the group have attended and actively participated in the organization of Mathematics days in different countries and in particular in Rwanda, Uganda and Tanzania. In Rwanda, members of the group have contributed in the organization of the Rwanda Mathematics Competion (RMC) at all the three stages (District, Provincial and National). (IPMS PDEAAP)

The executive secretary of the network, Prof. Sameh AbouZid, is currently contributing to the committees of drug development in the Egyptian Drug Agency (EDA). (IPICS NAPRECA)

Ethiopia

The Department in collaboration with the Ethiopian Mathematics Professionals' Association has organised the 2nd Ethiopian National Mathematics Olympiad in which students from 27 different countries participated. (IPMS ETH:01)

The group designed a short summer training program for promising high school students who have completed Grade 11 and will enter Grade 12 from both public and private schools. The goal is to challenge the negative connotations associated with physics and to encourage interest in science in general, and physics in particular. At the conclusion of the program, each student delivers a short oral presentation of their work to an audience of department staff and parents. The training program has been conducted for ten consecutive summers, except in 2020 (due to the Covid-19 pandemic). A formal long-term impact assessment regarding subsequent enrollment in science programs has yet to be conducted. The Department has been supportive in facilitating students' access to the university campus and laboratories, although it has not provided financial support. The group will continue to seek financial assistance from the Department and other potential donors in order to expand the program, particularly to increase female participation. (IPPS ETH:01)

Several outreach activities to explain the seismic activities to the general public and to some embassies in Addis Ababa were performed during 2025. (IPPS ETH:02)

Professor Mulugeta Bekele, serves as chairperson of a committee leading a reforestation initiative on Galema Mountain in the Arsi area of the Oromia Regional State. (IPPS ETH:02)

Up to this time, our research has primarily focused on fundamental scientific investigations; however, it has begun to demonstrate relevance for practical applications and policy awareness. In particular, we have conducted research related to invasive plant species, with support from the Biotechnology Institute of the Ministry of Innovation and Technology, contributing to the knowledge base needed for environmental management and sustainable utilization of local biomass resources. (IPICS ETH:01)

Our group has played an important role in raising awareness about the unusually high levels of lead detected in locally produced cooking utensils in some communities in the northern part of the country. These findings were formally communicated to university authorities and the Environmental Protection Agency, with the expectation that they will inform future regulatory attention and intervention measures aimed at safeguarding public health. (IPICS ETH:01)

Our research expertise in materials chemistry and environmental analysis positions us to contribute to emerging policy and practice in areas such as renewable energy and environmental sustainability. Our ongoing studies on solar energy conversion and energy storage systems have strong potential for

practical application, and we intend to strengthen collaboration with local industries to translate these findings into usable technologies and solutions. (IPICS ETH:01)

Our work on wastewater remediation has clear societal and environmental relevance. The outcomes of this research can support improved treatment practices and may be of direct interest to local industries and municipal authorities seeking sustainable and cost-effective environmental management strategies. While our outputs have not yet resulted in patents, commercial products, or company formation, the skills, methodologies, and findings generated by our group are increasingly aligned with national priorities related to environmental protection, clean energy, and public health. Moving forward, we aim to expand consultancy, industry engagement, and applied research collaborations to enhance the practical and policy impact of our work and contribute to the development of sustainable technologies and evidence-based practices. (IPICS ETH:01)

Kenya

The group contributes to the National and International Standards Development. Three INST staff members (John Birir, Lindah Kiriiinya, and Wilson Kairu) serve on Kenya Bureau of Standards (KEBS) Technical Committees covering Renewable Energy and Energy Management, Solar and Wind Technologies, Dosimetry, Radiotracer, and Non-Destructive Testing. These committees contribute to the developmentand harmonization of national standards aligned with International Organization for Standardization (ISO) frameworks, supporting quality assurance and regulatory policy in Kenya. (IPPS KEN:01/2)

The group, via Dr. Wilson Kairu and Prof. Michael Gatari, plays a key role in the Pan-African Network for Detection of Air Quality Initiative (PANDA). This consortium of African and European researchers strengthens regional scientific collaboration and supports evidence-based environmental management by supporting standardized, real-time, long-term air quality measurements; quality-assured and open-access data; and training and local capacity building. (IPPS KEN:01/2)

Laos

In the area of groundwater management, the group provided technical input on aquifer characterization, which directly supported the development of national groundwater regulations. This work has helped shape the framework for sustainable water resource management in the country. (IPPS LAO:01)

In mineral exploration, the group collaborated with the Department of Geology and Minerals to conduct geophysical surveys that identified and characterized mineral resources. This contribution has been formally recognized through its inclusion in the Department's 2026–2030 Development Plan, integrating the group's research into national strategies for resource development and economic planning. (IPPS LAO:01)

The research results and technical expertise of the LAO01 group have been applied to support environmental management and human resource development in the following ways:

- Evidence-Based Data for Urban Planning: Our comprehensive data on wastewater quality and organic pollutant loading in Vientiane’s drainage canals provide a crucial scientific baseline for local authorities. These results are used to identify pollution hotspots, which can inform urban environmental policies and the design of future wastewater treatment infrastructure by municipal departments.
- Capacity Building for National Institutions: The advanced analytical skills acquired by our members—particularly in chromatography (GC/MS, HPLC) and sample preparation (SPME, SPE)—are directly transferred to the national workforce. Graduates from our group have moved into positions within governmental laboratories, environmental agencies, and the private sector, applying their specialized skills to improve national standards for environmental monitoring and chemical analysis.

- Scientific Consultation and Public Service: Group members frequently provide informal consultancy and technical expertise to governmental committees on environmental quality. By organizing dissemination seminars that involve various sectors, we actively bridge the gap between academic research and practical policy implementation, fostering a more science-driven approach to environmental challenges in Lao PDR. (IPICS LAO:01)

Mali

The group carried out did dissemination activities of results from using biogas-based cookstove as alternative to wood and charcoal stove across Bamako through various TV chains and meeting with stakeholders. (IPPS MAL:01)

The group carried out short-time training for professional and technician in the field of photovoltaic systems installation. (IPPS MAL:01)

The group participated in several consultation frameworks with companies as YIRIMEX-SA: (a company that produces improved-cooking-stove and biofuels for households and industries) and SEWA Katine-Kadji: (a unit for the production of fuel sticks and briquettes from coal dust, rice husk). (IPPS MAL:01)

The group joined participatory discussion as energy expert in a workshop organized by the Netherlands Development Organization in Mali (SNV). (IPPS MAL:01)

The group works with the Malian Alliance for clean cooking (MACC) to promote the quality label GWA+ for using more efficient clean or improved cookstove. (IPPS MAL:01)

Nepal

Dr. Shriram Sharma, together with the Honorable Minister of Internal Affairs and Law of Nepal, Mr. Suraj Chandra Lamichhane, facilitated an interaction program on mitigating lightning hazards in Makawanpur District. The program aimed to educate local authorities on reducing loss of life and property damage in this lightning-prone region. (IPPS NEP:01)

Dr. Shriram Sharma conducted a feasibility study on the installation of a lightning early warning system in the Changunarayan Municipality of Bhaktapur Nepal. (IPPS NEP:01)

Dr. Shriram Sharma carried out a field visit to assess lightning risk in various schools and public buildings in Helambu Municipality, Bagmati, Nepal. (IPPS NEP:01)

Dr. Shriram Sharma and the installation team installed lightning protection systems on seven buildings (five school buildings and two municipal buildings) as part of a pilot project, aiming to enhance protection against lightning. (IPPS NEP:01)

Dr. Shriram Sharma carried out the installation and handover of a lightning early warning system as part of a pilot implementation project. (IPPS NEP:01)

Dr. Shriram Sharma, Dr. Prem Dhungel, and Mr. Laube Lukas (PIN donor agency) conducted an inspection and monitoring visit following installation of the early warning system. This included interactions with local communities and authorities, as well as evaluation of system functionality. (IPPS NEP:01)

Dr. Shriram Sharma interacted with the Nepal Army Team in the mid-western region on lightning protection systems enhancing personnel knowledge of scientific approaches to lightning safety. (IPPS NEP:01)

Dr. Shriram Sharma led a training session on electrical fire hazards, including simulations, in Kathmandu Metropolitan City Ward 23. The activity focused on mitigating fire risks in urban environments. (IPPS NEP:01)

Dr. Shriram Sharma led an orientation program on the installation of a lightning early warning system as a pilot project in Raksirang Rural Municipality, during which the system was introduced to local authorities and community leaders. (IPPS NEP:01)

Rwanda

The Rwanda Mathematics competition (RMC) and celebration of the International Day of Mathematics (IDM known as Pi-Day) were held in 2025. During the RMC, three levels: district level, provincial level and national levels were initiated and two categories: Juniors and Seniors were set up. The increasing number of participants wes also noticed. (IPMS CoRE-Math UR)

Dr. Celestin Kurujyibwami made a visit at INES-Ruhengeri and made a public lecture on the contribution of mathematics to achieve SDG's. (IPMS CoRE-Math UR)

Staff from the department have been selected as trainers for AFRETEC Base Funding Project: The goal of the project is to create a basis for effective UR participation in the digital transformation in Rwanda and Africa on education, research front with the intent to enable young Rwandans and Africans to nurture and maximize their academic potential for a more dignifying human experience and employment. (IPMS CoRE-Math UR)

Two staff from the Mathematics Department have been invited by National Examination and School Inspection Authority (NESA) for contributing in moderating, setting and validating mathematics subjects' exams. (IPMS CoRE-Math UR)

The CoRE-Math-ICTP summer school was conducted and hosted by the College of Science and Technology (CST)-UR Node between 22July and 02 August 2025. (IPMS CoRE-Math UR)

A PIC 25 Summer school on Probability, Information and Computing in Africa (*Summer School on Probability, Information and Computing in Africa*) was held on 24- 28 November 2025 and it was organised by UR and AIMS. The school had 47 participants with 13 African Nationalities. (IPMS CoRE-Math UR)

As an outreach activity, the SNAPI Primary School from Southern Province was invite to visit the node College of Science and Technology (CST)-UR on 13 June 2025. (IPMS CoRE-Math UR)

Mathematics Teacher's Training was held on 19th November to 22nd November at the node College of Science and Technology (CST)-UR. (IPMS CoRE-Math UR)

Staff of the node participated in the development of National Technology transfer and commercialization strategy organised by College of Science and Technology (CST)-UR. (IPMS CoRE-Math UR)

The East African Mathematical Olympiad (EAMO) – Coach training was held on 1-4 June 2025. (IPMS CoRE-Math UR)

The laboratory of chemistry is analysing many environmental samples, including water samples, to assess the quality of the services delivered by different institutions, including industries (industrial wastewater treatment plants) and hotels (swimming pools), to the community. Around 65 samples were conducted not only to help the community but also to generate some income for the University of Rwanda (UR): During the year 2025, laboratory services generated RwF 25,500,000 (EUR 14,982) to UR. (IPICS RWA:01)

Different team members of the project are contributing a lot in different assessments from other institutions to regulate and control the quality of goods in both the Rwanda Standard Board and the Rwanda Environmental Management Agency (REMA), and others are solicited by other Higher Learning Institutions for their expertise. (IPICS RWA:01)

The chair of NAPRECA-Rwanda, Dr. MUGANGA Raymond, MPharm, PhD Associate, is currently working as the head of Laboratory Services Department, Rwanda Food and Drug Authority, Kigali, Rwanda. (IPICS NAPRECA)

Tanzania

The 2025 annual meeting of the Department of Mathematics at UDSM and the Mathematics Association of Tanzania (MAT) took place in Singida, Tanzania, from 31st August to 6th September, 2025. A total of 260 participants attended—100 women and 160 men—exceeding the previous year's attendance. Efforts will be made to further increase the number of female teachers at upcoming seminars. The training targeted to familiarise the difficult areas in teaching mathematics for all levels. (IPMS CoRE-Math UDSM)

The Department supported three postgraduate students to attend a summer school in Rwanda. (IPMS CoRE-Math UDSM)

The Department of Mathematics, through the CoRE-Math program and in collaboration with the NORHED II – Mathematics for Sustainable Development Project, organized a two-day workshop in Bagamoyo for postgraduate students and their supervisors, attended by approximately 25 participants. The workshop aimed to enhance the capacity of supervisors in guiding students at advanced levels. (IPMS CoRE-Math UDSM)

A significant number of staff members participated in the International Day of Mathematics celebration held on 14 March 2025. During the event, students from primary to secondary schools were introduced to various real-life applications of mathematics. (IPMS CoRE-Math UDSM)



Photo. 3 School visit, Tanzania (IPPS TAN:01/2)

The group participated in the annual University Research Week exhibitions, in the outreach category for the science camp and solar cooking projects. (IPPS TAN:01/2)

The group made a number of school visits to inspire and motivate students, particularly female students to pursue STEM programs at higher level education. This was done through hands-on experiments

demonstrations and other activities to explain different physics and mathematics concepts as well as giving general motivational talks by established scientists. (IPPS TAN:01/2)

The group assisted schools in maintaining and repairing school physics laboratory apparatus. This also included on-site training of school teachers and/or technicians on simple repair and maintenance techniques of the apparatus. (IPPS TAN:01/2)

The group took part in the preparations for SCOUT GO SOLAR activity as Solar PV experts. The activity is being organised by the Tanzania National Scout Council. (IPPS TAN:01/2)

Several members of the group participated in Governmental and international committees that utilised skills developed, e.g., Tanzania Bureau of Standards, Tanzania Institute of Education, Institute of Physics UK, Tanzania Commission for Science and Technology. (IPPS TAN:01/2)

Uganda

A number of members are working at the Uganda Virus Research Institute (UVRI) and their results have direct applications to the medical sector. (IPMS CoRE-Math MAK)

An expert in Insurance Mathematics supported the leaders of the Makerere University Academic Staff. (IPMS CoRE-Math MAK)

The Mathematics Department supported the Makerere University Academic Staff Association in establishing the MUASA Social Support Fund, through which members make annual contributions that are invested with an insurance provider. The fund provides a lump-sum payment to a member's family in the event of the member's death, and financial support to members who lose a family member. (IPMS CoRE-Math MAK)

The Department works close with its outreach arm, The Uganda Mathematical Society to inform policy, mainly on mathematics curriculum development for secondary schools in Uganda. (IPMS CoRE-Math MAK)

The Department continues to carry out its outreach activities via Uganda Mathematical Society. The activities include the annual National Mathematics Contests for Primary schools, Secondary schools and Universities, and identification of participants in different Mathematics Olympiads organised regionally and internationally. For the year 2025, the total number of participants was 20,626, of which 12,703 were in the Primary School category, 5,207 in the O level category, 2,645 in the A level category and 71 at university level. Prizes were awarded to the best performers in each category in July 2025. Compared to the year 2024, (17,913 participants), this was a 15% increase in the total number of participants. The best performing students from the 2024 National Mathematics Contests took part in regional and international olympiads: East African Junior Mathematical Olympiad (EAMO-J) which started in 2024, where brilliant young stars below 16 years competed, The East African Mathematical Olympiad (EAMO), International Mathematics Summer Camp (IMSC), International Mathematical Olympiad (IMO) and The Pan African Mathematical Olympiad (PAMO). (IPMS CoRE-Math MAK)

The group members collaborate with the Uganda Mathematical Society to reach out to Mathematics teachers and learners across the country. (IPMS PDEAAP-Uganda)

The team provided consultancy services to NEMA and the Agricultural Chemicals Board to which one of the research team members, Dr. Job Samuel Kasule, sits as a Board member. (IPICS UGA:01)

During 2025, the major outreach activity conducted by research team was engaging with the National Environment Management Authority (NEMA) in providing technical input to national consultations related to POPs management. The team leader was the lead consultant for the review and update of

Uganda's National Implementation Plan for the Stockholm Convention, to which two other research members were part of the assignment. (IPICS UGA:01)

The group has offered advisory services to an NGO operating a sewage treatment plant and water treatment plant in Kampala. (IPICS UGA:02)

Dr Tebandeke held the following positions in 2025

- Chair of the Department of Chemistry, Makerere University.
- Chair for a National Coordinating Committee for a Project on Global Development, Review and Update of National Implementation Plans (NIPII) under the Stockholm Convention on POPs, implemented by the National Environment Management Authority (NEMA) with support from the UNEP, for the period 2023-2025.
- Dr Tebandeke is a coordinator for a project working with communities and other stakeholders to eliminate lead exposure and its negative health impacts. The project is implemented by the Global Alliance on Health and Pollution in collaboration with the Government of Uganda, through the National Environment Management Authority. (IPICS UGA:02)

Dr. Betty Naziriwo, the deputy project leader sits on the Board of the Science Foundation College, in Uganda which is aimed at promoting basic science teaching in secondary schools in Uganda. (IPICS UGA:02)

During the 21st NAPRECA international symposium in Uganda, the development of herbal drug product COVIDEX was highlighted. This local herbal medicine has been approved by Uganda's National Drug Authority (NDA) as a supporting treatment for viral infections including Covid-19. (IPICS NAPRECA)

West Africa

Members of the network participated as speakers in several conferences organized by students' associations on the possible applications of mathematics to the development of the network's countries. (IPPS BURK:01)

The research activities contributed to propose to industrial sector some technological patterns in order to guarantee the quality of their products and develop new products based on endogenous local resources. With respect to food enterprises the following activities have been performed:

- Several local foods were characterized,
- Technologies to optimize the process of local foods,
- The creation of semiindustrial incubator "Technopole at DTA/IRSAT/CNSRT). The optimization food products with mathematical through "experimental design" has been performed.

The used of experimental mathematical approach for optimization yielded an optimal formulation of several food products extraction and process. One of the first example of successful work were those of Dr Inoussa KY, Dr Abdouramen SANOu and Dr Jean Axel KABORE. (IPICS RABiotech)

Zimbabwe

At university level, outreach to undergraduate students continues through research briefings, career open days and informal academic discussions aimed at increasing awareness of applied geophysics and geo-energy research themes. These engagements help connect teaching, research, and national development objectives. (IPPS ZIM:01)

Prof. N. Basopo presented research data on the concentrations of selected heavy metals in soils from both natural and anthropogenically impacted sites in the Matabeleland region of Zimbabwe at the Soil Standards Development Workshop. The data were compiled to complement existing baseline information on heavy metal concentrations in Matabeleland soils and to contribute to the formulation of permissible limits for heavy metals in Zimbabwean soils. (IPICS ZIM:02)

Representatives of the research group (Ms. Nokuthaba Siyafa and Mr. Brighton Meki (MSc Biotechnology) were heavily involved in the 2025 Research, Innovation and Industrialization week that was organized annually by the university (National University of Science and Technology). The students gave presentations on their projects. This is an opportunity to showcase our research activities to peers, the University community, and public and government officials. Some stakeholders have benefited in that they now see the importance of research in science because it produces tangible products. The recommendation from the public was that we needed to move away from prototypes now to real industrialization in which there is production of these goods at least to be in a university shop. This was the only outreach activity that was carried out in 2025. (IPICS ZIM:01)

Dr Donald Tapfuma was appointed Patron of the National University of Science and Technology Environmental Society and helped draft a Memorandum of Understanding with a National Heritage Site called the Hillside Dam Conservancy to partner with them on sustainable invasive plant species and waste management. (IPICS ZIM:01)

Prof. N. Basopo was selected to serve on a national technical committee mandated to develop soil quality standards for Zimbabwe. The committee's role is to establish scientifically sound, regulatory guidelines for assessing and managing soil health, including the identification of permissible limits for chemical contaminants and other pollutants. (IPICS ZIM:02)

Appendix 2. ISP IN NUMBERS

2.1. Supported research groups

In 2025, in total **34 research groups** were supported in 14 countries. There were 14 research groups in chemistry, one in mathematics, and 19 in physics.

In **Bangladesh,** totally four research groups are supported. In chemistry, support to one group at Department of Chemistry, University of Rajshahi, in the field of safety of herbal medicines, continued (IPICS BAN:05). In physics three groups were supported. One of the remaining groups is at the Materials Science Division at the Atomic Energy Centre, Dhaka (IPPS BAN:02/2), implementing knowledge in nanomaterials and magnetism into new biomedical applications, such as cancer characterisation and therapy. Support in medical physics was continued to a group at the Department of Biomedical Physics & Technology (IPPS BAN:04), and to a group in the field of nanophysics at the Department of Physics, both at University of Dhaka (IPPS BAN:05).

In **Bolivia,** support continued to a research group (IPICS BOL:01) in the field of chemical ecology, at University Mayor Real y Pontificia de San Francisco Xavier de Chuquisaca (USFX) in Sucre.

In **Burkina Faso,** two research groups at the Department of Chemistry, University Joseph Ki-Zerbo, Ouagadougou, were supported, one in the field of natural products research (IPICS BUF:01) and one in the field of clay mineralogy (IPICS BUF:02). Support to Department of Physics at the same university was given in the area of energy effective buildings (IPPS BUF:01).

In **Ethiopia,** chemistry and physics support was provided to five research groups at Addis Ababa University (AAU), at the Departments of Chemistry and Physics, and at the Department of Pharmaceutical Chemistry and Pharmacognosy. Two were working on conducting polymers with photovoltaic applications (IPICS ETH:01 and IPPS ETH:01), and one in the field of seismology (IPPS ETH:02). The chemistry group IPICS ETH:01 is working also on electrochemical sensors. At the College of Health Sciences, support to a group working in the field of pharmacological chemistry (IPICS ETH:02) was continued. New support started in 2023 to a group at Addis Ababa Science and Technology University,

IPICS ETH:05, in the field of natural products chemistry. Support was also continued to the AAU Department of Mathematics (IPMS AAU; formerly named IPMS ETH:01). The ISP physics continued to support the newly started (in 2021) research group at Bahir Dar University (IPPS ETH:03) working in materials science, in particular for solar energy applications.

In **Kenya,** one physics research group at University of Nairobi was supported. This group works in the fields of X-ray fluorescence and nuclear technology applications in environmental monitoring (IPPS KEN:01/2).

In **Laos**, three research groups were supported at the National University of Laos. Two are at the Department of Chemistry, one in environmental chemistry (IPICS LAO:01), and one in natural products chemistry (IPICS LAO:04). At the Department of Physics one group is supported in the field of geoscience (IPPS LAO:01).

In **Mali,** a physics research group in the field of spectral imaging (IPPS MAL:01) was supported at the Department of Physics at Université des Sciences, des Techniques et des Technologies de Bamako.

In **Myanmar,** at University of Mandalay, support was provided to one physic research group, working in the field of experimental and theoretical nuclear physics, and in solar energy materials (IPPS MYA:01). The group at University of Yangon (MYA:02) works in materials science at the Universities' Research Centre.

In **Nepal**, ISP physics continued to support the Atmospheric and Material Science Research Group (AMSRG) working with lightning and with materials science research. The group is located at the Department of Physics, Tribhuvan University.

In **Rwanda,** at University of Rwanda, support to a chemistry research group in the field of environmental chemistry (IPICS RWA:01), and a physics research group in the field of astrophysics and atmospheric physics (IPPS RWA:01), was continued.

In **Tanzania**, support was provided to one research group in physics, in the field of materials science (IPPS TAN:01/2).

In **Uganda** support was continued to a research group in the field of materials science (IPPS UGA:01/1) at Makerere University, Kampala, and to a research group in astronomy and space science at the Mbarara University of Science and Technology, Mbarara (IPPS UGA:02). Chemistry support was continued to two groups at Makerere University, conducting research in the field of environmental chemistry (IPICS UGA:01), and in the field of coordination chemistry (IPICS UGA:02).

In **Zambia,** at University of Zambia, a physics research group was supported in the field of materials science (IPPS ZAM:01). One chemistry research group, in the field of natural products chemistry (IPICS ZAM:02), was phased out.

In **Zimbabwe**, one chemistry research group, working in the field of biomolecular interactions (IPICS ZIM:01), were supported at Department of Biochemistry, University of Zimbabwe. A second group, working in the field of biochemical toxicology (IPICS ZIM:02), was supported at the Department of Environmental Science and Health, at the National University of Science and Technology (NUST) in Bulawayo. In physics, support was provided to a research group at NUST (Bulawayo) in the field of geophysics, groundwater studies and on the energy potential of natural hot springs in Zimbabwe (IPPS ZIM:01).

2.2 Supported networks

In 2025, totally 20 scientific networks were supported *[Table 2],* eight in chemistry, seven in mathematics, and four in physics. In addition, a network formed 2018 to promote the participation of women in basic sciences was supported.

Table 2. Number of scientific networks supported by ISP, by region.

Region	Chemistry	Mathematics	Physics	Gender	Total
Africa	4	6	4	1	15
Asia	4	1			5
Total	**8**	**7**	**4**	**1**	**20**

Scientific networks in chemistry

ANCAP - African Network for the Chemical Analysis of Pesticides and Other Pollutants, aims to safeguard public health and the environment and ensure the safety of African agricultural and aquatic products. Nodes are located in Ethiopia, Kenya, Nigeria, Rwanda, Sudan, Tanzania, Uganda and Zimbabwe.

ANEC - African Network of Electroanalytical Chemists, has the objective to foster research activities in the field of electroanalytical chemistry, and to promote and encourage the use of electrochemical approaches in basic science and in environmental sciences and food security. Nodes are located in Burkina Faso, Cameroon, Ethiopia, Kenya, Morocco, Tunisia, Senegal and South Africa.

ANFEC - Asian Network of Research on Food and Environment Contaminants builds on the progress facilitated by the ISP support to environmental chemistry in the region, and to further develop the capacity for reliable trace analysis of pollutants. Nodes are located in Bangladesh, Cambodia and Laos.

ANRAP - Asian Network of Research on Antidiabetic Plants, with the objective to develop cooperation between scientists working in the field of antidiabetic plant research. Nodes are located in Bangladesh, the Philippines, India, Malaysia and Pakistan.

CAB-CCS – Cambodian Chemical Society has the goal to enhance chemistry education in high schools by training provincial teachers. It is an outreach link initiated by staff at the Royal Academy Cambodia and at the Department of Chemistry, Royal University of Phnom Penh.

NAPRECA - Natural Products Research Network for Eastern and Central Africa, has the objective to initiate, develop and promote research in the area of natural products chemistry in Eastern and Central Africa. Nodes are located in Botswana, Cameroon, DR Congo, Egypt, Ethiopia, Kenya, Madagascar, Sudan, Rwanda, Tanzania, Uganda and Zimbabwe.

NITUB - Network of Instrument Technical Personnel and User Scientists of Bangladesh has the objective to improve the capabilities in handling, maintaining, troubleshooting and repairing scientific instruments in Bangladesh.

RABiotech - West African Biotechnology Network has the objective to ensure and reinforce research training in biotechnology, and to share research on local challenges. Nodes are located in Benin, Burkina Faso, Guinea, Ivory Coast, Kenya, Mali, Niger, Nigeria, Senegal, Togo and Tunisia.

Scientific networks in mathematics

Four research groups (APREA, CoRS, EAALG and PDEAPP) are presented below together with the previously supported networks. Although they are called “research groups” they fit better into “networks” in the sense that they all have members from a number of different African countries.

APREA - Applied Probability Reseach in Eastern Africa with the main objective to form a sustainable statistical research group whose focus is in solving health, economic and environmental issues using applied probability theories which eventually will contribute significantly towards poverty reduction. APREA has members from University of Nairobi, Kenyatta University, Technical University (Kenya), Makerere University, Kyambogo University (Uganda) and Eduardo Mondlane University (Mozambique). The main collaborating insitutions in Sweden are the Royal Institute of Technology and Linköping University. This network will be phased out after 2025.

BURK:01 - PDE Modeling and Control aiming at applications of mathematics, and strengthening other areas of mathematics. The cooperation is between University Joseph Ki-Zerbo (Burkina Faso), Gaston Berger University (Senegal), University of Nouakchott (Mauritania), University of Cocody-Abidjan (Ivory Coast), and Université des Sciences, des Techniques et des Technologies de Bamako (Mali).

CoRS - Combinatorial Research Studio, whose objective is to initiate and develop research in enumerative combinatorics in the region. The establishment of the group was initiated through the support of ISP and Sida bilateral research programmes. CoRS has members from Addis Ababa University (Ethiopia), University of Antananarivo (Madagascar), Makerere University and Mbarara University of Science and Technology (Uganda). The main collaborating institutions in Europe are Stckholm University (Sweden) and Université Paris Cité. This network will be phased out after 2025.

EAALG – The Eastern Africa Algebra Research Group, whose overall objective of EAALG is to build research and graduate training capacity in Algebra within the Eastern Africa region. This is done through offering scholarships to postgraduate students, organising workshops and summer schools, facilitating research and also through collaborations among the member departments with other researchers from both the South and the North. EAALG has members from Addis Ababa University (Ethiopia), Makerere University (Uganda), University of Nairobi (Kenya), Khartoum University (Sudan), Eduardo Mondlane (Mozambique), University of Rwanda (Rwanda) and University of Zambia (Zambia). This network will be phased out after 2025.

EAUMP (Eastern Africa Universities Mathematics Programme) changed name to **CoRE-Math** (Africa-Europe Cluster of Excellence in Mathematics) with the main objectives to enhance postgraduate training in mathematics and build capacity for mathematics research in the participating universities. The network consists of the Departments of Mathematics at Makerere University (Uganda), University of Rwanda (Rwanda), University of Dar es Salaam (Tanzania), University of Nairobi (Kenya), and University of Zambia (Zambia).

PDEAPP - Partial Differential Equations and Applications with the overall goal to strengthen the growth of partial differential equations and application in Africa through research and publication. The first strategic objective is to identify and formulate new research projects, to train research group members in research proposal grant writing. The second strategic objectives to achieve this goal is the support MSc and PhD students. The third strategic objective is research collaboration North- South and South-South through research visits. PDEAPP has members from University of Joseph Ki-Zerbo (Burkina Faso), Addis Ababa University (Ethiopia), Eduardo Mondlane University (Mozambique), University of Rwanda (Rwanda), Busitema University (Uganda), Makerere University (Uganda) and University of Zambia (Zambia). This network will be phased out after 2025.

SEAMaN - South East Asian Mathematics Network, with the objective to strengthen the postgraduate education in mathematics at the three Departments of Mathematics, at the National University of Laos (Laos), Royal University of Phnom Penh (Cambodia) and the University of Mandalay (Myanmar). The nodes in Cambodia and Myanmar were phased out in 2025.

Scientific networks in physics

AFSIN - African Spectral Imaging Network (AFR:04), with the objective to bring the research activity of the members to international standard in the field of spectroscopy and spectral imaging, with applications in medicine, environment and agriculture. Nodes in nodes in Burkina Faso, Cameroon, Ivory Coast, Ghana, Kenya, Mali, Senegal, Sri Lanka and Togo.

EAARN - East Africa Astronomy Research Network (AFR:05) is coordinated from Muni University in Arua, Uganda. Nodes are at Mbarara University of Science and Technology (MUST), Entoto Observatory at Addis Ababa (Ethiopia), and University of Rwanda (Rwanda). Students from the nodes participate in the MSc programme at MUST.

ESARSWG - Eastern and Southern African Regional Seismological Working Group (AFR:01), with the objective to monitor seismic activities of the East Africa Rift System through the operation of seismic stations in nine countries and collectively analyse data. Nodes in Eritrea, Ethiopia, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia and Zimbabwe.

MSSEESA - Materials Science and Solar Energy Network for Eastern and Southern Africa (AFR:03), with the aim to use costly equipment in a more efficient way and to harmonise and strengthen the quality of physics education in the region with special focus on materials for Solar energy applications. Nodes in Kenya, Tanzania, Uganda and Zambia.

Other scientific network

EANWoBAS - Eastern Africa Network for Women in Basic Sciences, consisting of of female researchers in mathematics and physicist from universities in Uganda, Kenya, Rwanda, Tanzania and Zambia. The network envisions to be leading in creating gender balanced gender representation in the basic sciences, on all levels from primary to tertiary education in East Africa.

Table 3. Supported research groups and network coordinating nodes per university/institute.

Country	Institute/University	Chemistry	Math	Physics	Gender	Total
Bangladesh	Atomic Energy Centre Dhaka			BAN:02/2		1
Bangladesh	Bangladesh University of Health Sciences	ANRAP				1
Bangladesh	Rajshahi University	BAN:05				1
Bangladesh	University of Dhaka	NITUB		BAN:04 BAN:05		3
Bolivia	University of Saint Francis Xavier (USFX)	BOL:01				1
Burkina Faso	University Joseph Ki-Zerbo	BUF:01 BUF:02 ANEC RABiotech	BURK:01	BUF:01		6
Cambodia	Cambodian Chemical Society	CAB-CCS				1
Ethiopia	Addis Ababa University	ETH:01 ETH:02	AAU CoRS	ETH:01 ETH:02		6
Ethiopia	Addis Ababa Science & Technology University	ETH:05				1
Ethiopia	Bahir Dar University			ETH:03		1
Ivory Coast	National Polytechnic Institute			AFSIN		1
Kenya	University of Nairobi		APREA	KEN:01/2		3
Laos	National University of Laos	LAO:01 LAO:04 ANFEC	SEAMaN	LAO:01		5
Mali	University of Sciences, Techniques and Technologies of Bamako			MAL:01		1
Myanmar	University of Mandalay			MYA:01		1
Myanmar	University of Yangon			MYA:02		1
Nepal	Tribhuvan University			NEP:01		1
Rwanda	University of Rwanda	RWA:01	PDEAPP	RWA:01		3
Tanzania	University of Dar es Salaam	ANCAP		TAN:01/2 MSSEESA		3
Tanzania	University of Dodoma			ESARSWG		
Uganda	Makerere University	UGA:01 UGA:02 NAPRECA	CoRE-Math EAALG	UGA:01/1	EANWoBAS	6
Uganda	University of Mbarara			UGA:02		1
Uganda	Muni University			EAARN		1
Zambia	University of Zambia			ZAM:01		2
Zimbabwe	National University of Science & Technology	ZIM:02		ZIM:01		2
Zimbabwe	University of Zimbabwe	ZIM:01				1
Total number	**26 institutes/universities**	**22**	**8**	**23**	**1**	**54**

2.3 Staff in supported activities

Table 4. Gender proportion of staff members/network members. The average values 2008-2013 and 2014-2019 are given, and the values in 2020-2024, and 2025. Percent values are followed by the numbers of women (F) in relation to the total in each year category.

Indicator	2008-2013	2014-2019	2020	2021	2022	2023	2024	2025
g) Gender proportion of staff.	ISP total *18% F*	ISP total *23% F*	ISP total *22% F (214/978)*	ISP total 20% F staff (191/968)	ISP total 22% F staff (217/981)	ISP total 23% F staff (226/983)	ISP total 29% F staff (266/918)	ISP total 22% F staff (184/838)
	Chemistry *28%*	Chemistry *29%*	Chemistry *30% (94/313)*	IPICS *31% (80/261)*	IPICS *31% (98/312)*	IPICS *33% (107/321)*	IPICS *35% (111/315)*	IPICS *35% (96/275)*
	Mathematics *12%*	Mathematics *19%*	Mathematics *17% (58/332)*	IPMS *14% (57/407)*	IPMS *17% (59/356)*	IPMS *17% (62/356)*	IPMS *15% (45/273)*	IPMS *15% (47/308)*
	Physics *12%*	Physics *18%*	Physics *19% (62/271)*	IPPS *18% (54/300)*	IPPS *19% (60/313)*	IPPS *18% (54/252)*	IPPS *16% (50/165)*	IPPS *16% (41/255)*

2.4 Students in supported activities

PhD and MSC students

Table 5. Gender proportions and numbers of students. The yearly averages 2008-2013 and 2014-2019 are given, and the values for 2020-2024 and 2025. Percent values are followed by the numbers of women (F) in relation to the total in each category.

Indicator	2008-13	2014-19	2020	2021	2022	2023	2024	2025
h1) Gender proportion of all post-graduate students.	ISP total *23% F PhD 27% F MSc*	ISP total *27% F PhD 33% F MSc*	ISP total *31% F PhD (155/496) 43% F MSc (276/635)*	ISP total *27% F PhD (190/699) 36% F MSc (258/718)*	ISP total *29% F PhD (180/626) 29% F MSc (202/696)*	ISP total *29% F PhD (168/584) 35% F MSc (260/745)*	ISP total *31% F PhD (173/566) 36% F MSc (221/611)*	ISP total *31% F PhD (141/495) 33% F MSc (157/472)*
	Chemistry *34% F PhD 36% F MSc*	Chemistry *34% F PhD 41% F MSc*	Chemistry *40% F PhD (61/153) 46% F MSc (77/169)*	Chemistry *37% F PhD (71/192) 48% F MSc (106/220)*	Chemistry *35% F PhD (76/220) 40% F MSc (115/290)*	Chemistry *33% F PhD (67/202) 38% F MSc (101/263)*	Chemistry *36% F PhD (65/182) 45% F MSc (98/220)*	Chemistry *27% F PhD (42/153) 42% F MSc (57/136)*
	Math *16% F PhD 19% F MSc*	Math *21% F PhD 31% F MSc*	Math *24% F PhD (38/160) 47% F MSc (77/164)*	Math *15% F PhD (30/186) 26% F MSc (62/236)*	Math *16% F PhD (28/175) 24% F MSc (51/215)*	Math *17% F PhD (29/168) 26% F MSc (42/160)*	Math *14% F PhD (26/186) 20% F MSc (29/148)*	Math *11% F PhD (17/157) 16% F MSc (16/99)*
	Physics *16% F PhD 19% F MSc*	Physics *22% F PhD 27% F MSc*	Physics *31% F PhD (56/183) 40% F MSc (122/302)*	Physics *33% F PhD (78/235) 34% F MSc (90/262)*	Physics *32% F PhD (76/231) 40% F MSc (114/285)*	Physics *34% F PhD (72/214) 36% F MSc (117/322)*	Physics *41% F PhD (82/198) 39% F MSc (95/243)*	Physics *44% F PhD (82/185) 35% F MSc (84/237)*

Table 6. The average number of **PhD and MSc graduations** per year 2008-2013 and 2014-2019, and the yearly number in 2020-2024 and 2025.

Indicator	2008-13	2014-19	2020	2021	2022	2023	2024	2025
q) Number of PhD graduations per year (% of women)	27 (17% F)	70 (29% F)	94 (35% F)	69 (29% F)	98 (30% F)	75 (21% F)	84 (27% F)	92 (17% F)
p) Number of MSc graduations per year (% of women)	103 (24% F)	201 (31% F)	234 (43% F)	215 (35% F)	232 (41% F)	209 (33% F)	220 (35% F)	192 (36% F)



Photo 4. Group leader So Koko Aung demonstrates fabrication and measurement of carbon-based perovskite solar cell for his PhD students, University of Mandalay, Myanmar (IPPS MYA:01).

2.4.1 PhD graduations

The PhD graduations are listed below. Students reported by chemistry groups and networks (IPICS) are given first, followed by those reported for mathematics (IPMS) and physics (IPPS). The entries are given essentially as submitted to ISP. "Sandwich" are by students with intermittent visits to a collaborating supervisor in another country. (F = female; M= male).

ISP programme	Group	F/M	Given name, Family name	*Title of thesis if applicable*	Country	Sandwich/Local	Direct/ Indirect ISP funding
IPICS	ANEC	M	Dethie FAYE	*New materials based on carbon nanotubes functionalized with diazoniums and nanoparticles for colorimetric and electrochemical detection of organophos-phorus pesticides in cabbage and soil extracts*	Senegal	Local	Indirect
IPICS	ANEC	M	Diebel Dado SALL	*Development of Carbon-Based Nanomaterials for the Detection of Glucose and Heavy Metals via Electrochemical and Optical Pathways*	Senegal	Sandwich, University Paris Cité, 2025	Direct
IPICS	ANEC	M	Mamadou BADJI	*Corrosion studies on galvanized steels*	Senegal	Local	Indirect
IPICS	ANEC	M	Modou Gnigue DIOP	*Synthesis of hybrid nanocomposites based on zinc-magnesium ferrite oxide coated with polypyrrole (ZnXMg1-xFe2O4@PPy) for the removal of excess fluoride from drinking water and hexavalent chromium in Senegal*	Senegal	Local	Indirect
IPICS	ANEC	M	SILGA Jean Philippe Theodore	*Development of electrochemical sensors for the analysis of pesticide and drug residues in the environment and the study of their bioremediation through innovative processes*	Burkina Faso	Local	Direct
IPICS	ANEC/ ETH:01	M	Asmamaw Taye	*Water Hyacinth-based Materials for the Removal of Toxic Heavy Metals and Applications in Supercapacitors*	Ethiopia	Local	Indirect
IPICS	ANFEC	F	Nargis Parvin	*A comprehensive analysis of residual antibiotics, organochlorine pesticides and heavy metals in beef and chicken*	Bangladesh	Local	Indirect
IPICS	ETH:01	M	Tadele Tamenu	*Molecular design, synthesis and characterization of organic semiconductors for applications in photonics and electronics*	Ethiopia	Sandwich, Chalmers University, 2021-2022	Direct
IPICS	ETH:05	M	Meseret Zebeaman, Birhanu	*Isolation and modification of cellulose and nanocellulose from invasive weed Senna didymobotrya and evaluate their potential applications*	Ethiopia	Local	Indirect
IPICS	ETH:05	F	Yenework Nigussie, Ashagrie	*Study on physicochemical properties and nanoemulsion synthesis of wild plants seed oil and their potential applications*	Ethiopia	Local	Indirect
IPICS	RABiotech	M	ALOGNON Ablam	*Contribution à la lutte contre les infections vaginales à Candida albicans: analyse phytochimiques et évaluation des propriétés biologiques d'une recette de trois plantes utilisées en médecine traditionnelle au Togo*	Togo	Local	Indirect
IPICS	RABiotech	F	Amenan Aline DOH	*Production et évaluation des caractéristiques filmogènes et microbiologiques d'un emballage à base d'amidon de manioc (Manihot esculenta Crantz) renforcé à l'huile de Garcinia kola et aux microfibres de Cocos nucifera L. pour la conservation de l'attiéké*	Ivory Coast	Local	Indirect

IPICS	RABiotech	M	AMEYRAN Koami	*Contribution à la valorisation des sels hyposodés d'origine végétale: Enquêtes sur les usages alimentaires et thérapeutiques, études du potentiel nutritionnel et de l'effet anti - hypertension chez Bufo bufo, Rattus norvegicus (souche Wistar) et Oryctolagus cuniculus*	Togo	Local	Indirect
IPICS	RABiotech	F	Atchiman Esther Blandine KRAIDY	*Impact de l'insécurité alimentaire et de la typologie des comportements alimentaires sur les maladies métaboliques associées: cas de la région des Grands-Ponts*	Ivory Coast	Local	Indirect
IPICS	RABiotech	M	Bonzou Ernest TIGORI	*Formulation d'aliments de complément infantiles à partir de produits vivriers locaux: Caractérisations nutritives, fonctionnelle et sensorielle*	Ivory Coast	Local	Indirect
IPICS	RABiotech	M	Brice Dodji DANGNON	*Propriétés pharmacologiques de deux plantes médicinales (Vitellaria paradoxa Gaertn. et de Parkia biglobosa (Jacq.) Benth) utilisées pour le traitement des ulcères gastrointestinaux dans les communes d'Abomey-Calavi et Cotonou au Sud du Bénin*	Benin	Local	Indirect
IPICS	RABiotech	F	CHEPKEMOI Emmy Ruto	*Bioassay and response of pyrethrum (Chrysanthemum cinarerііfolium) genotypes to pathogenic fungi in Kenya*	Kenya	Local	Indirect
IPICS	RABiotech	M	DABIRE Sanhitouo Charlemagne	*Prévalence et antibiorésistance des entérobactéries potentiellement pathogènes isolées de différents biotopes au Burkina Faso*	Burkina Faso	Local	Indirect
IPICS	RABiotech	M	Elokou ALABI	*Genetique des populations des principaux bulins du benin et leur role dans la dynamique de la transmission de la bilharziose par les schistosomes*	Benin	Local	Indirect
IPICS	RABiotech	M	Erick Ochieng' OBONG'O	*Factors driving the adoption of improved cassava cultivars in Teso south, Busia County, Kenya*	Kenya	Local	Indirect
IPICS	RABiotech	M	HOINSOU Yao	*Evaluation de quelques activités biologiques d'une recette de trois plantes utilisées dans le traitement de la fièvre typhoïde au Togo*	Togo	Local	Indirect
IPICS	RABiotech	M	HOUNKPATIN Mathieu Eustache	*Caractérisation moléculaire des souches bactériennes responsables de suppuration des plaies dans le sud du Bénin et élaboration de crèmes phytothérapeutiques*	Benin	Local	Indirect
IPICS	RABiotech	M	Kouadio Gabin KOUAKOU	*Optimisation du procédé d'extraction de l'huile d'amande de noix de Cajou (Anacardium occidentale L.), caractéristiques physico-chimiques et évaluation de son impact nutritionnel*	Ivory Coast	Local	Indirect
IPICS	RABiotech	M	Kouadio Joel KOUACOU	*Effet de la UV-C sur les caractéristiques physico-chimiques, biochimiques et sur la flore d'altération des variétés d'aubergines ''klongbo'' (Solanum aethiopicum anguivi) et ''Gbokouman'' (Solanum macrocarpon) consommées en Cote d'Ivoire*	Ivory Coast	Local	Indirect
IPICS	RABiotech	M	Kouadoueu Yves Roland DELI	*Évaluation des pratiques phytosanitaires et des méthodes de mûrissement artificiel sur la qualité nutritionnelle et sanitaire des mangues (Mangifera indica var. Kent) et des bananes plantains (Musa paradisiaca var. Faux Corn) consommées en Côte d'Ivoire*	Ivory Coast	Local	Indirect

IPICS	RABiotech	M	Kponou Mathieu Bienvenu TOBOSSI	*Habitude alimentaire, profils nutritionnel et biochimique des patients recus dans le service d'hepato-gastro-enterologie du CHU campus Lome*	Benin	Local	Indirect
IPICS	RABiotech	M	MASSAMBA Stève MOULENGO	*Fabrication et caractérisation des bouillons cubes alimentaires à base de Scyphocephalium ochocoa Warb (Lubunô), de Hua gabonii Pierre (Kikarbouanga) et de Irvingia gabonensis Baill (Péké)*	Congo	Local	Indirect
IPICS	RABiotech	M	Médérice Sènanmi BEHANZIN	*Etude et elaboration d'edulcorants stabilises naturels a usage alimentaire a partir du sisre, le fruit de synsepalum dulcificum*	Benin	Local	Indirect
IPICS	RABiotech	M	Mutati MUASYA	*Performance, yield stability analysis and characterization of new potato (Solanum tuberosum) mutant lines in Kenya*	Kenya	Local	Indirect
IPICS	RABiotech	F	Rutto Cheluget Emmah	*Diversity of selected sorghum genotypes using 0 morphological, molecular and biochemical markers*	Kenya	Local	Indirect
IPICS	RABiotech	F	Salamata TIENDREBEOGO	*Etude des propriétés nutritives et technologiques des différentes fractions/ composants du fruit de la liane goïne en vue de leur valorisation: coque, pulpe et graine*	Burkina Faso	Local	Direct
IPICS	RABiotech	M	TOUGLO Kossi	*Evaluation de la qualité microbiologique des poulets d'importation, typage moléculaire des souches pathogènes isolées et étude de leurs gènes de résistances au Togo*	Togo	Local	Indirect
IPICS	RABiotech	F	Viviane Aurélie TAPSOBA	*Analyse des environnements alimentaires au Burkina Faso avec l'outil Food-EPI*	Burkina Faso	Local	Indirect
IPICS	BUF:02	M	Hadi Hamadoum GORO	*Synthesis of nano kaolinite for chromium removal from waste waters*	Burkina Faso	Local	Indirect
IPICS	BUF:02	M	Jean Baptiste ZOUNGRANA	*Caractérisation physico-chimique des phosphates naturels de Kotchari pour une meilleure utilisation en agriculture*	Burkina Faso	Local	Indirect
IPICS	BUF:02	M	Mamadou OUEDRAOGO	*Formulation of anti-corrosion dyes*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	Abdel Aziz ADOUM	*Iiterative methods for nonlinear equations in classical Banach spaces Directeur de these*	Senegal	Local	Indirect
IPMS	BURK:01	M	BAGUIAN Wahabo	*Etude de quelques équations intégro-différentielles stochastiques dans les espaces de Hilbert*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	BANCE Mohamed	*Étude de quelques équations intégro-différentielles comportant une diffusion et une convection non linéaires à données irrégulières*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	BELLA Boureima	*Méthodes variationnelle dans la résolution des problèmes de Cauchy pour des équations différentielles elliptiques*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	Dicko Hamadoum	*Contribution à la modélisation mathématique en épidémiologie : analyses mathématiques et simulations numériques de modèles de la tuberculose et d'épidémies à immunité temporaire ou définitive*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	KABORE Bruno	*Analyse de quelques problèmes de Cauchy pour des équations différentielles elliptiques non linéaires*	Burkina Faso	Local	Indirect

IPMS	BURK:01	M	KAMBELE Siaka	*Modélisation spatio-temporelle et analyse de quelques systèmes dynamiques de diffusion-réaction*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	KOAMA Daniel	*Résidu non commutatif sur des feuilletages et géométrie différentielle du fibré unitaire de l'espace hyperbolique*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	MOUSSA Brahim	*Étude de problèmes non linéaires discrets sous des conditions au bord générales*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	POODA Mathieu Romaric	*Modélisation et contrôle du terrorisme au Sahel*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	RAMDE Nestor	*Modélisation mathématique, contrôle et simulations numériques de la dynamique des criquets pèlerins*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	SAWADOGO Ragnimwendé	*Contribution à la modélisation stochastique de la dynamique de maladies tropicales négligées : Cas de la dengue et de la filariose lymphatique*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	Serigne Mbacké COLY	*Modélisation Mathématique et contrôle optimal des chocs climatiques*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	SORE Seydou	*Modélisation mathématique, contrôle optimal et simulation numérique du transport des polluants et des sédiments dans les bassins versants: Application au lac Bam*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	TAPSOBA Wendpanga Alain	*Modélisation mathématique et contrôle optimal de la dynamique comportementale des idéologies terroristes*	Burkina Faso	Local	Indirect
IPMS	CoRE Math UDSM	M	Imani Kapungu	*Asset and liability management of Tanzania health insurance*	Tanzania	Local	Indirect
IPMS	CoRE Math UDSM	F	Samya Suleiman	*Modelling and forecasting power exponential function with Lee and Carter method*	Tanzania	Sandwich	Direct/partial support
IPMS	CoRE-Math MAK	M	Frank Namugera	*Long-range contact process: Theory and applications*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Herbert Batte	*Solutions to diophantine equations involving terms of lucas sequences, perfect powers and repdigits*	Uganda	Local	Direct
IPMS	CoRE-Math MAK	M	Ronald Katende	*Numerical analysis of physics-informed neural networks for solving pdes*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	F	Zabibu Afazali	*Regime-switching approaches for dynamic risk*	Uganda	Local	Indirect
IPMS	ETH:01	M	Gezahegn Anberber	*Common fixed point results for some class of generalized nonexpansive mappings in banach spaces*	Ethiopia	Local	Direct
IPMS	ETH:01	M	Goitom Wellu Hagos	*Analysis of united boundary domain integral and integro-differential equations to the boundary value problems for a compressible stokes system with variable viscosity*	Ethiopia	Local	Direct
IPMS	ETH:01	M	Solomon Bekele Zegeye	*Further investigation of iterative approximation of fixed points of non- linear mappings on banach spaces with applications*	Ethiopia	Local	Direct

IPPS	AFSIN	M	Serge Martial Adepo	*Measurement of optical properties of dense media by SLIPI imaging: Applications to medical diagnostics and therapeutics*	Ivory Coast	Local	Indirect
IPPS	AFSIN	M	Constant Kouakou Kouakou	*Identification and characterisation of phytopathologies of agricultural plants by proximal spectroscopy*	Ivory Coast	Local	Indirect
IPPS	AFSIN	F	Nana Coulibaly	*Analyse de la distribution spatio-temporelle des polluants dans l'eau du fleuve Niger par observation satellitaire : Cas de Bamako et environ*	Mali	Local	Direct
IPPS	AFSIN	M	Dickson Linani Omucheni	*Machine learning-enhanced Raman spectroscopy for mosquito taxonomy*	Kenya	Local	Indirect
IPPS	BUF:01	M	MOYENGA Cyrille Constant	*Modeling study of a radial junction photovoltaic cell under a magnetic field in static regime and monochromatic illumination*	Burkina Faso	Local	Indirect
IPPS	MYA:01	F	Ma Nway Nway Aung	*Study on the Structure of KKp system using three phenomenological KN interactions*	Myanmar	Local	Indirect
IPPS	MYA:02	F	Zin Thu Hlaing	*Modified interlayer of bulk heterojunction polymer blend for efficient and stable photovoltaic device*	Myanmar	Local	Direct
IPPS	MYA:02	F	Pyone Moh Moh Aung	*Synthesis and characterization of hydroxyapatite/ and bioglass composite for non-load bearing clinical applications*	Myanmar	Local	Direct
IPPS	MSSEESA/ TAN	M	Sawa Hezekiah	*Investigation of the effects of CZTSSe absorber layer reaction pathways, alkali incorporation and bandgap engineering on the performance of the CZTSSe thin film solar cells*	Tanzania	Sandwich, Uppsala University, Sweden	Indirect
IPPS	MSSEESA/ TAN	M	Joseph Wilson	*Investigations on biosorbents derived from agricultural wastes for multi-pollutants removal in wastewaters*	Tanzania	Local	Indirect
IPPS	MSSEESA/ TAN	M	Mohamed Mussa Mtangi	*A study on improving the electrical and thermal stability of high-temperature superconducting coils using smart insulation materials for superconducting magnet applications*	Tanzania	Local	Indirect
IPPS	MSSEESA/ KEN	M	Miller Shatsala	*Synchrotron-based in-situ and ex-situ investigation of perovskite for photovoltaic applications*	Kenya	Local	Indirect
IPPS	MSSEESA/ KEN	M	David Osiyo	*Study of the effect of sunflower oil and water on thermal storage properties of a flat plate solar water heating collector*	Kenya	Local	Indirect
IPPS	MSSEESA/ UGA	M	Chaciga Jimmy	*Development of solar energy storage technology for off-grid cooking applications*	Uganda	Local	Indirect
IPPS	MSSEESA/ UGA	M	Swalleh Tusiime	*Development of a thermal energy storage system with a controlled charging temperature*	Uganda	Local	Indirect
IPPS	ETH:01	M	Sintayehu Yigzaw	*Effects of thermal and photo-induced treatments on the electrical, optical, and surface properties of PEDOT:PSS*	Ethiopia	Local	Indirect
IPPS	ETH:01	M	Yissa Abdi	*Unravelling heating and light induced degradation mechanisms in fullerene and nonfullerene acceptor based organic solar cells fullerene and nonfullerene acceptor based organic solar cells*	Ethiopia	Local	Indirect

IPPS	ETH:01	M	Dagne Wordofa	*Investigation of nonequilibrium phase transition in ferromagnetic systems using Monte Carlo and machine learning methods*	Ethiopia	Local	Indirect
IPPS	ETH:02	M	Sisay Alemayehu	*Seismotectonics and lithospheric structure of Western Ethiopian Plateau*	Ethiopia	Local	Indirect
IPPS	ETH:03	M	Assaye Gedifew	*Estimating solar radiation using machine learning for improved photovoltaic system design*	Ethiopia	Local	Direct
IPPS	ETH:03	M	Melaku Metto	*Development of modified glassy carbon electrodes by new transition metal complexes for electrochemical determination of selected electroactive species in pharmaceutical formulations, urine, serum, cow's milk, and DNA extract samples*	Ethiopia	Local	Direct
IPPS	ETH:03	F	Mulu Gashu	*Polymeric film modified glassy carbon electrode for electrochemical determination of selected drugs in pharmaceuticals and biological samples*	Ethiopia	Local	Direct
IPPS	KEN:01/2	M	Wilson Kairu	*Method development for online structural health monitoring of concrete using embedded acoustic waveguide sensors*	Kenya	Sandwich, India, Indian Institute of Technology, India	Direct
IPPS	KEN:01/2	F	Lindah Kiriinya	*Alginates as an electrode stabilizer for Mg and Transition metal-ion Batteries*	Kenya. Graduated in Netherlands	Sandwich, Delft University of Technology, Netherlands	Direct
IPPS	MAL:01	F	Nana Coulibaly	*Detection of water pollution parameters in the River Niger*	Mali	Local	Direct
IPPS	MAL:01	F	Safiatou MARIKO	*Assessing the sustainability of malian national energy system using multicriteria decision making*	Mali. Graduated in Niger	Sandwich. University of Niamey, Niger	Indirect
IPPS	MAL:01	M	Tji Coulibaly	*Dynamique des particules pm2,5 et pm10 et pollution atmosphérique associées en Afrique de l'ouest*	Mali	Local	Direct
IPPS	MAL:01	M	Kagou DICKO	*Assessing cities response to climate change in the Sudan Savanna region of West Africa through renewable energy*	Mali	Sandwich	Indirect
IPPS	MAL:01	M	Moussa I Maiga	*Assessment of current and projected climate change over Inner Niger Delta Wetland of Mali in CMIP6 models*	Mali	Sandwich	Indirect
IPPS	MAL:01	M	Issa Bagayoko	*Potentil contribution of PV to electricity access in rural area of Mali*	Mali	Local	Direct
IPPS	RWA:01	M	Theogene Ndacyayisenga	*Analysis of Low-Frequency solar radio bursts from the solar corona and their space weather implications*	Rwanda	Local	Direct
IPPS	RWA:01	M	Abdou Safari Kagabo	*Dynamic analysis of atmospheric air quality*	Rwanda	Local	Indirect
IPPS	RWA:01	M	Joseph Sebaziga Ndakize	*Climate variability and modeling*	Rwanda	Local	Direct
IPPS	RWA:01	M	Jean Damascene Mbarubukeye	*A multi-messenger view of the transient sky*	Rwanda. Graduated in Germany	Sandwich. Humboldt-Universität zu Berlin, Germany	Direct

IPPS	ZAM:01	M	Fred Joe Nambala, not reported 2024	*Optimization of Silicon for low cost and high efficiency Solar Cells*	Zambia. Graduated in South Africa	Sandwich	Indirect

2.4.2 Other postgraduate theses

The MSc, MPhil and Lic graduations listed below. Students reported by chemistry groups and networks (IPICS) are given first, followed by those reported for mathematics (IPMS) and physics (IPPS). The entries are given essentially as submitted to ISP. "Sandwich" are by students with intermittent visits to a collaborating supervisor in another country. (F = female; M= male).

ISP programme	Group	F/ M	Given name, Family name	Title of thesis if applicable	Country	Sandwich/Local	Direct/ Indirect ISP funding
IPICS	ANCAP/ RWA:01	M	Alphonse Bayisabe	*Assessment and treatment of the properties of the biochar and briquettes produced at the nyamagabe decentralized faecal sludge treatment plant*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Emmanuel Hagenimana	*Metalloids and heavy metals uptake and accumulation in soil, wastewater and various plant species from polluted area by mining activities*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Emmanuel Nyahorendore	*Assessment and comparison of accumulation of some of heavy metals concentration in different tissues of commercially valuable marine edible fish species*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Emmanuel Simpunga	*Production of activated carbon from agriculture waste (orange peels and coconut shells) and its utilization in waste water treatment*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Etienne Ndayisaba	*Investigation of the phytoremediation approach in the heavy metal-polluted land by native accumulator plant species*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Jean Baptiste Misago	*Removal of selected heavy metals from polluted water of bralirwa industry using banana peels bioadsorbent*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Jean Claude Maniriho	*Investigation of the removal efficiency of heavy metals from wastewater by plant-derived nanoparticles. Case study of umubazi and Icyumwa*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Jean de Dieu Tuyishime	*Assessment of chemical and biological safety of vermicompost and water produced at rulindo faecal sludge treatment*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Jean de Dieu Utabarutse	*Comparative study on the level of heavy metals pollution in the water, sediment and aquatic organisms: A perspective of tackling environmental threats for food security*	Rwanda	Local	Indirect
IPICS	ANCAP/ RWA:01	M	Jean Pierre Uwimana	*Investigation on the capability of Rwandan macrophyte Cyperus papyrus and Leersia hexandra to treat polluted water and wastewater*	Rwanda	Local	Indirect
IPICS	ANEC	F	Chyrol MAFFEU NZEUKEU	*Capteur ampérométrique à base de la silice mésoporeuse pour l'électroanalyse du paracetamol*	Cameroon	Local	Indirect
IPICS	ANEC	F	Daina AYEMELE MELI	*Capteur ampérométrique a base de biochar de drêche de soja dope aux nanoparticules d'argent pour la détection de la sulfadiazine*	Cameroon	Local	Indirect
IPICS	ANEC	M	Dylan NOUBI MOWA	*Détection électrochimique de l'adrénaline à base d'une électrode de carbone vitreux modifiée par le MOF-808 greffée de cystéine*	Cameroon	Local	Indirect

IPICS	ANEC	M	Jerry MADJADOUM	*Capteur ampérométrique à base d'un matériau composite [H4PW17V(IV)O62]9-@MOF-808: Application à l'électroanalyse du tramadol*	Chad	Local	Indirect
IPICS	ANEC	F	July Adelaide KONANE	*Phytochemical study and evaluation of the antidiabetic activity of Senna alata*	Burkina Faso	Local	Indirect
IPICS	ANEC	F	KONANE July Adelaïde	*Phytochemical study and evaluation of the antidiabetic activity of Senna alata*	Burkina Faso	Local	Indirect
IPICS	ANEC	M	Moussa SANGO	*Monitoring the degradation of an organophosphate pesticide via electrochemical methods: the case of fenitrothion*	Burkina Faso	Local	Indirect
IPICS	ANEC	M	NAPON Tasléma	*Study of the chemical composition of banana peel waste (Musa paradisiaca) and evaluation of their bio-floculant properties*	Burkina Faso	Local	Indirect
IPICS	ANEC	M	SANGO Moussa	*Monitoring the degradation of an organophosphate pesticide via electrochemical methods: the case of fenitrothion*	Burkina Faso	Local	Indirect
IPICS	ANEC	M	Talesman NAPON	*Study of the chemical composition of banana peel waste (Musa paradisiaca) and evaluation of their bio-floculant properties*	Burkina Faso	Local	Indirect
IPICS	ANFEC	F	Sanjida Tanjid	*Spatial distribution, quantification, and risk assessment of multi-elements in urban wastewater of Dhaka, Bangladesh*	Bangladesh	Local	Indirect
IPICS	ANRAP	M	Tanvir Mahtab Rifat	*Elucidation of antioxidant and antidiabetic activities and the role of GLUT4 and insulin receptor gene expression of Clinacanthus nutans leaves on n-STZ induced type-2 diabetic model rats*	Bangladesh	Local	Indirect
IPICS	BAN:05	M	Md Ariful Islam	*Comprehensive safety assessment of energy stimulating herbal medicines in Bangladesh: A multi-approach contamination and toxicity analysis*	Bangladesh	Local	Direct
IPICS	BAN:05	M	Md. Abu Hasnat	*Assessing the safety of anti-diabetic herbal medicines: quantification of hidden synthetic pharmaceuticals sitagliptin & linagliptin*	Bangladesh	Local	Direct
IPICS	BAN:05	M	Md. Ashraful Alam Munna	*Investigation of Preservatives Used inSome Energy Stimulating Herbal Medicine by High Performance Liquid Chromatography (HPLC) and UV- Vis Spectroscopy.*	Bangladesh	Local	Direct
IPICS	BAN:05	M	Md. Mukta	*Identification and Quantification of Empagliflozin & Dapagliflozin as Adulterant in Anti-diabetic Herbal Medicines by High Performance Liquid Chromatography (HPLC)*	Bangladesh	Local, Uppsala University, March-May 2019	Direct
IPICS	BAN:05	M	Md. Rumman Bhuyan	*Determination of the toxcic metal levels in some energy stimulating herbal medicines by using atomic absorption spectroscopy*	Bangladesh	Local	Direct
IPICS	BAN:05	M	Md. Yeadun Islam	*Investigation of undeclared synthetic drugs glicazide & repaglinide in anti-diabatic herbal medicines*	Bangladesh	Local	Direct
IPICS	BAN:05	M	Omar Mohamed Hirsi	*Toxic metal analysis in selected herbal medicines used as energy stimulants by atomic absorption spectroscopy*	Bangladesh	Local	Direct
IPICS	BAN:05	F	Quantum Kaiborto	*Microbiological load profilling and safety of energy stimulating herbal medicines: a public health evaluation*	Bangladesh	Local	Direct
IPICS	BAN:05	F	Sadia Islam Bithi	*Investigation of pde-5 inhibitors (sildenafil, tadalafil, vardenafil, avanafil) in some energy stimulating herbal medicines*	Bangladesh	Local	Direct

IPICS	BUF:01	F	Hadiguèta Sinaré	*Phytochemical variability of Cassia nigricans Vahl leaves according to edaphic factors and climatic zone*	Burkina Faso	Local	Direct
IPICS	BUF:01	F	Leslie Jasmine Yolande Sanou	*Cleome gynandra L. grown on polluted soil and risks of contamination by trace metals*	Burkina Faso	Local	Direct
IPICS	ETH:02	M	Adugna Feyissa	*Acaricidal Activity and chemical composition of two essential oils from Essential Oil-bearing Plants*	Ethiopia	Local	Indirect
IPICS	ETH:05	M	Belete Ketema	*In vivo investigation of phytochemicals from heracleum abyssinicum leave for the treatment of psoriasis*	Ethiopia	Local	Indirect
IPICS	ETH:05	M	Gebrekidan Desu	*Phytochemical screening and synthesis of nanoparticles from extracts of selected plants of Ethiopia*	Ethiopia	Local	Indirect
IPICS	ETH:05	F	Hayimanot Azimeraw	*Physical and chemical profiling of stingless bee honey based on its botanical origin using CAMAG-HPTLC*	Ethiopia	Local	Indirect
IPICS	LAO:01	F	Phim Dalavanh	*Adsorption of iron (Fe^{2+}) ions from aqueous solution using rice husk*	Laos	Local	Indirect
IPICS	LAO:01	M	Photthaharn Inthilath	*The Analysis of Domestic Wastewater Quality Using Principal Component Analysis Technique*	Laos	Local	Indirect
IPICS	LAO:01	M	Singvixay Saynumkong	*Study on the Efficiency of Zinc Ion (Zn^{2+}) Adsorption Using Rice Straw*	Laos	Local	Indirect
IPICS	LAO:04	F	Bouathanom Noynaly	*Quantification and Separation of Gymnemic acid $\boldsymbol{I}$ in Gymnema sylvestre*	Laos	Local	Direct
IPICS	LAO:04	M	Thansamai Dethphakhoun	*Quantification of Catechin, Caffeine and Antioxidant Content in local tea products*	Laos	Local	Indirect
IPICS	RABiotech	F	AMOIN ANGE SEGOLENE KOUADIO	*Evaluation de la qualite de vie chez les patients atteints de maladies cardiovasculaires (mcv) suivis en readaptation cardiaque a l'institut de cardiologie d'Abidjan*	Ivory Coast	Local	Indirect
IPICS	RABiotech	M	BAPARAPE Mounirou	*Caracteristiques physico-chimique, microbiologique et nutritionnelle de sagagnega, une bouillie fermentee a base de cereales produite au nord-benin*	Benin	Local	Indirect
IPICS	RABiotech	F	BATIONO Marina Bénédicte	*Impact des techniques de cuisson sur les caractéristiques nutritionnelles des tubercules de deux variétés de patate douce à chair orange*	Burkina Faso	Local	Indirect
IPICS	RABiotech	F	Gwladys Inès DAGOU	*Pilotage de la performance d'un cabinet de conseil et formation: Cas des processus du departement commercial et formation du cabinet mk conseil et formation*	Ivory Coast	Local	Indirect
IPICS	RABiotech	M	ISSA OUMAR Atamane	*Profil bacteriologique et caracterisation moleculaire des souches d'enterobacteries et de staphylocoques isolees des infections urinaires a zinder au Niger*	Benin	Local	Indirect
IPICS	RABiotech	M	KAO TCHANGAÏ Tchamiè Honoré	*Connaissances et pratiques des mères allaitantes de la préfecture de la Binah sur l'alimentation des enfants de 06 à 23 mois en 2025.*	Togo	Local	Indirect
IPICS	RABiotech	F	Kouamé Trésor KOUAKOU	*Vérification et suivi métrologique des balances par l'élaboration de cartes de contrôles: cas du Laboratoire de Contrôle des Médicaments du LNSP*	Ivory Coast	Local	Indirect

IPICS	RABiotech	M	Kouassi Félix N'GUESSAN	*Caractérisation biochimique et sensorielle de deux galettes à base de maïs (Zea mays L.) et de pulpes de baobab (Adansonia digitata) et néré (Parkia biglobosa) produites au Nord de la Côte d'Ivoire*	Ivory Coast	Local	Indirect
IPICS	RABiotech	F	LARE Kansanme	*Evaluation de la pratique de l'allaitement exclusif par dilution isotopique chez les femmes allaitantes avec des nourrissons de 0 a 2 mois dans le district Sanitaire De Tone*	Togo	Local	Indirect
IPICS	RABiotech	F	Marie-Josée Yo Déborah ZAGADOU	*Stabilisation de la qualite de la poudre de curcuma (Curcuma longa l.) Par la determination de sa courbe de sorption*	Ivory Coast	Local	
IPICS	RABiotech	F	MOGRE Dandoun	*Evaluation du potentiel nutritionnel des accessions de lentille de terre (Macrotyloma geocarpum (Harms)) cultivées au Togo*	Togo	Local	Indirect
IPICS	RABiotech	M	MOUBACHAR Abdelkerim Mahamat	*Phytochimie, potentiel antioxydant et anti-inflammatoire de l'ecorce de parkia biglobosa (jacq.) Benth. Et son effet antibacterien sur des souches cliniques de salmonella ssp multiresistantes*	Benin	Local	Indirect
IPICS	RABiotech	F	N'TAH SANDRINE NICOLE YAPO	*Pilotage de la performance des processus de gestion de la sante et securite au travail: cas des processus gerer les ressources hummaines et les activites geotechniques de l'entreprise agts-ci*	Ivory Coast	Local	Indirect
IPICS	RABiotech	F	NANA S. C. Aristide	*Impact de la non standardisation du processus de production de l'attiéké sur le rendement, la qualité nutritionnelle et microbiologique*	Burkina Faso	Local	Indirect
IPICS	RABiotech	M	NATAMA Yampari	*Evaluation des proprietes nutritionnelles des feuilles de la patate douce a chair orange*	Burkina Faso	Local	Indirect
IPICS	RABiotech	F	NIKIEMA Kiswendsida Florentine	*Evaluation de la contribution des pratiques agroécologiques à l'amélioration de l'état nutritionnel des femmes en âge de procréer et leurs jeunes enfants dans les zones rurales du Kadiogo au Burkina Faso*	Burkina Faso	Local	Indirect
IPICS	RABiotech	F	SAWADOGO Solange	*Identification des facteurs associés à l'approvisionnement et à la consommation des fruits chez les femmes à Ouagadougou*	Burkina Faso	Local	Indirect
IPICS	RABiotech	M	Soumaïla SOUROKOU	*Caractérisation moléculaire des souches de Salmonella spp isolées des eaux dans les zones endémiques du choléra*	Benin	Local	Indirect
IPICS	RABiotech	F	Zita GBANDI Kadjessi	*Caractérisation nutritionnelle des accessions du voandzou (vigna subterranea (l.) Verdc) cultivées au Togo*	Togo	Local	Indirect
IPICS	RABiotech	M	ZOUNON KPOGNI Adébo Chédrac	*Phytochimie et potentiel antioxydant, anti-inflammatoire et antibactérien des extraits de Cananga odorata Hook. F. & Thomson*	Benin	Local	Indirect
IPICS	UGA:01	M	Kiniri Eria	*Formaldehyde levels inin fish, meat and grasshoppersfrom markets around Kampala, Uganda*	Uganda	Local	Indirect
IPICS	UGA:01	F	Patience Natumanya	*Assessment of radionuclides levels in soil, water, and foodstuffs from selected gold mining areas in Uganda*	Uganda	Local	Indirect
IPICS	UGA:02	M	Collins Letibo Yikii	*Epoxidation of olefins over supported bimetallic catalysts using oxygen as oxidant and carbon dioxide as moderator*	Uganda	Local	Indirect

IPICS	ZIM:01	F	Ruvarashe Dakwa	*Antibacterial and anti-inflammatory activities of azanza garckeana in vitro and implications*	Zimbabwe	Local	Indirect
IPMS	BURK:01	F	Ali Karimou Ramatou	*Introduction à l' étude des sous variétés pseudo finsleriennes*	Niger	Local	Indirect
IPMS	BURK:01	F	Ananmah Rose Ayine	*Potentiel oncolytique et spécificité tumorale réduite des virus dans la virothérapie oncolytique : une approche de modélisation mathématique*	Senegal	Local	Indirect
IPMS	BURK:01	M	ARANI KARAMBA Kabirou	*Etude d'un modèle mathématique de la dynamique du Diabète*	Niger	Local	Indirect
IPMS	BURK:01	M	Bartelemy NDECKY	*Analyse mathématique de la virothérapie oncolytique en présence de la réponse immunitaire: approche déterministe et stochastique déterministe et stochastique*	Senegal	Local	Indirect
IPMS	BURK:01	M	BASSOLE Marius	*Algèbres Anti-associatives : Structure, Polarisation, Dépolarisation et Quantification par Déformation Dépolarisation et Quantification par Déformation*	Burkina Faso	Local	Indirect
IPMS	BURK:01	F	DERA Mariam	*Modélisation Mathématique de la dispersion des moustiques stériles : efficacité de la technique de l'insecte stérile (TIS) en présence de zones inaccessibles*	Burkina Faso	Local	Direct
IPMS	BURK:01	M	Guèye Dame	*Modélisation et simulation numérique d'écoulement incompressible de gaz naturel dans une conduite à géométrie variable.*	Senegal	Local	Indirect
IPMS	BURK:01	M	GUIRA Hassimi	*Algèbres commutatives à puissances associatives en dimensions faibles*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	Hamadou Garba Abdoul Wahab	*Amibe, fonction de Ronkin et test de stabilité 1D-BIBO basé sur les coefficients de Schur fonctionnels*	Niger	Local	Indirect
IPMS	BURK:01	M	Issa Dan Mouché Abdoul-Jabbard	*Sous-varieté de Kaelher de type lumière*	Niger	Local	Indirect
IPMS	BURK:01	M	KABORE Abdulkader	*Universalité de ½ dans les algèbres commutatives non associatives à identité polynômiale : approche par le formalisme des arbres binaires*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	Keita Mamadou	*Transport routier; gestion des feux de circulation*	Senegal	Local	Indirect
IPMS	BURK:01	M	Keita Mamadou	*Analyse de la persistance et de la stabilité stochastiques d'un modèle Holling-Tanner modifié*	Senegal	Local	Indirect
IPMS	BURK:01	M	MAIGA Abdoulaye-Aziz	*Étude d'un problème elliptique-parabolique dégénéré à données intégrables*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	OKE DAVID	*Un modèle non local pour la reconstruction des images corrompues par le bruit de Cauchy*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	OUARO Adama	*Étude du modèle garch(1,1) avec applications aux données météorologiques*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	OUEDRAOGO Datamanegre Antoine	*Construction des codes cycliques sur le corps fini F4 et application aux codes ADN*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	SANKARA Ali	*L'equation de Perona-Malick et son application au débruitage d'image*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	SAWADOGO Pierre	*Valeurs propres de matrices symétriques*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	Tiendrebeogo Rasmané	*Sur les bases intégrales des corps de nombres pures*	Burkina Faso	Local	Indirect
IPMS	BURK:01	M	ZIDA Ali	*Etude de la complexité additive sur des mots infinis : cas de Tribonacci et Thue-Morse*	Burkina Faso	Local	Indirect

IPMS	CoRE Math UDSM	F	Efgenia T. Festo	*Modeling technical efficiency in maize production using copula based joint distribution of rainfall and temperature*	Tanzania	Local	Direct/partial
IPMS	CoRE Math UDSM	F	Fatma Abdalla Ali	*Numerical analysis for magnetic fields, leakage and blockage of water flow through the pipeline systems.*	Tanzania	Local	Indirect
IPMS	CoRE Math UDSM	M	Mussa Bahati Mandugume	*Modelling host-pathogen co-infection in emerging infectious diseases. Insights into mpox dynamics with direct, indirect, and vertical transmission under control measures*	Tanzania	Local	Direct/partial
IPMS	CoRE Math UDSM	M	Mwambona Christopher Jackson	*Mathematical modeling of the effects of insectices treated cattle for malaria control*	Tanzania	Local	Indirect
IPMS	CoRE Math UDSM	M	Nkulu Constantine J.	*Analysis of Spatial-temporal model for harvested Predator-Prey system with Prey refuge and intraspecific competititon.*	Tanzania	Local	Direct/partial
IPMS	CoRE Math UDSM	F	Suzan Msenga	*Mathematical Modeling of the Impact of Human Papillomavirus (HPV) Vaccination on the Reduction of the Rate of Cervical Cancer Incidence.*	Tanzania	Local	Indirect
IPMS	CoRE Math UDSM	M	Yusto Daniel Gyunda	*Not Yet/Still on the course work*	Tanzania	Local	Indirect
IPMS	CoRE Math UDSM	M	Zacharia Mtemba Bihiye	*An Investigation of Stable Geometric Models of Metric Spaces through Bifiltrations*	Tanzania	Local	Indirect
IPMS	CoRE-Math MAK	M	Abel Aliniitwe	*A numerical solution to an optimal control of fractional order diffusion equation*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Abu-Sufiyan Abdul-Razak	*No data*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Arnold Ssekago	*No data*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Deogratius Ssebawunde	*No data*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Emmanuel Bwesigye	*No data*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	F	Latifah Namuyindi	*No data*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Nick Wepukhulu	*No data*	Uganda	Local	Indirect
IPMS	CoRE-Math MAK	M	Paul Kivumbi	*On Minimal Free Resolutions of Powers of square Free Monomial Ideals*	Uganda	Local	Direct
IPMS	CoRE-Math UNZA	M	Boas Chisha	*Lower bound estimates of the eigenvalue of the smallest modulus associated with a general weighted regular Sturm-Liouville problem with mixed boundary conditions*	Zambia	Local	Indirect

IPMS	CoRE-Math UNZA	M	Carols Mulamfu	*A Negative Binomial INGARCH Model for Overdispersed Count Time Series: Structure, Parameter Estimation and Application to Real Data*	Zambia	Local	Indirect
IPMS	CoRE-Math UNZA	M	Derick Hamakala	*Statistical relationship between onset dekad of raining season and normalized difference vegetation index: an indicator of acute food insecurity levels in districts of Zambia*	Zambia	Local	Indirect
IPMS	CoRE-Math UNZA	M	Dominique Sampa	*Quasi-deformations of the special linear lie algebra of degree 2 using twisted derivations*	Zambia	Local	Indirect
IPMS	CoRE-Math UNZA	F	Memory Zulu	*Trends in extreme temperature and precipitation events over Zambia for the period 1981-2021*	Zambia	Local	Indirect
IPMS	CoRE-Math UNZA	M	Russell Chileshe	*Employing Bayesian Vector Autoregression Method as an Alternative Technique for Forecasting Tax Revenue in Zambia*	Zambia	Local	Indirect
IPMS	CoRE-Math UNZA	F	Twiza Namukwanya	*Poisson Integer-Valued GARCH Model: Structure, Parameter Estimation and a Real-Data Example*	Zambia	Local	Indirect
IPMS	CoRE-Math UNZA	M	Zielesa Zulu	*A Multivariate Poisson Integer-Valued Autoregressive Model for Public Health Surveillance*	Zambia	Local	Indirect
IPMS	ETH:01	F	Helen Girma	*Mathematical modeling of treatment switch for people living with HIV.*	Ethiopia	Local	Direct
IPMS	ETH:01	F	Samrawit Getachew	*Spatiotemporal Dynamics of an Intraguild Predation Model with Prey-Taxis and Density-Dependent Mortality*	Ethiopia	Local	Direct
IPMS	PDEAAP	M	Joseph Ebalait - not reported in 2024	*Modelling leakage of sewage pipes laid in a porous ground: A case study of Tororo District*	Uganda	Local	Indirect
IPMS	PDEAAP	M	Weston Malakata	*Regular Weighted indefinite Sturm Liouville Problems in a three turning Point Case*	Zambia	Local	Indirect
IPPS	AFSIN	M	Guédé Serge Zélé	*Non-destructive Optical Analysis of Natural Fermented Beverages Using the SLIPI-1p Method: Toward Rapid Quality Control*	Ivory Coast	Local	Indirect
IPPS	AFSIN	M	Kouassi Yassoua Henri Joël Loukou	*Impact of Sugar on the Elastic Properties of Red Blood Cells: A Characterization Study Using Optical Tweezers*	Ivory Coast	Local	Indirect
IPPS	BAN:02/2	M	A. K. Mahmud	*Co doped HAP Synthesis by Hydrothermal method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Akram Hossain	*Impact of Cobalt Doping on Nickel Ferrite Nanoparticles: Structural, Magnetic & Optical Insights*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Akram Hossain Zulkarnine	*Structural, Morphological, Magnetic and Transport Properties of Ba0.5Li0.1Gd0.1Sr0.3ZrxTi1-xO3*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Arif Hossain	*Ni-doped Bismath ferrite synthesis*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Azmana Tabassum Sabah	*From Structure to Functions: Insights into Ho-Eu Co Doped Ni-Zn-Cu Ferrites*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Fahija Farjana Upama	*Effect of titanium doping and chitosan coating on structural, morphological, optical and magnetic properties of Mg0.5Zn0.5Fe2O4 nanoparticles via hydrothermal method*	Bangladesh	Local	Indirect

IPPS	BAN:02/2	F	Farhana Akter Mim	*Development of Rice Husk-Derived Silica and $MnFe_2O_4$-Based Nano-Hybrid Films for Gas Sensing Applications*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Abu Sohel	*The antibacterial activity of green synthesized silver nanoparticles using crinum asiaticum*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Hedeatul Kabir Anik	*Influence of Ti doping in Ni-Mn ferrite for telecommunication switching application*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Imtiaj Khan Lesun	*Zinc oxide fabrication with silica coating using sol-gel method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Ismail Shah	*Iron oxide fabrication with silica coating using sol-gel method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Jahidul Islam	*Synthesis & characterization of Mesoporous Silica Coated Nickel Doped Copper Ferrite (NixCu1-xFe2O4, x=0,0.3,0.5) Nanoparticles*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Manik Mia	*Synthesis and Optical, Magnetic and Electrical Characterization of $La_xBi_{1-x}Ni_{0.02}Mn_{0.05}Fe_{0.93}O_3$ Perovskites*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Motasim Billah	*Spatio-temporal variation of microplastics concentration in urban surface water bodies*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Razu Ahmmed	*Citric Acid and Gypsum Production from Wastes Biomass and Industrial By-products Using Microbial Fermentation*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Sayem	*Synthesis and Investigation of Structural, Morphological, Optical, Electrical and Magnetic Properties of Ti4+ Substituted Ni0.35Co0.45Zn0.2Fe2-xTixO4 Materials*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Sohrab Hossain	*Synthesis and structural, optical, dilectric and magnetic characterization of Co-doped Ba0.92Ca0.08Ti(1-x)CoxO3 multiferroic*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Md. Zahin Hasan	*Synthesis of Bi2O3 nanoparticles and assessment of their efficacy as computed Tomography (CT) imaging*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Mrinmoy Brahma	*Synthesis and Characterization of multi-elements doped lead-free potassium-sodium niobate piezoceramics*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Mst. Sornali Akter	*Investigation on the Structural, Magnetic, Electrical & Optical Properties of MnGdxFe2-xO4 (0.0£x£0.1) Nanoparticles Prepared by Hydrothermal Method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Nilufa Anjum	*Febrication, Characterization, Gas sensing Permformance: Nickel Doped Zinc Ferrite Thin Films Synthesized by Spray Pyrolysis Deposition Technique*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Omar Faruk Tuhin	*Synthesis and characterization of La0.05Ba0.15Bi0.8Fe1-xCoxO3: A study of magnetic, optical and electrical properties*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Papri Kundu	*Structural, Morphological and Microbial Analysis of Hydroxyapatite/ Garaphene Oxide/ Cobalt(HAP/GO/Co) Nanocomposite for Biomedical Application*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Rabia Khatun Rita	*Correlation of Structural and Physical Properties of Samarium (Sm) Doped Nickel Ferites (NiSmxFe2-xO4) Synthesized Hydrothermal Process*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Rahimanaznin Zim	*A Comprehensive Study on Multifunctional Properties of Mn-Doped ZnFe2O4 Thin Films Synthesized by Chemical Bath Deposition Method*	Bangladesh	Local	Indirect

IPPS	BAN:02/2	F	Sadia Shanaz Haque	*Synthesis and Characterization of MgFe2-xCrxO4 nanoparticles to develop High-quality bulk ferrites*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Sangeeta Kundu	*Ag- substituted Mg-Zn mixed ferrite in Hyperthermia and drug release study*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Shahid Ibne Selim	*Study the Holmium doping in bismuth ferrite*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Shahnaz Khatun	*Synthesis, structural and optical characterization of MgxTi(1-x)O2 nanoparticles via coprecipitation method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Shakil Hasan Polash	*Synthesis and Characterization of Zr-Doped $MnFe_2O_4$ Magnetic Nanoparticles: Mastering Electrical Integrity, Optical Tunability, and Magnetic Softness for Energy-Efficient Electronics*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Sumaiya Alam Chowdhury	*Investigation of structural, optical and gas sensing properties of magnesium doped zinc oxide thin films synthesized by spin coating method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Tahmina Rashid Smrity	*Controlled synthesis and characterization of super paramagnetic Fe3O4 Nanorods for the application of cancer thermo-therapy and drug delivery system*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	F	Tamanna Tabassum	*Structural, Magnetic and Feroelectric Properties of Holmium (HO)- Substituted Nickel Ferritrs (NiHoxFe2-xO4) Grown by Hydrothermal Method*	Bangladesh	Local	Indirect
IPPS	BAN:02/2	M	Tony Thomas Nokrek	*Operation Atomic Absorbtion Spectrophotometer (AAS)*	Bangladesh	Local	Indirect
IPPS	BAN:04	F	Afsana Parvin	*Sustainable Cellulose–Chitosan–Tannic Acid Composites Derived from Coconut Fiber & Shrimp Shell for Protective Shoe Sole Materials in Diabetic Neuropathy*	Bangladesh	Local	Direct
IPPS	BAN:04	F	Arpita Roy	*Development of a foot pressure sensory threshold measurement system for early detection of diabetic peripheral neuropathy*	Bangladesh	Local	Direct
IPPS	BAN:04	F	Jahanara Afrose Chumki	*Non-invasive monitoring of localized tissue temperature during hyperthermia therapy using bioimpedance: an experimental phantom study*	Bangladesh	Local	Direct
IPPS	BAN:04	F	Kaniz Fatema Keya	*A deep learning approach for cardiovascular disease prediction using retinal fundus images*	Bangladesh	Local	Indirect
IPPS	BAN:04	M	Md. Mahmudul Haque Milu	*Biopolymer sponges for rapid hemostasis and in vitro drug delivery: comparative evaluation of chitosan based systems*	Bangladesh	Local	Direct
IPPS	BAN:04	M	Md. Munna Jomaddar	*Design and development of a temperature discrimination threshold measurement system for early detection of peripheral neuropathy*	Bangladesh	Local	Direct
IPPS	BAN:04	M	Mithun Bhowmick	*TinyML-Enabled Hybrid CNN–BiLSTM–BiGRU Model for Fetal ECG Analysis*	Bangladesh	Local	Indirect
IPPS	BAN:04	M	Omar Faruk	*Multi-modal signal-based hand gesture classification using deep learning for prosthetic hand control*	Bangladesh	Local	Indirect
IPPS	BAN:04	F	Ramija Hasan Nikita	*Radiomics driven machine learning approach for identifying primary tumor origin of brain metastases*	Bangladesh	Local	Indirect
IPPS	BAN:05	M	Deep Arnold Gomes	*Photocatalytic activity of titanium dioxide nanostructures with and without doping*	Bangladesh	Local	Direct

IPPS	BAN:05	F	Mehjabin Afroz Neha	*Exploring the griffiths phase evolution and the structural, dielectric, magnetic and magnetocaloric properties of* $(La1-xPbx)0.8Ba0.2MnO3$ *perovskite manganite*	Bangladesh	Local	Direct
IPPS	BAN:05	M	Mohibur Rahman	*Molecular dynamics simulation to study the sol-gel transition of Iota-carrageenan at higher concentrations*	Bangladesh	Local	Direct
IPPS	BAN:05	F	Shanjida Binta Yousuf	*Effect of variations of evaporation temperature on the properties of iron oxide nanoparticles synthesized via chemical bath deposition technique*	Bangladesh	Local	Direct
IPPS	BAN:05	F	Tamanna Subrin Tawma	*Synthesis and characterization of pure and Te-doped titanium dioxide thin films at various deposition temperatures by chemical bath deposition technique*	Bangladesh	Local	Direct
IPPS	BUF:01	M	DIALLO Adou	*Study of a hydrogen – fuel cell storage system using the Zagtouli photovoltaic solar plant*	Burkina Faso	Local	Indirect
IPPS	EAARN	M	Ali Oniango	*Planet formation by pebble accretion: The role of stellar encounters and photoevaporation*	Uganda	Local	Direct
IPPS	EAARN	M	Gifty Akem Kwene	*Planet formation by pebble accretion: The role of disc substructures and stellar clusters*	Uganda	Local	Direct
IPPS	EAARN/ RWA:01	F	Delphine Nishimwe	*Spectral energy distribution properties of active and non-active galaxies in green valley*	Rwanda. Graduated in Uganda	Sandwich. Mbarara University, Uganda	Indirect
IPPS	EAARN/ RWA:01	M	Jean Nepomuscene Twahirwa	*Aspects of Modified Gravity in Cosmology*	Rwanda. Graduated in Uganda	Sandwich. Mbarara University, Uganda	Direct
IPPS	ETH:02	F	Genet Sewnet	*Recent seismicity around Addis Ababa*	Ethiopia	Local	Indirect
IPPS	ETH:03	M	Amare, Mengistu	*Investigating Ultraviolet Index at Bahir Dar City from 2010-2020*	Ethiopia	Local	Indirect
IPPS	ETH:03	M	Muhabaaw, Assefa	*Optical Properties of Copper Nanoparticles: A Systematic Review*	Ethiopia	Local	Indirect
IPPS	ETH:03	M	Wolelaw, Melese	*Comparison of Ultraviolet (UV-B) Distribution at Ras Dashen and Ertale from 2010 to 2020*	Ethiopia	Local	Indirect
IPPS	MSSEESA/ TAN:01/2	F	Anasia Maro	*Investigation of the effect of s/se amount and post-selenization temperature on the structural and optical properties of sputtered Cu2ZnSnS4 AND (Ag,Cu)2ZnSnS4 precursors*	Tanzania	Local	Indirect
IPPS	MSSEESA/ TAN:01/2	M	Athumani Majala	*Optimization of the designed parameters and performance evaluation of ~10 m2 Scheffler Solar Cooker in Dar es Salaam weather conditions*	Tanzania	Local	Indirect
IPPS	MSSEESA/ TAN:01/2	M	Godwill Kamuhaba Biyengo	*Performance evaluation of parabolic and enhanced box solar cookers in dry and rainy seasons in Isimani, Tanzania*	Tanzania	Local	Indirect
IPPS	MSSEESA/ TAN:01/2	M	Marebo Sabuni	*Investigation of the influence of coal nanoparticles on the properties and performance of binary mixture of pentaerythritol and tris(hydroxymethyl) aminomethane phase change materials for use in solar cookers*	Tanzania	Local	Indirect
IPPS	MSSEESA/ ZAM:01	F	Clemens T. Chama	*Quantum dynamics and entanglement in organic excitons*	Zambia	Local	Direct

IPPS	MSSEESA/ ZAM:01	F	Luuma Michelo	*The design and analysis of photovoltaic solar based pumped hydro energy storage at the Shiwangandu mini-hydro power station*	Zambia	Local	Direct
IPPS	MSSEESA/ ZAM:01	F	Rachael Nyirongo	*Optical investigation of tungsten phosphide WP2 (Weyl Semimetal)*	Zambia	Local	Direct
IPPS	MSSEESA/ KEN	M	Silas Abok	*Determination of Optical, electrical, structural and morphological properties of MAPbI3 perovskite films for photocatalytic applications*	Kenya	Local	Indirect
IPPS	MYA:01	F	Ma Kay Khaing Maw	*Investigation PEDOT: PSS polymer electrode in continuous redox-flow desalination performance*	Myanmar	Local	Indirect
IPPS	MYA:01	F	Ma Win Thiri Toe	*Radioactivity concentration and health risk assessment in cement samples from local market in Mandalay*	Myanmar	Local	Indirect
IPPS	NEP:01	M	Binaya Upadhaya	*First principle study of structural, electronic and magnetic properties of Al-doped CuO monolayer*	Nepal	Local	Indirect
IPPS	NEP:01	F	Karishma Rana	*Structural, electronic and magnetic properties of Ga-Doped SnO2 monolayer by density function theory*	Nepal	Local	Indirect
IPPS	NEP:01	M	Mahendra Adhikari	*Study of activated carbon from Diospyros Malabarica (Tiju) Seed with MnO2 for supercapacitor electrode*	Nepal	Local	Indirect
IPPS	NEP:01	M	Sandip K Dangi	*Study on pine cone petal based activated carbon with manganese dioxide for supercapacitors*	Nepal	Local	Indirect
IPPS	NEP:01	F	Sarita Regmi	*Electrochemical performance of hydrothermally Grown Cu-Doped Co3O4 for supercapacitor application*	Nepal	Local	Indirect
IPPS	NEP:01	M	Saroj Kafle	*Activated carbon from Alnus Nepalensis bark with mno2 composites for supercapacitor electrode*	Nepal	Local	Indirect
IPPS	UGA:01	F	Paskazia Nakamya Nayiga	*Performance Assessment of a Low Cost Solar Box Cooker*	Uganda	Local	Direct
IPPS	UGA:01	M	Ronald Anguyo	*Modelling of the performance of solar cookers: A case ofbBox cookers from local materials*	Uganda	Local	Direct
IPPS	UGA:02	M	Boniface Lokuny	*Photometric and spectroscopic characteristics of selected candidate Ap stars*	Uganda	Local	Direct
IPPS	UGA:02	M	Herbert Mbarushimana	*Modeling the ionospheric irregularities over Africa during geomagnetically quiet conditions using non-linear methods*	Uganda	Local	Direct
IPPS	UGA:02	M	Malson Kwikiriza	*Spatial and temporal variation of PM2.5 pollution over Ugandan cities*	Uganda	Local	Direct
IPPS	UGA:02	F	Ruth Nabassa	*Qauntitative relationship between ROTI and amplitude scintillation index*	Uganda	Local	Direct

2.5 Publications

In the chemistry programme, 73% of the 235 publications were in quality journals (236, 64% in 2024). 3% were in articles in journals by predatory publishers (8% in 2024).

In the mathematics programme, 48% of the 163 publications were in quality journals (209, 68% in 2024), and 15% were in predatory journals (9% in 2024).

In the physics programme, 65% of the 175 publications were in quality journals (129, 55% in 2024) and 11% in journals by predatory publishers (8% in 2024).

List of publications

Below, publications are detailed for each programme, chemistry, physics and mathematics, and summarised in tables. The bibliographic data given is obtained directly from the reporting of the supported activities, with only minor editing.

- The code of the ISP supported activity that is reporting the publication is given before each entry.
- All publications reported to ISP are listed, independent of whether the scientific work has been directly supported by ISP funding or not.

In all cases, each publication reported to ISP is never intentionally listed twice in the annual reports.

Scientific Quality Journals and Other Journals

The publications are sorted by scientific journal, and where available the ***Journal Impact Factor (JIF) 2021 is given.*** Journals listed with JIF are here considered to be "scientific quality journals".

From ISP Annual report for 2016, an additional quality measure is applied, comprising the ranking in the Norwegian Register for Scientific Journals, Series and Publishers, operated jointly between The National Board of Scholarly Publishing (NPU) and Norwegian Directorate for Higher Education and Skills on behalf of The Norwegian Ministry of Education and Research. Where available, **the rank is given**. These numbers are counted for in in the last column.

The Norwegian scale stretches from 0–2. Journals ranked at 0 are not categorised as a scientific publication venue, those ranked at 1 being a scientific publication venue, and those at 2 being extra prestigious scientific publication venues. Journals ranked 1 or 2 are here considered to be "scientific quality journals", while those ranked 0/- and those not listed as "other journals".

Journals marked in red occur on Cabells Blacklist, indicating a "predatory", non-scientific publication venue.

2.5.1 Chemistry publications

Table 8. Summary by region of publication data for the chemistry programme in 2025. The number of publications (Publ.) in scientific journals is specified to those with and without Journal impact factors (JIF) and/or Norwegian Centre for Research Data (NCDR) ranking (see explanation in the first paragraphs of this appendix, and whether ISP funding was acknowledged.

Publication category	Africa		Asia		Latin America		Total	
ISP acknowledged	yes	no	yes	No	yes	no	yes	no
Publ. in Scientif. Quality J. (TR or/and NCRD ranked)	39	122	6	3	1	1	46	126
Publ. in Other Scientific Journals ("unranked")	9	21	10	5	1	1	20	27
Publ. in Journals by "predatory publishers"	4	3	0	0	0	0	4	3
Books, Chapters, Popular Publ., Technical Reports, etc.	9	0	0	0	0	0	9	0
Total number of publications (yes/no)	63	147	16	8	2	2	81	157
Grand total	207		24		4		235	

List of chemistry publications. Journals marked in red occur on Cabells Blacklist, indicating a "predatory", non-scientific publication venue.

Group/ Network	Journal	Author(s)	Title	DOI	WoS, 1 yr IF 2021	Norwegian Register
ANCAP	Environmental Geochemistry & Health	Zaranyika MF, Dzomba P	*Bioaccessibility of DDT and DDE in tropical soil ecosystems: A model based on pollutant speciation coefficients and the desorption free energy of adsorbed speciation forms*	doi.org/10.1007/s10653-025-02380-5	4.898	1
ANCAP/ Kenya	International Journal of Research and Innovation in Applied Science	Waweru, J., Andayi, W. A., Mburu, J., Kiprotich, S., & Shadrack, K.	*Development of a Traceability Model for Geographical Origin of Kenya's Black Teas Based on Principal Component Analysis of FTIR and UV-Vis Spectral Data*	ideas.repec.org/a/bjf/journl/v10y2025i5p643-654.html	NA	NA
ANCAP/ Kenya	International Journal of Research and Scientific Innovation	Victor K. Korir*, Deborah A. Abong'o., Joyce G.N. Kithure., Vincent O. Madadi	*Pesticide Residue Levels in Water and Sediment from River Thiba, Kirinyaga County, Kenya*	doi.org/10.51244/IJRSI.2025.12030035	5.561	NA
ANCAP/ Kenya	Frontiers in Environmental Chemistry	Atiang', S., Ndunda, E. N., & Okello, V. A	*Advances in removal of chromated copper arsenate elements in wood waste, contaminated water and soils*	doi.org/10.3389/fenvc.2025.1452837	2024 (1.9)	1
ANCAP/ Kenya	Next Materials	Maqinana, S., Kowenje, C. O., & Ojwach, S. O	*Effective adsorption of Cd (II), Cr (VI) and Pb (II) ions from aqueous solutions using silica immobilized (pyridine)/(phenoxy) imine chelating agents*	doi.org/10.1016/j.nxmate.2025.101142	NA	1
ANCAP/ RWA:01	Environmental Monitoring and Assessment	Venuste Nsengimana, Edmond Twagira-yezu, Jean de Dieu Habiyaremye, Marce-llin Rutegwa, Vedaste Nyandwi, Gilbert Ndatimana	*Application of aquatic macroinvertebrates in water quality assessment of the Nyabarongo and Akagera Rivers in Rwanda*	doi.org/10.1007/s10661-025-13817-w	3.307	1
ANCAP/ RWA:01	Environmental Research Letters	Natxo García-López, Ange Sabine Ingabire, Rob Bailis, Axel C Eriksson, Christina Isaxon and Christoffer Boman	*Biomass cookstove emissions, a systematic review on aerosol and particle properties of relevance for health, climate, and the environment*	doi.org.10.1088/1748-9326/adc615	6.948	2
ANCAP/ RWA:01	Environmental Technology & Innovation	Brigitte Mukarunyana, Cecilia Sundberg, Christoffer Boman, Telesphore Kabera, Jerker Fick	*Coffee pulp and husk-derived hydrochars and biochars adsorb polyphenols and pesticides from wastewater*	doi.org/10.1016/j.eti.2025.104739	7.704	1
ANCAP/ RWA:01	Food science and Nutrition	Valens Habimana, Svetlana Gaidashova, Egide Kalisa, Antoine Nsabimana, Christopher A. Scholz, Charles T. Driscoll	*Bioaccumulation of trace elements in fish from Lake Kivu and its potential risk to consumers in Rwanda*	doi.org/10.1002/fsn3.70929	3.553	1
ANCAP/ RWA:01	Hydrogeology Journal	Emmanuel Ngendahayo; Erik Nilsson; Gerhard Barmen; Umaru Garba Wali; Magnus Larson; Antoine Nsabimana; Kenneth M. Persson	*Review: Current groundwater monitoring practices in Rwanda and recommendations for enhancing knowledge of groundwater resources*	10.1007/s10040-025-02888-1	3.151	1
ANCAP/ RWA:01	International Journal of Microbiology	Théoneste Muhizi; Gervais Manizabayo; Colores Uwamariya; Jean Bosco Nkuranga; Daniel Umereweneza	*Antibacterial activity of eucalyptus essential oils in both culture media and coated materials*	doi.org/10.1155/ijm/2756030	2024(3.2)	1
ANCAP/ RWA:01	Journal of Food Quality and Hazards Control	J.B. Ntamuturanyi; E. Nkurunziza; A. Rutikanga; T. Muhizi; D. Umereweneza,	*Pesticide Residues in Tomato, Eggplant, and Cabbage Grown in the Western Province of Rwanda*	10.18502/jfqhc.12.2.18865	NA	NA

ANCAP/ RWA:01	Phytomedicine Plus	Colores Uwamariya, Jackson T. Mollel, Farshid M. Rad, Wouter A. Remmerswaal, Joanna Said, Charles Hannoun, Masum Miah, Ambjörn Kärmander, Daniel Umereweneza, Théoneste Muhizi, Eric Seruyange, Emile Bienvenu, Tomas Bergström, Edward Trybala	*Ethnopharmacological survey of Rwandese medicinal plants used for respiratory infections. Effect of Senecio maranguensis extract against respiratory syncytial virus*	doi.org/10.1016/j.phyplu.2025.100842	NA	NA
ANCAP/ RWA:01	Rwanda Journal of Engineering, Science, Technology and Environment	Frodouard Hitimana, Elisee Gashugi, Vedaste Nyandwi, Emmanuel Nkurunziza, Christian Sekomo Birame,	*Key triggering factors in the clogging process of Nyarutarama hybrid ponds treating municipal wastewater in Kigali*	doi.org/10.4314/rjeste.v7i1.7	NA	NA
ANCAP/ RWA:01	Water	J. Chrisostome Ufitinema, Valens Habimana, Emmanuel Habimana, Antoine Nsabimana, and Gunaratna Kuttuva Rajarao	*Characterization and treatment of academic wastewater using volcanic-gravel-constructed wetlands: A study in Rwanda*	doi.org/10.3390/w17223200	3.530	1
ANCAP/ RWA:01	Water Research X	Valens Habimana, Paula Pou Rodríguez, J. Chrisostome Ufitinema, Antoinette Ifeyinwa Okeke, Minna Hakkarainen, Antoine Nsabimana, Gunaratna Kuttuva Rajarao	*Banana fibres as adsorbents for ammonium and phosphate in slaughterhouse wastewater*	doi.org/10.1016/j.wroa.2025.100451	9.365	2
ANCAP/ Sudan	EC Pharmacology and Toxicology	Bashir, N. H.	*Studies on water-harvesting ponds (haffirs) in Gedarif state, Eastern Sudan: iii. determination of haffir soil and water contamination with pesticides and hydrocarbons*			
ANCAP/ Tanzania	Environmental Geo-chemistry & Health	Njale, E., Shilla, D. J., Dharsee, N., Mahugija, J. A., & Mbare, N. S	*Association between single and mixed exposure to potentially toxic trace metals and the risk of prostate cancer: A case–control study in Tanzania*	doi.org/10.1007/s10653-025-02497-7	4.898	1
ANCAP/ Tanzania	Environmental Monitoring and Assessment	Mhande, Z., Mihale, M. J., Hellar-Kihampa, H., Brion, N., & Baeyens, W	*Deciphering the carbon and nitrogen cycling in selected tropical coastal fish: revelations from stable isotope fluctuations and feeding patterns*	doi.org/10.1007/s10661-025-13625-2	3.307	1
ANCAP/ Tanzania	Food Control	Ali, T. M., Shilla, D., Mwevura, H., Nombo, M. P., Elvevoll, E. O., Markhus, M. W., ... & Kjellevold, M	*Novel analytical data on cadmium, mercury, lead, arsenic and selenium content in fish from Tanzania and Mozambique: Implications for food safety*	doi.org/10.1016/j.foodcont.2025.111350	6.652	1
ANCAP/ Tanzania	Green Chemistry Letters and Reviews	Hellar-Kihampa, H.	*Applicability of green chemistry principles for optimum environmental conservation and sustainability in sub-Saharan Africa*	doi.org/10.1080/17518253.2025.2507331	6.016	1
ANCAP/ Tanzania	Human and Ecological Risk Assessment	Mbonaga, S. S., Hamad, A. A., & Mkoma, S. L.	*GIS-based mapping of spatiotemporal health and ecological risk associated with potential toxic elements in water and sediments of the urban catchment of Ngerengere River, Tanzania*	doi.org/10.1080/10807039.2025.2531992	4.997	1
ANCAP/ Tanzania	Journal of Geoscience and Environment Protection	Mwangomo, E. A., Mihale, M. J., & Yohana, L	*Assessment of energy recovery potentials of solid waste generated in Mbeya City, Tanzania*	doi.org/10.4236/gep.2025.135016		NA
ANCAP/ Tanzania	Next Research	Amiry, R. M., Mwankuna, C. J., Mariki, E. E., & Mkoma, S. L.	*Optimization and characterization of high surface area mesoporous activated carbon produced from Syzygium cumini leaves bio-waste by zinc chloride activation*	doi.org/10.1016/j.nexres.2025.100219	NA	0
ANCAP/ Tanzania	Tanzania Journal of Science	Kitalika, A. J.	*Variations in physicochemical properties, microbiological profiles, and nutrient dynamics in the Temi River, Arusha, Tanzania: Sources and implications*	doi.org/10.65085/2507-7961.1119	NA	NA

ANCAP/ Uganda	BMC chemistry	Bbumba, S, Ssekatawa, J, Karume, I, Tebandeke, E, Kigozi, M, Yiga, S, ... Ntale, M.	*Prediction and optimization of Rhodamine B removal from water using metal-organic frameworks: RSM-CCD, ANN, non-linear kinetics, and isotherm studies*	doi.org/10.1186/s13065-025-01590-3	4.095	NA
ANCAP/ Uganda	Emerging Contaminants	Miiro, A, Mubiru, E, Odume, ON, Odongo, S, Nyakairu, GW, Matovu, H, ... & Ssebugere, P	*Novel and legacy per-and poly-fluoroalkyl substances in major wastewater treatment plants within the Lake Victoria basin, East Africa*	doi.org/10.1016/j.emcon.2025.100580	2024(6.9)	1
ANCAP/ Uganda	Emerging Contaminants	Muhwezi, G, Kyarimpa, C, Gumula, I,Nagawa, CB, Omwoma, S, Matovu, H, Ssebugere, P	*Legacy and emerging organic pollutants in indoor and outdoor environments in Africa: Contamination levels, health risks, and analytical techniques*	doi.org/10.1016/j.emcon.2025.100468	2024(6.9)	1
ANCAP/ Uganda	Environmental Challenges	Nalweyiso, A, Nagawa, CB, Yildiz, E, Uzman, S., Wanyama, J., Kirabira, JB, ... & Kabenge	*Green synthesis of zero-valent iron nanoparticles from cape gooseberry (physalis peruviana l.) biomass for oil spill remediation*	doi.org/10.1016/j.envc.2025.101146	NA	1
ANCAP/ Uganda	Journal of Xenobiotics	Ebbu, E., Nalumansi, I., Kiganda, I., Nakiguli, C. K., Onen, P., Ocakacon, S., ... & Ntambi, E.	*Ecological and Human Health Risks from Potentially Toxic Elements in Environmental Matrices of Kiteezi Landfill, Uganda*	doi.org/10.3390/jox15060185	2024(4.4)	NA
ANCAP/ Uganda	Microplastics	Ocakacon, S, Nyenje, PM, Kalibbala, HM, Kulabako, RN, Nagawa, C.B, Omara, T, Ssebugere P	*Spatiotemporal Dynamics of Microplastics in Nakivubo Catchment: Implications for the Pollution of Lake Victoria*	doi.org/10.3390/microplastics4020021	2024(5.1)	1
ANCAP/ Uganda	Results in Materials	Moses, K., Karume, I., Bbumba, S., Parvathalu, K., Kasozi, G., & Tebandeke, E.	*None-emission carbon nanomaterial derived from polystyrene plastic waste for the adsorption of carbon dioxide*	doi.org/10.1016/j.rinma.2025.100671	NA	1
ANCAP/ Uganda	Science of the Total Environment	Natuhwera, M., Shehu, Z., Špánik, I., Nyakairu, G. W. A., Mubiru, E., Nantaba, F., ... & Ssebugere, P.	*Pharmaceuticals and personal care products in sediments in Africa: Status, ecological risks, extraction and analytical techniques*	doi.org/10.1016/j.scitotenv.2025.180036	10.754	2
ANEC	Electrochimica Acta	Momath Lo, Mengqi Tang, Déthié Faye, Vijay Vaiyapuri, Archana Jayaram, Navaneethan Mani, Mohamed Jouini, Mohamed M. Chehimi	*Silver-modified sugarcane bagasse biochar-based electrode materials for the electrochemical detection of mercury ions in aqueous media*	doi.org/10.1016/j.electacta.2025.147214.	7.331	2
ANEC	Emergent Materials	Modou Gningue Diop, Momath Lo, Mamadou Gueye, Déthié Faye, Mor Cissé, Arvind K. Bhakta, Swaminathan Prasanna, Makhtar Guene	*Chromium removal from aqueous solutions via spontaneous adsorption using hybrid nanocomposites based on zinc-magnesium ferrite spinel anchored in polypyrrole*	doi.org/10.1007/s42247-025-01068-x	2024(4.1)	1
ANEC	Emergent Materials	OUEDRAOGO Bibata, Amidou TALL, Sabrine Baachaoui et Noureddine Raouafi, Issa TAPSOBA	*Laccase-modified graphene electrodes obtained by direct laser writing for the sensitive detection of dopamine in real samples*	doi.org/10.1007/s42247-025-01128-2	2024(4.1)	1
ANEC	Inorganic chemistry	Xin-Qi Liu, Ang Ma, Ya-Nan Zhang, Zhi-Jun Yi, Roberts I. Eglitis, Issa Tapsoba, Ran Jia	*Pan-C2(n+1): A Theoretical Prediction for 2D Carbon Allotropes*	doi.org/10.1021/acs.inorgchem.5c00178	5.436	1
ANEC	International Journal of Environmental Chemistry	Mohamed Lamine Sall, Ababacar Diouf, Alassane Traore, Arona Ngom, Diébel Dado Sall, Abdou Karim Diagne Diaw, Modou Fall	*Determination of lead (Pb) pollution levels in soils from different mechanical garages and bus stations in dakar using X-ray Fluorescence (XRF) Spectrometry*	doi.org/10.11648/j.ijec.20250902.17		0
ANEC	Ionics	Jean-Philippe Théodore SILGA, Yibor Fabrice Roland Bako, Nesrine Kalboussi, Maxime Pontié, Serge Mbokou Foukmeniok, Mehri Shabani, Issa Tapsoba	*Evaluation of 3-methyl-4-nitrophenol a pesticide by-product removal from water using nanoiltration combined by Trichoderma harzianum microbial fuel cell for irrigation purposes*	doi.org/10.1007/s11581-025-06613-6	2.961	1
ANEC	Journal of Electroanalytical Chemistry	Talla D. E. N., Yemene A. L. D., Jiokeng S. L. Z. Mbomekalle I, Mizaikoff B., Tonle K. I.	*Sensitive electrochemical determination of sunset yellow in soft drinks using geopolymer modified carbon paste electrode*	doi.org/10.1016/j.jelechem.2025.119522	4.598	1

ANEC	Journal of Inorganic & Organometallic Polymers and Materials	Déthié Faye, Momath Lo, Dame Seye, Cheikh A. B. Diop, Modou G. Diop, Arona Ngom, Mamadou Dieng, Arvind K. Bhakta, Diariatou Gningue-Sall, Mohamed Chehimi, Abdoulaye Koné	*Silver Nanoparticles Supported by Carbon Nanotubes Functionalized with 1,2,3-Benzenetricarboxylic Acid: Spectroscopic Analysis and Electrochemical Capacitance*	doi.org/10.1007/s10904-025-03782-9	3.518	1
ANEC	Journal of Materials & Environmental Science	Amadou Sarr Gning, Papa Abdoulaye Diaw, Diéry Diouf, Modou Fall	*Cassava flour bioadsorbent used to remove Cr (VI) from water*			
ANEC	Journal of Molecular Structure	Momath Lo, Mamadou Dieng, Dame Seye, D´ethié Faye, Cheikh Ahmadou Bamba DIOP, Arona Ngom, Moustapha Diaw, Mohamed M. Chehimi, Tore Brinck, Modou Fall	*Electropolymerization by self-doping of 4-amino-3-hydroxynaphthalene sulfonic acid: spectroscopy characterization and DFT for growth mechanism growth mechanism*	doi.org/10.1016/j.molstruc.2025.143136	3.841	1
ANEC	Journal of Pharmacognosy & Phyto-chemistry	Raselison Nirintsoa Francine, Karanga Yssouf, Bonzi Schemaeza, Ganame Teeda Hamidou, Tapsoba Issa, Somda Irenée and Raonizafinimanana Ramaroson Béatrice	*Phytochemical studies and evaluation of the antifungal activities of Hypochaeris radicata L. leaves against rice fungi: Bipolaris oryzae and Curvularia lunata*	doi.org/10.22271/phyto.2025.v14.i4e.15490		NA
ANEC	Journal of The Electrochemical Society	Jean-Philippe Théodore SILGA, Serge Mbokou Foukmeniok, Yibor Fabrice Roland Bako, Assia Chaouch Ramdane, Maryam Nazerifar, Habibollah Younesi, Issa Tapsoba, Pontié Maxime	*Serge ultrasensitive screen-printed-electrodes for p-aminophenol analysis and applications in bioremediation and photodegradation processes*	orcid.org/0000-0001-8751-3041	4.371	2
ANEC	Journal of Water Process Engineering	Cheikh Gaye, Jorge Rodríguez-Chueca, Alba Ortíz Fuduo, Modou Fall, Patricia García-Muñoz	*Upcycling Guiera Senegalensis waste into biochar for sustainable amoxicillin removal from water*	doi.org/10.1016/j.jwpe.2025.107726	7.340	1
ANEC	Materials Sciences and Applications	Ousmane Ilboudo, Serge Mbokou Foukmeniok, Yssouf Karanga, Yibor Fabrice Roland Bako, Issa Tapsoba, Ignas Tonlé Kenfack	*Functionalization of arabic gum by both oxidation and acylation: Application as sensing materials for the electrochemical determination of phenolic compounds*	10.4236/msa.2025.167023		NA
ANEC	Sensors & Diagnostics	Ismaila Diédhiou, Amal Raouafi, Sami Hamzaoui, Modou Fall, Noureddine Raouafi	*Optimizing the preparation of laser-derived 3D porous graphene electrodes for modification-free sensing of heavy metal ions*	doi.org/10.1039/D4SD00290C	2024(4.1)	1
ANEC	Surfaces	Cheikh Ahmadou Bamba Diop, Déthié Faye, Momath Lo, Dahbia Bakiri, Huifeng Wang, Mohamed El Garah, Vaishali Sharma, Aman Mahajan, Mohamed Jouini, Diariatou Gningue-Sall	*Engineering Porous Biochar for Electrochemical Energy Storage*	doi.org/10.3390/surfaces8040087	2024(2.9)	NA
ANFEC	Biomedical Chromatography	Md Tangebul Islam, Sabina Yasmin, Md Iqbal Rouf Mamun, Mohammad Shoeb, Md Hasib Pathan, Md Alamgir Kabir, Sharmin Akter Lisa, Md Sakib Mahdi Aziz, Md Humayun Kabir	*Occurrence and health risk of multiclass pesticide residues in tomatoes from bangladesh via modified QuEChERS–LC–MS/MS*	doi.org/10.1002/bmc.70332	1.911	1
ANFEC	Cambodian Journal of Natural History	T Chhy, R Sor, S Konmany, M Chea, B Hugueny, R Chea	*Distribution of Escherichia coli and total coliforms in relation to the physico-chemical characteristics of wastewaters in Vientiane capital, Lao PDR*		NA	NA

ANFEC	Current Research on Biosciences & Biotechnology	Zeba Samiha, Sherajom Moniroh Joya, Saima Sultana, Md. Mazharul Islam, Mohammad Shoeb and Md. Shahed Reza	*Physicochemical properties, antimicrobial activity, and contaminants in personal care products from Bangladesh*	doi.org/10.5614/crbb.2025.7.1/NC6ZDI7J	NA	NA
ANFEC	Dhaka U Journal of Science	Umma Tohura, Md. Mazharul Islam and Mohammad Shoeb	*Characterization and Quantification of Microplastics in Surface Water of Shitalakshya River, Bangladesh*	doi.org/ 10.3329/dujs.v73i1.81286	NA	1
ANFEC	Environmental Monitoring & Assessment	Anika Haider, Md Mazharul Islam, Mohammad Shoeb	*Spatio-environmental surveillance of organochlorine pesticides in the Meghna River by liquid–liquid extraction coupled with GC-ECD*	doi.org/10.1007/s10661-025-14878-7	3.307	1
ANFEC	Food Additives & Contaminants: Part B	Chamina Ounsily, Khamla Phonsayalinkham, Sounantha Souvanlasy, Sysay Palamy, Chithdavone Her, Oudone Chanthavong, Santi Kongmany & Noudy Sengxeu	*Antibiotic residues in pork in 3 provinces of Lao PDR and risk assessment*	doi.org/10.1080/19393210.2025.2595626	3.964	1
ANFEC	Frontiers in Public Health	Raja Dhar, Sayantan Sarkar, Chen Luo, Megha Anand, Shyamasree Dasgupta, Ujjwal Neogi, Apostolos Bossios, Rausan Zamir, Mohammad Shoeb, Joyanto Routh	*The energy-health-environment nexus: assessing the transboundary impacts of coal-fired power plants*	doi.org/10.3389/fpubh.2025.1581460	6.461	1
ANFEC	Heliyon	Md. Mazharul Islam, Mohammad Moniruzzaman, Mohammad Shoeb, Md. Iqbal Rouf Mamun, Razia Sultana Ankhy	*Spatiotemporal dynamics, quality appraisal and source apportionment of water quality parameters in Shitalakshya River, Bangladesh*	. doi.org/10.1016/j.heliyon.2025.e43627	3.776	1
ANFEC	Journal of Bangladesh Academy of Sciences	Othai Saha, Md. Mazharul Islam and Mohammad Shoeb	*Spectrophotometric analysis of caffeine and sugar content in energy drinks commonly consumed in Dhaka City, Bangladesh: A public health concern*	doi.org/10.3329/jbas.v49i2.76778	NA	NA
ANFEC	Journal of Bangladesh Academy of Sciences	Tasnum Rahman, Aporupa Abeazom Zom Urmi, Md. Mazharul Islam, Md. Iqbal Rouf Mamun and Mohammad Shoeb	*Impact of the tannery industrial zone on the physicochemical and microbiological quality of the Dhaleshwari river water, Bangladesh*	doi.org/10.3329/jbas.v49i1.75146	NA	NA
ANFEC	Lao Journal of Science and Technology	Oulay PHOUPASONG, Santi Kongmany, Bounphak LOBRIAYAO, Davone KEOMANY, Chandaly Sinsamphanh, Davisouk NOYNALY	*Isolation and Characterisation of Extracellular Enzymes Produced by Bacteria from Cassava Starch Factory Waste Water for Organic Hydrolysis*	10.71026/sj.2025.02012	NA	NA
ANFEC	Souphanouvong University Journal of Multidisciplinary Research and Development	Alounny Kingkeo, Chiobouaphong Phakeovilay, Souphaphone Sorsavanh, Santi Kongmany, Oudone Chanthavong, Soulivanh Lanorsavanh, Bounleuane Douangdeuane	*Quality evaluation and quantification of caffeic acid in orthosiphon aristatus collected from oudomxay, Vientiane Capital, and Champasak Provinces, Lao PDR*	doi.org/10.69692/SUJMRD1104104	NA	NA
ANFEC	North African Journal of Food and Nutrition Research	Md. Mazharul Islam, Sanjida Tanjid, and Mohammad Shoeb	*Quantification of caffeine and carbohydrates in chocolate and confectionery products from Dhaka, Bangladesh: A UV-Visible spectrophotometric approach*	doi.org/10.51745/najfnr.9.19.57-66	NA	0
ANRAP	AgroLife Scientific Journal	Fatima Zohra El Mahi, Fatima Zohra Elkadi1, Habib Meliani, Md Mahedi Hassan Tusher, Aicha Rih, Warda Zitouni, Meriem Mahi, Abir Makni, Khadra Nemmich	*Elucidation of the physiochemical and phytochemical properties of the ethanolic extract of opuntia ficus-indica cladodes from various regions in Algeria*	DOI:10.17930/AGL202514	2024(0.9)	1

ANRAP	Asian Journal of Chemistry	Hasan KM, Hossain SM, Shoeb M, Nahar N, Mamun MIR, Rokeya B	*Hypoglycemic evaluation, isolation and characterization of four major compounds from the ethanolic extract of crataeva religiosa hook leaves*	DOI:10.14233/ajchem.2025.33847	2013(0.355)	1
ANRAP	Dhaka U Journal of Pharmaceutical Sciences	Md. Shakhawoat Hossain, Md. Kamrul Hasan, Nilufar Nahar and Begum Rokeya	*Hypoglycemic and lipidemic effects of irvingia gabonensis seeds in long-evans rats*	doi.org/10.3329/dujps.v24i2.86353	NA	NA
ANRAP	European Journal of Medical and Health Sciences	Ratul MSA, Rokeya B, and Tusher MMH	*Elucidation of phytochemicals and antidiabetic activity of methanolic ex-tract of Piper betle leaves on nSTZ-induced type 2 diabetic model RatsElucidation of phytochemicals and antidiabetic activity of methanolic ex-tract of Piper betle leaves on nSTZ-induced type 2 diabetic model Rats*	10.34104/ejmhs.025.04280441	NA	NA
ANRAP	Food Science & Nutrition	MNH Malik, MMH Tusher, B Rokeya, S Javaid	*Exploring the Healing Potential of Aqueous Extract of Baccaurea ramiflora Leaves in Inflammation: A Cytokine and Prostaglandin Modulator* Not reported in 2024	10.1002/fsn3.70356	3.553	1
ANRAP	International Journal of Endocrinology	A Bhowmik, B Rokeya, Y Kabir	*KCNJ11 rs5219 Gene Polymorphism Is Associated with T2DM in a Population of Bangladesh: A Case-Control Study*	doi.org/10.1155/ije/5834412	2.803	1
BOL:01	Anales de la Facultad de Medicina	Méndez D, Adler M, Pérez-Morales F, Pinto C, Solís-Soto M.	*Zoonotic Disease Knowledge, Attitudes, and Practices in Chuquisaca, Bolivia*	doi.org/10.15381/anales.v86i1.29499	NA	1
BOL:01	European Journal of Investigation in Health, Psychology & Education	Castro Torres, M. E., Vargas-Piérola, P. M., Layme Mamani, A. M., Murillo Toro, A. K., Ribera Domínguez, A., & Pinto, C. F.	*Effects of social capital on depression in university students*	doi.org/10.3390/ejihpe15050083	2024(2.6)	1
BOL:01	Journal of Hymenoptera Research	Adler M, Ajhuacho-Villalobos M, Flores-Prado L, Benitez-Vieyra S, Collao-Alvarado K, Pinto CF	*Dominance of Capsicum minutiflorum (Solanaceae) pollen in stingless bee hives: An insight into protein composition and foraging behavior by four Meliponini species of the Bolivian-Tucumano forest*	doi.org/10.3897/jhr.98.138703	1.760	NA
BOL:01	One Health Cases	Solís-Soto, M.T., Kuhn, C., de Carvalho, D.S., Vásquez-Almazán, C.R., Burrone, M.S., Navia, C.F.P., Adler, M., Heredia, D.M.M., Morales, F.M.P., Pires, L.S.A. and da Costa-Ribeiro, M.C.V.	*Zoonotic Diseases and Wildlife in Latin America: A Necessity for Implementing the One Health Approach*	doi.org/10.1079/onehealthcases.2025.001	NA	1
Botswana	Journal of Food Science	Mbisana, M., Mogopodi, D., Kabomo, M. T., Chibua, I., & Nkoane, B. B	*Application of molecularly imprinted polymers as separation tools for determination of aflatoxins in food*	doi.org/10.1111/1750-3841.70259	3.693	1
BUF:02	Asian Journal of Water, Environment and Pollution	Corneille Bakouan, Ollé Rodrigue Kam Anne-Lise Hantson, and Boubié Guel	*Effectiveness of raw and activated laterite in removing lead and copper from aqueous solutions: A kinetic and thermodynamic study*	10.36922/AJWEP025380292	2024(0.7)	1
BUF:02	*Chemistry-Didactics-Ecology-Metrology* (CDEM)	Jean-Baptiste Zoungrana, Brahima Sorgho, Corneille Bakouan, Régie Dimanche Ouedraogo, Maurice François Gonon, Boubié Guel, Philippe Blanchar	*Catalytic activity of Burkina phosphates for chalcone synthesis in green solvent*	10.2478/cdem-2025-0003	2024(1.2)	NA
BUF:02	International Journal of Electrochemical Science	Mamadou Ouedraogo, Tambi Ramdé, Boubié Guel, Stefano Rossi	*Evaluation of corrosion protection performance and color stability of environment-friendly pigmented polyurethane coating*	doi.org/10.1016/j.ijoes.2024.100923	1.541	1
BUF:02	Results in Chemistry	Amadou Soukairatou Moustapha, Corneille Bakouan, Abdoulkadri Ayouba Mahamane, Boubié Guel	*A manganese phthalocyanine histidine composite-modified carbon paste electrode as a biomimetic sensor for bisphenol A determination* Not reported in 2024	doi.org/10.1016/j.rechem.2024.101927	2024(4.2)	1

CAB-CCS	Cambodia Journal of Basic and Applied Research	Leap Ly, Chorney Eang, Sereilakhena Phal, and Bunthoeun Nim	*Optimization and validation of hplc method for quantification of caffeine content in energy drinks available in Cambodia*	doi.org/10.61945/cjbar.2025.7.2.04	NA	NA
CAB-CCS	Cambodia Journal of Basic and Applied Research	Sakmay Tom and Sereilakhena Phal	*Determination of Benzoic Acid and Sorbic Acid in Fish Sauce Using HPLC-UV*	www.doi.org/10.61945/cjbar.2025.7.2.03	NA	NA
ETH:01	ACS Omega Journal	Nika Bekri, Wendimagegn Mammo, Newayemedhin A. Tegegne	*Structure–Property Relationship of Thiophene-Isoindigo Co-Oligomers: A First-Principles Study*	10.1021/acsomega.5c02238	4.132	1
ETH:01	Chemistry of Materials Journal	Shi Tang, Tadele T. Filate, Zewdneh Genene, Krzysztof Kotewicz, Leandro R. Franco, Qiaonan Chen, Christian Larsen, Wendimagegn Mammo, Ergang Wang, Ludvig Edman	*Thiadiazolobenzotriazole-based donor-acceptor terpolymers that can be processed from green solvents and deliver 950 nm emission in light-emitting electrochemical cells*	10.1021/acs.chemmater.5c00984	10.508	2
ETH:01	New Journal of Chemistry	Nika Bekri, Wendimagegn Mammo, Newayemedhin A. Tegegne	*Thermally stable direct arylation derived terthiophene-isoindigo copolymer for organic solar cell application*	doi.org/10.1039/D4NJ03644A	3.925	1
ETH:01/ ANEC	ACS Applied Electronic Materials Journal	Kelechi Chiemezie Nwambaekwe, Ziyanda Zamaswazi Tshobeni, Meleskow Cox, Ruidong Xia, Shimelis Admassie, Linxin Zhong, Xinwen Peng, Emmanuel Iheanyichukwu Iwuoh	*Mediated spectral conversion and electrochemical charge dynamics in gadolinium oxyselenide for high-performance solar cells*	10.1021/acsaelm.5c01249	4.494	1
ETH:01/ ANEC	ACS Materials Au Journal	Kelechi Nwambaekwe, Sodiq Yussuf, Ziyanda Tshobeni, Chinwe Ikpo, Jaymi January, Meleskow Cox, Precious Ekwere, Shimelis Admassie, Xinwen Peng, Emmanuel Iwuoha	*Cu2PdSnSe4 and Cu2PdSn(S,Se)4 Palladium-substituted kesterite nanomaterials for thin-film solar cells*	10.1021/acsmaterialsau.4c00129	2024(6.5)	1
ETH:01/ ANEC	Advances in Applied Energy	Ze Li, Jianheng Chen, Wenqi Wang, Yang Fu, Xin Li, Aiqiang Pan, Yiying Zhou, Shimelis Admassie, Chi Yan Tso	*Ensemble learning framework for radiative cooling coatings in China's buildings*	10.1016/j.adapen.2025.100241	2024(13.8)	1
ETH:01/ ANEC	Applied Catalysis B: Environment and Energy	Jianyun Gan, Ning Wang, Yunyi Yang, Olbana Itana, Esrael Kifle, Kidist Yilma, Wu Yang, Zehong Chen, Youzhi Song, Ruidong Xia, Shimelis Admassie, Emmanuel Iwuoha, Lingxin Zhong, Yunpeng Liu, Xinwen Peng	*Nickel coated paper electrode constructed by interfacial electrodeposition for biomass upgrading at industrial current density*	10.1016/j.apcatb.2024.124792	24.319	1
ETH:01/ ANEC	Bulletin of the Chemical Society of Ethiopia	Assegid Ergete, Yongfa Huang, Jiawei Zhou, Teklewold Getachew, Asmamaw Taye, Ruidong Xia, Emmanuel Iheanyichukwu Iwuoha, Xinwen Peng, Shimelis Admassie	*N-Doped activated carbon derived from Water Hyacinth for ultra-stable metal-free bifunctional electrode for zinc-air battery* Not reported in 2024	10.4314/bcse.v39i3.14	1.218	1
ETH:01/ ANEC	Bulletin of the Chemical Society of Ethiopia	Melaku Belay, Asmamaw Taye, Negash Getachew, Solomon Mehretie, Shimelis Admassie	*Polyaniline-coated activated carbon from Prosopis juliflora for hexavalent chromium removal in aqueous solutions*	10.4314/bcse.v39i8.14	1.218	1

ETH:01/ ANEC	Bulletin of the Chemical Society of Ethiopia	Solomon Mehretie, Jose Losada, Shimelis Admassie, Merid Tessema, Theodros Solomon, Isabel Díaz Carretero	*Iron (III) modified glassy carbon electrode for adsorption stripping voltammetric detection of uric acid*	10.4314/bcse.v39i12.14	1.218	1
ETH:01/ ANEC	Electrocatalysis	Dereje Yenealem, Shimelis Admassie, Santhi Raju Pilli, Sowjanya Motana, Dessie Tibebe	*Detection and separation of paracetamol and p-aminophenol using activated glassy carbon electrodes*	10.1007/s12678-025-00941-x	2.933	1
ETH:01/ ANEC	Green Energy & Environment	Qi Hao, Yijun Liu, Ren Zou, Ge Shi, Shilian Yang, Linxin Zhong, Wu Yang, Xiao Chi, Yunpeng Liu, Shimelis Admassie, Xinwen Peng	*g-C3N4 nanosheets coupled with CoSe2 as co-catalyst for efficient photooxidation of xylose to xylonic acid*	10.1016/j.gee.2024.04.004	12.781	1
ETH:01/ ANEC	Small	Yongfa Huang, Tingzhen Li, Runxin Huang, Kaimeng Xu, Zehong Chen, Chao Huang, Wu Yang, Youzhi Song, Zhongxin Chen, Ruidong Xia, Kasim Ocakoglu, Shimelis Admassie, Emmanuel Iwuoha, Linxin Zhong, Xinwen Peng	*Constructing pentagonal topological defects in carbon aerogels for flexible zinc-air batteries*	10.1002/smll.202502067	15.153	2
ETH:02	International Journal of Molecular Sciences	Temesgen Berhanu, Eyael Tewelde, Mariamawit Y. Yeshak, Daniel Bisrat and Kaleab Asres	*Anthelmintic Potential and In Silico Studies of Ricinoleic Acid from the Seed Oil of Ricinus communis L.*	doi.org/10.3390/ijms26041636	6.208	0
ETH:02	Journal of Molecular Structure	Abera Dessie, Sileshi Degu, Abiy Abebe, Daniel Bisrat	*In vitro antimicrobial, semisynthesis and in silico studies of 1,2-naphthoquinone derivatives*	doi.org/10.1016/j.molstruc.2024.140238	3.841	1
ETH:02	Molecules	Biniam Paulos, Daniel Bisrat, Maramawit Yonathan Yeshak and Kaleab Asres	*Natural Products with Potent Antimycobacterial Activity (2000–2024): A Review*	doi.org/10.3390/molecules30183708	4.927	0
ETH:02	*South African Journal of Botany*	Kevine Kamga Silihe, Stephane Zingue, Mariamawit Yonathan Yeshak, Daniel Bisrat, Douglas Kemboi, Karen Bräutigam, Achim Rody	*Purification of α-amyrin-acetate and phenylpropanoïd compounds from Ficus umbellata Vahl (Moraceae) stem bark and evaluation of their anti-breast cancer potential*	doi.org/10.1016/j.sajb.2024.12.015	3.111	1
ETH:05	ACS Omega Journal	TG Seyoum, Z Du, S Wang, W Lu, Q Mao, X Yang, A Dekebo, E Dagne, P Yohannes, B Wang	*New Tirucallane-Type Triterpenes Isolated from Commiphora oddurensis from Ethiopia with Anticancer Activity*	10.1021/acsomega.5c03203	4.132	1
ETH:05	Anti-Infective Agents	AG Mohammed, MG Tadesse, RK Bachheti, Y Bayeh, TG Ashebr	*Isolation, characterization, and antibacterial activity study of bioactive compounds from leaves of Cyphostemma cyphopetalum*	10.2174/0122113525306978240520053843	NA	1
ETH:05	BMC Complementary Medicine and Therapies	FB Tessema, TB Asfaw, MG Tadesse, RK Bachheti, YH Gonfa, DS Addisie, TG Aregahegn, TG Tadesse, M Aboneh	*Exploring antimicrobial properties and the oral health benefits of Salix subserrata wild: unveiling the potential beyond its use as a traditional chewing stick*	10.1186/s12906-025-04854-6	2.838	2
ETH:05	Bulletin of the Chemical Society of Ethiopia	TG Seyoum, A Dekebo, E Dagne, Z Du, W Lu, S W, Q Mao, X Yang, B Wang, P Yohannes	*Isolation and Characterization of Myrrhasin from Commiphora oddurenesis Resin: Revisiting Its Presence in C. Myrrha*	10.4314/bcse.v39i9.13	1.218	1
ETH:05	Journal of Chemistry	MZ Birhanu, MG Tadesse, RK Bachheti, IN Ahmed, A Bachheti	*Carboxymethyl Cellulose (CMC) synthesis and characterization from invasive weed senna didymobotrya through response surface Methodology (RSM)–guided alkalization and etherification methods*	doi.org/10.1155/joch/1053700	3.241	NA
ETH:05	Scientific Reports	AT Wassie, MG Tadesse, AS Wotango, RK Bachheti, IN Ahmed	*Chemical composition profiling of Oldeania alpina culm layers across developmental ages*	10.1038/s41598-025-33766-1	4.997	x

ETH:05	Scientific Reports	YN Ashagrie, MG Tadesse, RK Bachheti, G Nijhawan, S Tyagi, A Bachheti	*Formulation and characterization of Caesalpinia decapetala seed oil nanoemulsion: physicochemical properties, stability, and antibacterial activity I*	10.1038/s41598-025-87732-y	4.997	x
LAO:01/ ANFEC	Lao Journal of Science and Technology	Phoutthaharn Inthilath, Vanseng chounlamany, Kesiny Phomkeona, Phengxay Deevanhxay, Southsada Zulinthone, Santi Konhmany and Aphisid Chandavongs	*The Analysis of Domestic Wastewater Quality Using Principal Component Analysis Technique: A Case Study of The Canal in the Vientiane Area*	DOI:10.71026/sj.2025.02012	NA	NA
LAO:04	Lao Journal of Science and Technology	Bouathanom Noynaly, Phengxay Deevanhxay, Kesiny Phomkeona, Bounleuane Douangdeuane and Kingsading Thongkham Vongdeth	*Quantification of Gymnemic Acid I in Gymnema Sylvestre*		NA	NA
LAO:04	Lao Journal of Science and Technology	Thansamai Dethphakhoun, Phengxay Deevanhxay, Kesiny Phomkeona and Vanseng Chounlamany	*Quantification of Catechin, Caffeine and Antioxidant in Local Tea Products of Lao PDR*		NA	NA
NAPRECA	Discover Toxicology	Kiyimba, K., Ahmed, A., Choudhary, M.I., Obakiro, S.B., Gavamukulya, Y., Guantai, E.M. and Munyendo, W.L.	*Phytochemical analysis and toxicity evaluation of Polyscias fulva stem bark extract using gas chromatography-mass spectrometry, fourier transform infrared spectroscopy, in silico, and in vivo studies in wistar rats*	doi.org/10.1007/s44339-025-00031-z	NA	NA
NAPRECA	Journal of Molecular Graphics and Modelling	Kenedy Kiyimba, Lincoln Munyendo, Samuel Baker Obakiro, Yahaya Gavamukulya, Ayaz A hmed, Muhammad, Iqbal Choudhary, Muhammad Shafiq, Zaheer Ul-Haq, Eric Guantai	*Drug likeliness, pharmacokinetics profiling and efficacy of Polyscias fulva bioactive compounds in the management of uterine fibroids; An integrative in silico and in vivo approach*	doi.org/10.1016/j.jmgm.2025.108984	2.942	1
RABiotech	ACS Omega Journal	Assia Omrani, Manel Hraoui, Amal Thebti, Haitham Elleuch, Ali Dekir, Hadda Imene Ouzari, Ali Ben Ahmed, Noureddine Mhadhbi, Hichem Sebai, Azhar Hajri	*Metal-Free Catalytic Synthesis of N-Allylaminocyclohex-2-enone via α-Regioselective Substitution of Morita–Baylis–Hillman Adducts: Characterization, Biological Activities, In Silico ADMET, and Molecular Docking Studies*	doi.org/10.1021/acsomega.5c03009	4.132	1
RABiotech	Agricultural Research	Corentin Akpodé, Sylvestre Abado Assogba, Sêmassa Mohamed Ismaël Hoteyi, Mèvognon Ricardos Aguégué, Marcel Yévèdo Adoko, Luckman Tokumbo Alao, Haziz Sina, Pacôme Agossou Noumavo, Ayihadji Paul Houssou, Adolphe Adjanohoun, Olubukola Oluranti Babalola, Lamine Baba-Moussa	*Impact of Combinations of native arbuscular mycorrhizal fungi and mineral fertilizers on the production and nutrition of maize plants on ferruginous soil*	doi.org/10.1007/s40003-024-00808-5	2024(1.1)	1
RABiotech	Agrochemicals	Abdoul-nassiré Derra, Hemayoro Sama, Barthelemy Yélémou, Adama Hilou, Mamoudou Hama Dicko	*Effects of compost from jatropha curcas on soil biochemistry and microbial community diversity*	doi.org/10.3390/agrochemicals4010000	NA	NA
RABiotech	Al-Anbar Journal of Veterinary Sciences	Marius K Somda	*Therapeutic effects of rosemary leaf extract on liver and kidney parameters of rats treated with cypermethrin*	doi.org/10.4103/AJVS.AJVS	NA	NA

RABiotech	Antibiotics	Abdirahman Elmi, Fatouma M. Abdoul-Latif, Andréea Pasc, Arnaud Risler, Stéphanie Philippot, Ricardo Gil-Ortiz, Dominique Laurain-Mattar, Rosella Spina	*Exploring the Antibacterial Potency of Cymbopogon Essential Oils: Liposome Encapsulation and Phytochemical Insights*	doi.org/10.3390/antibiotics14050510	5.222	1
RABiotech	Antibiotics	Amani Omrani, Meriam Ben Youssef, Ines Sifaoui, Eduardo Hernández-Álvarez, Carlos J. Bethencourt-Estrella, Isabel L. Bazzocchi, Hichem Sebai, Jacob Lorenzo-Morales, Ignacio A. Jiménez, José E. Piñero	*Mechanism insight of cell death signaling by thymol derivatives on trypanosomatidae protozoan parasites*	doi.org/10.3390/antibiotics14040383	5.222	1
RABiotech	Applied Food Research	Jean Axel T. KABORE, Ella W.R. COMPAORE, Inoussa KY, Ousmane OUEDRAOGO, Fulbert NIKIEMA, Elie KABRE, Mamoudou H. DICKO	*Formulation of high-calorie foods from local raw materials using the Design of Experiments (DOE) methodology*	doi.org/10.1016/j.afres.2025.100936	2024(6.2)	1
RABiotech	Applied Food Research	Kouame Aristide Kouakou, Kouakou Nestor Kouassi, Gbè Aya Jacqueline Konan, Yapo Hypolithe Kouadio, Kouadio Benal Kouassi, Yao Denis N'dri, N'Guessan Georges Amani	*Nutritional and food potential of cornmeal cakes enriched with wild fruit pulps (Tamarindus indica, Adansonia digitata, Parkia biglobosa) consumed during the lean season in Côte d'Ivoire*	doi.org/10.1016/j.afres.2025.100989	2024(6.2)	1
RABiotech	Applied Food Research	Mahamadou Bello Issa Adam, Crépin Ibingou Dibala, Abdou-Rahim Salou Adam, Clarisse Sidbewendé Compaore, Maman Garba, Sakonon Traore, Kayaba Kabore, Adjaratou Souratie, Gnetouwo Alice Lougue, Rocksane Octavia Kiswendsida Nikiema, Vincent Bekuone Some, Hama Mamoudou DICKO	*Valorisation of Niger's soy flour through flavoured chips via physico-chemical and sensory characterization*	doi.org/10.1016/j.afres.2026.101668	2024(6.2)	1
RABiotech	Applied Food Research	Ouattara Ahmed FARMAN, N'zebo Désiré KOUAMÉ, Mah Laure Marie Régina KADJO, Anin Louise ANIN-ATCHIBRI, Thomas DADIÉ	*Nutritional composition of seasoning broths formulated from the edible mushroom Psathyrella tuberculata, onion (Allium cepa), garlic (Allium sativum), parsley (Petroselinum crispum) and cassava starch (Manihot esculenta)*	doi.org/10.1016/j.afres.2025.101123	2024(6.2)	1
RABiotech	Applied Microbiology (Switzerland)	Asmae Aboulkacem, Hanane Zaki, Amina Aboulkacem, Tarik Ainane, Rafail Isemin, Fatouma Mohamed Abdoul-Latif, Ayoub Ainane	*Seasonal variation in bacterial load and genetic diversity in groundwater from Aïn Tawjdate, Morocco*	doi.org/10.3390/applmicrobiol5040136	NA	NA
RABiotech	Applied Sciences (Switzerland)	Maroua Almi, Nadia Chekir, Leila Merabti, Djilali Tassalit, Naima Sahraoui, Soumeya Bouchareb, Khadidja Benkraouche, Wissam Yanina, Seif El Islam Lebouachera	*Chemical and Bio-Based Coagulation Coupled with Adsorption: Advancing Leachate Treatment Chemistry*	doi.org/10.3390/app152211948	2.838	1
RABiotech	Biochemistry Research International	Frédéric Anderson Konkobo, Poussian Raymond Barry, Sandrine Zongo, Elisabeth Rakisewendé Ouédraogo, Noëlle Edwige Roamba, Roger Dakuyo, David Bazié, Balamoussa Santara, Mamounata Diao, Paul Windinpsidi Savadogo, Mamoudou Hama Dicko	*Biochemical characterization and antimicrobial properties of extracts from four food plants traditionally used to improve drinking water quality in rural areas of Burkina Faso*	doi.org/10.1155/bri/9994531	2024(3.4)	1

RABiotech	BMC Health Services Research	Ousmane Ouedraogo, Mahamadi Tassembedo, Assane Ouangare, Estelle Bambara, Paton Guillaume Paré, Boro Gosso, Fulbert Ilboudo, Céline Zongo, Rodrigue Kouamé, Mediatrice Kiburente, Saidou Diallo, Barbara Baille, Justine Marie Francoise Briaux, John Ntambi, Norah Stoops, Simeon Nanama	*Strengthening nutrition routine data using institutionalized health management information systems for decision making: analysis of best practices and lessons learned from implementation in Burkina Faso*	doi.org/10.1186/s12913-025-12791-w	2.908	1
RABiotech	BMC Infectious Diseases	Chakir Ishola Bello, Cyriaque Comlan Degbey, Yves Eric Denon, Sessi Armel R. Hinvi, Lamine Baba-Moussa	*Nasopharyngeal carriage and risk factors of major meningitis pathogens among asymptomatic healthcare workers in paediatric units in Benin, with serogroup distribution of Neisseria meningitidis*	doi.org/10.1186/s12879-025-11492-3	3.669	1
RABiotech	BMC Infectious Diseases	David Mahouton Zoungbédji, Alphonse Keller Konkon, Rock Aikpon, Isidore Hoyochi, Steve Zinsou Hougbé, Albert Sourou Salako, Arthur Sovi, Bruno Adjottin, Roseric Azondekon, Lamine Baba-Moussa, Martin Akogbéto, Germain Gil Padonou	*Impact of pyriproxyfen on the reproduction of pyrethroid-resistant Anopheles gambiae s.l. populations in Benin: What implications for vector control?*	doi.org/10.1186/s12879-025-11672-1	3.669	1
RABiotech	BMC Infectious Diseases	Edwige Hermione Dagba Gbessin, Michel Kiréopori Gomgnimbou, René Kpemahouton Keke, Haziz Sina, Aldric Afangnihoun, Moussa Bachabi, Abdoul Salam Ouedraogo, Lamine Baba-Moussa	*Viral suppression in the context of SARS-CoV-2 among children infected with HIV-1 monitored in five health facilities in Benin*	doi.org/10.1186/s12879-025-10830-9	3.669	1
RABiotech	BMC Microbiology	Kossi Touglo, Bouraïma Djeri, Haziz Sina, Bawa Boya, Guy Géoffroy Ayadokoun, Lamine Baba-Moussa, Yaovi Ameyapoh	*First detection of resistance genes and virulence factors in Escherichia coli and Salmonella spp in Togo: the case of imported chicken and frozen by-products*	doi.org/10.1186/s12866-025-04076-3	4.465	1
RABiotech	BMC Nutrition	Koffi Apéali Wassiou Agbokou, W. R.Ella Compaoré, Sakonon Traoré, Ousmane Ouédraogo, Adama Ouattara, Mouawiyatou Bouraima, Virginio Pietra, Laurencia Toulsoumdé Songré-Ouattara, Mamoudou Hama Dicko	*Knowledge, attitudes and practices of mothers of children aged 6 to 12 months on breastfeeding in the province of Sissili in Burkina Faso*	doi.org/10.1186/s40795-025-01162-7	2024(2.2)	1
RABiotech	Brazilian Journal of Pharma-ceutical Sciences	Issaadi Halima Meriem, Boudjema Nouara, Sahraoui Naima, Nait Bachir Yacine	*Formulation of anise seeds essential oil nanoemulsion stabilized by chitosan/polysorbate using full factorial design: oxidative stability and antimicrobial activity*	doi.org/10.1590/s2175-97902025e24261	1.214	NA
RABiotech	CABI Agriculture and Bioscience	Ibrahima Traoré, Salimata Pousga, Fernand Sankara, Kalifa Coulibaly, Jacques Philippe Nacoulma, Marc Kenis, Georges Anicet Ouédraogo	*Laying performance, egg and carcass characteristics, and economic profitability of using fresh maggots in the ration of growing local chicken (Gallus domesticus, L.) in Burkina Faso*	doi.org/10.1079/ab.2025.0068	2024(2.7)	1
RABiotech	Cereal Chemistry	John R.N. Taylor, Tilana Graaff, Johnes David, David Kamau, Darshana Joshi, Benjamin Byinshi, Corinda Erasmus, Peiman Milani, Henriëtte L. de Kock	*Vitamins Are Retained in Fortified Whole-Grain Maize Meal When Stored Under Tropical Conditions When Optimal Storage Practices Are Used*	doi.org/10.1002/cche.70006	2.534	1

RABiotech	Clinical Proteomics	Sidnooma Véronique Zongo, Michael A. Bauer, Lassina Traore, Tegwinde Rebeca Compaore, Albert Théophane Yonli, Augustin Tozoula Bambara, Palwendé Romuald Boua, Roger Arsène Sombié, Oumar Barro, Sosthene K. Somda, Mahamoudou Sanou, Jeremy James Martinson, Jean Christopher Chamcheu, Lewis R. Roberts, Mitesh J. Borad, Bolni Marius Nagalo, Alan J. Tackett, Adama Sanou, Florencia Wendkuuni Djigma, Jacques Simpore	*Plasma proteomic profiling reveals distinct protein signatures associated with hepatocellular carcinoma in chronic hepatitis B infection*	doi.org/10.1186/s12014-025-09580-2	5.000	1
RABiotech	Cogent Food and Agriculture	Amidou S. Ouili, Cheik Omar Tidiane Compaoré, Assiètta Ouattara, Djamilatou Dabré, Ynoussa Maiga, Mahamadi Nikiema, Mahama Ouedraogo, Aboubakar Sidiki Ouattara	*Assessment of aflatoxin contamination in Bambara groundnut (Vigna subterranea L.) produced in Burkina Faso, West Africa*	doi.org/10.1080/23311932.2025.2478470	2.161	0
RABiotech	Cogent Food and Agriculture	Bassirou Ndoye, Mamoudou H. Dicko, Colin Gill	*Exploring the spoilage microbiota of raw and processed meats under different storage environments and its related profiling methods: a review*	doi.org/10.1080/23311932.2025.2562177	2.161	0
RABiotech	Cogent Food and Agriculture	Marcel Houngbédji, E. C.Gilas Dahissiho, B. Pélagie Agbobatinkpo, S. Augustin Djogbe, Charles Parkouda, Sègla Wilfrid Padonou, D. Joseph Hounhouigan	*Oven-dried microbial culture for improved backslopping fermentation*	doi.org/10.1080/23311932.2025.2484363	2.161	0
RABiotech	Discover Applied Sciences	Mahamadi Nikiema, Marius K. Somda, Amidou S. Ouili, Assiètta Ouattara, Cheik Omar Tidiane Compaoré, Narcis Barsan, Joseph B. Sawadogo, Ynoussa Maiga, Iliassou Mogmenga, Cheik A.T. Ouattara, Aboubakar S. Ouattara	*Assessment of the agronomic value of digestate from cashew nut shell and cow dung anaerobic digestion*	doi.org/10.1007/s42452-025-06506-3	NA	1
RABiotech	Discover Food	Abel Tankoano, Mah Alima Esther Traoré, Inoussa Salambéré, Cheikna Zongo, Donatien Kaboré, Michel Bakar Diop, Aly Savadogo, Hagrétou Sawadogo-Lingani	*Nutritional composition of dried Gapal, a highly nutritious food based on fermented cereal and milk*	doi.org/10.1007/s44187-025-00410-w	2024(3.7)	1
RABiotech	Discover Food	Gabriel Owusu-Akyaw, Felix Offei, Yifeng Zhang, Charles Parkouda, Firibu Kwesi Saalia	*Sequential physicochemical extraction of high hexose-pentose syrups from pineapple processing residues*	doi.org/10.1007/s44187-025-00490-8	2024(3.7)	1
RABiotech	Electronics (Switzerland)	Claude Bertin Nzoundja Fapi, Mohamed Lamine Touré, Mamadou Baïlo Camara, Brayima Dakyo	*Control Strategy for DC Micro-Grids in Heat Pump Applications with Renewable Integration*	doi.org/10.3390/electronics14010150	2.690	1
RABiotech	Food and Humanity	Tienbnoma Sandrine Ouedraogo, Frédéric Anderson Konkobo, Poussian Raymond Barry, Mamounata Diao, Samson Guenné, Roger Dakuyo, David Bazié, Crépin Ibingou Dibala, Kiessoun Konaté, MH Dicko	*Stability of commercial packaged fried foods in Ouagadougou during storage*	doi.org/10.1016/j.foohum.2025.100633	NA	1

RABiotech	Food and Humanity	Wendkouni Marguerite Bamogo, Abel Tankoano, W. D.B.Aimée Guissou, Mah Alima Esther Traoré, Hyacinthe Kante-Traore, Charles Parkouda, Aly Savadogo	*Nutritional composition and bioactive compound of mango kernels and peels: Valorization of by-products*	doi.org/10.1016/j.foohum.2025.100971	NA	1
RABiotech	Food Chemistry Advances	Bernard Kwabena Asiedu, Emmanuel Ohene Afoakwa, Crossby Osei Tutu, Rexford Obeng, Nii Korley Kortei, Papa Toah Akonor, Agnes Simpson Budu, Firibu Kwesi Saalia	*Effect of roasting on flavonoids, phenolics, and antioxidant activity of industrial-pulped and fermented cocoa beans*	doi.org/10.1016/j.focha.2025.100925	NA	1
RABiotech	Food Research International	Salamata Tiendrebeogo, Clarisse Sidbewendé Compaore, Elisabeth Rakiswendé Ouedraogo, Leguet Ganou, Raymond Poussian Barry, Sandrine Zongo, Mamoudou H. Dicko	*Morphological variability, physical characteristics and proximate composition of Saba senegalensis fruit pulps from plant ecotypes in Burkina Faso*	doi.org/10.1016/j.foodres.2025.116175	7.425	1
RABiotech	Food Reviews International	Fabrice Bationo, Wendpuiré Cindy Ornéla Lalsomdé, Diarra Compaoré-Sérémé, Joseph Sougrenooma Ilboudo, Crépin Ibingou Dibala, Donatien Kaboré, Charles Parkouda, Laurencia Toulsoumdé Songré-Ouattara, Mamoudou Hama Dicko	*Exploring African Fermented Foods: Microbial Folate Synthesis and Potential for In Situ Fortification*	doi.org/10.1080/87559129.2025.2556776	6.043	1
RABiotech	Food Science and Nutrition	Adjaratou Souratié, Crépin I. Dibala, Hemayoro Sama, Roger Dakuyo, Kayaba Kaboré, Abdoudramane Sanou, Mamounata Diao, Mamoudou Hama Dicko	*Nutritional Properties and Preventive Potential of Leptadenia hastata (Pers) Decne (Apocynaceae) Against Metabolic Diseases*	doi.org/10.1002/fsn3.70468	3.553	1
RABiotech	Food Science and Nutrition	Edwige Noëlle Roamba, Frédéric Anderson Konkobo, Poussian Raymond Barry, Adama Pamba Séré, Abdoudramane Sanou, Roger Dakuyo, Kabakdé Kaboré, Kiessoun Konaté, Mamoudou Hama Dicko	*Nutritional and Phytochemical Potential of Two Local Food Plants in Burkina Faso: Crateva adansonii and Capparis corymbose*	doi.org/10.1002/fsn3.71272	3.553	1
RABiotech	Food Science and Nutrition	Inoussa Ilboudo, Hamidou Compaoré, Inoussa Compaoré, Sheryl Mounira Traoré, Laeticia Ella Dembélé, Fulbert Nikièma, Lanterbecq Déborah, Hagrétou Sawadogo-Lingani, Elie Kabré	*Biocontrol of Aflatoxigenic Maize Molds Using Lactobacillus spp.-Based Formulations*	doi.org/10.1002/fsn3.71039	3.553	1
RABiotech	Food Science and Nutrition	Mhimdi Mariem, Selmi Slimen, Amira Zammali, Manel Hraoui, Soumaya Wahabi, Dallacqua Stefano, Sebai Hichem	*Protective effects of myrtus communis essential oil against bisphenol a-induced metabolic dysfunction-associated fatty liver disease in wistar rats*	doi.org/10.1002/fsn3.71520	3.553	1
RABiotech	Food, Nutrition and Health	Wendkouni Marguerite Bamogo, Wendmintiri Jeanne d'Arc Kabré, Abel Tankoano, Mah Alima Esther Traoré, Olivier Banhoro, Charles Parkouda, Aly Savadogo	*Valorization of mango by-products: fortification of mugudugu using mango peel and kernels*	doi.org/10.1007/s44403-025-00040-1	NA	NA

RABiotech	Foods	Catarina Vila-Real, Célia Costa, Ana Pimenta-Martins, Samuel Mbugua, Sawadogo Lingani Hagrétou, Kati Katina, Ndegwa H. Maina, Elisabete Pinto, Ana M.P. Gomes	*Novel Fermented Plant-Based Functional Beverage: Biological Potential and Impact on the Human Gut Microbiota †*	doi.org/10.3390/foods14030433	5.561	0
RABiotech	Foods	Colin D. Rehm, John R. N. Taylor, Henriëtte L. de Kock, Suné Donoghue, Andrew Johnson, Chanelle Thompson, Yulia Berezhnaya	*What Drives Consumers' Breakfast Food Choices? Case Study in South Africa—A Multiethnic Middle-Income Country*	doi.org/10.3390/foods15010014	5.561	0
RABiotech	Frontiers in Food Science and Technology	Edwige Bahanla Oboulbiga, Zénabou Semdé, Fidèle Wend Bénédo Tapsoba, Siébou Youl, Fulbert Nikiéma, Crépin Ibingou Dibala, Fatoumata Hama-Ba, Mamoudou Hama Dicko	*Comparative study of the physicochemical and nutritional characteristics of the grains of two varieties of sesame cultivated in two climatic zones of Burkina Faso*	doi.org/10.3389/frfst.2025.1636295	NA	1
RABiotech	Frontiers in Nutrition	Achil Tia, Jonas Hauser, Amoin G. Konan, Olivier Ciclet, Yohan Grzywinski, Fabio Mainardi, Gioele Visconti, Adrien Frézal, Charlemagne Nindjin	*Unraveling the relationship between nutritional status, cognitive function, and school performance among school-aged children in Taabo, Côte d'Ivoire: a school-based observational study*	doi.org/10.3389/fnut.2025.1630497	6.590	1
RABiotech	Frontiers in Nutrition	Erhan Keyvan, Elizabeth Adesemoye, Marie Christine Champomier-Vergès, Emilie Chanséaume-Bussiere, Julie Mardon, Daniela Nikolovska Nedel-koska, Recep Palamutoglu, Pasquale Russo, Inga Sarand, Laurencia Songre-Ouattara, Biljana Trajkovska, Sibel Karakaya, Michail Syrpas, Christophe Chassard, Smilja Pracer, Guy Vergères, Daniel Heine, Christèle Humblot	*Vitamins formed by microorganisms in fermented foods: effects on human vitamin status - a systematic narrative review*	doi.org/10.3389/fnut.2025.1653666	6.590	1
RABiotech	Frontiers in Nutrition	Jean S.R. Kouame, Ella W.R. Compaore, Sonia Blaney, Estelle A. Bambara, Issaka Ouedraogo, Hamidou Sidibe, Mamoudou H. Dicko	*Links between household food consumption and nutritional status of children aged 6–59 months: a case study in Burkina Faso*	doi.org/10.3389/fnut.2025.1696003	6.590	1
RABiotech	Frontiers in Nutrition	Natacha Kere, Ella W.R. Compaore, Youssouf Keita, Daniel S. Ouedraogo, Souleymane Tirogo, Estelle A. Bambara, Z. Thierry Coulibaly, Mamoudou H. Dicko	*Impact of IYCF practices, as measured by national nutrition surveys from 2018 to 2022, on stunting and under-5 survival in Burkina Faso: a LiST analysis*	doi.org/10.3389/fnut.2024.1504564	6.590	1
RABiotech	IJID Regions	Cedeche Lebraiche Durain Mboungou, Claujens Chastel Mfoutou Mapanguy, Alain Maxime Mouanga, Vivaldie Mikounou Louya, Jeannhey Christevy Vouvoungui, Raoul Ampa, Francine Ntoumi	*The prevalence of rotavirus infection among Congolese children younger than 5 years hospitalized for gastroenteritis 10 years after introduction of rotavirus vaccination*	doi.org/10.1016/j.ijregi.2025.100596	2024(1.7)	1
RABiotech	Infection and Drug Resistance	Paul Sodéré, Marius K. Somda, Luc Zongo, Henriette B. Mihin, Iliassou Mogmenga, Agbémébia Y. Akakpo, Mamoudou H. Dicko	*Synergy and mechanism of the action of the combination of essential oils and antibiotics against antibiotic-resistant food borne disease bacteria in Burkina Faso*	doi.org/10.2147/IDR.S518717	4.177	1

RABiotech	Insects	Aïchatou Nadia Christelle Dao, Fernand Sankara, Mouhamadou Moustapha Ndiaye, Abdoulaye Baïla Ndiaye, Salimata Pousga, Irénée Somda, Marc Kenis	*Diversity of Termites Used in Poultry Feed in Burkina Faso*	doi.org/10.3390/insects16070687	3.141	x
RABiotech	International Journal of Food Properties	Kayaba Kaboré, Crépin Ibingou Dibala, Mah Alima Esther Traoré, Roger Dakuyo, Adjaratou Souratié, Tienbnoma Sandrine Ouédraogo, Aïnattou Ouédraogo, Ouaro desiré, Jean Axel Tegwendé Kaboré, Kabakdé Kaboré, Hemayoro Sama, Mamounata Diao, Mamoudou Hama Dicko	*Evaluation of the biochemical and nutritional profiles of Solanum aethiopicum L. subsp Kumba fruits: implications for diet and health*	doi.org/10.1080/10942912.2025.2600154	3.388	1
RABiotech	International Journal of Food Properties	Mahamadou Bello, Issa Adam, Crépin Ibingou Dibala, Maman Garba, Abdoul Rahim, Salou Adam, Zakaria Dindané, Désiré Ouaro, Hemayoro Sama, Mamounata Diao, Mamoudou H Dicko	*Evaluation of morphological diversity, nutritional potential, and techno-functional properties of improved soybean (Glycine max (L.) Merr.) accessions and varieties cultivated in Niger*	doi.org/10.1080/10942912.2026.2627049	3.388	1
RABiotech	International Journal of Molecular Sciences	Amani Omrani, Meriam Ben Youssef, Ines Sifaoui, Eduardo Hernández-Álvarez, María J. Trujillo-Rodríguez, Montse Saura-Cayuela, Verónica Pino, Hichem Sebai, Isabel L. Bazzocchi, Jacob Lorenzo-Morales, José E. Piñero, Ignacio A. Jiménez	*Bioprospecting for Anti-Kinetoplastid Drug Discovery from Aloysia citrodora Essential Oil*	doi.org/10.3390/ijms26125697	6.208	0
RABiotech	International Journal of Molecular Sciences	Meriam Ben Youssef, Javier Chao-Pellicer, Eduardo Hernández-Álvarez, Amani Omrani, Ines Sifaoui, Hichem Sebai, Isabel L. Bazzocchi, José E. Piñero, Ignacio A. Jiménez, Jacob Lorenzo-Morales	*Mentha rotundifolia, a Source of Amoebicidal Agents Against Naegleria fowleri*	doi.org/10.3390/ijms26189048	6.208	0
RABiotech	International Journal of Molecular Sciences	Nouha Dakhli, Auxiliadora López-Jiménez, Casimiro Cárdenas, Manel Hraoui, Jihene Dhaouafi, Manuel Bernal, Hichem Sebai, Miguel Ángel Medina	*Urtica dioica Aqueous Leaf Extract: Chemical Composition and In Vitro Evaluation of Biological Activities*	doi.org/10.3390/ijms26031220	6.208	0
RABiotech	International Journal of Nutrition Sciences	Koffi Apéali Wassiou Agbokou, Ousmane Ouédraogo, Rasmata Dabo, Ella Wendinpuikondo Raketa Compaoré, Donald Ouédraogo, Adama Ouattara, Mouawiyatou Bouraima, Virginio Pietra, Laurencia Toulsoumdé Songré-Ouattara, Mamoudou Hama Dicko	*Knowledge and Practices on Complementary Feeding among Mothers of Children Aged 6-12 Months in Sissili Province, Burkina Faso*	10.30476/ijns.2025.103834.1342	NA	

RABiotech	International Journal of Nutrition Sciences	Koffi Apéali Wassiou Agbokou, Ousmane Ouédraogo, Rasmata Dabo, Ella Wendinpuikondo Raketa Compaoré, Donald Ouédraogo, Adama Ouattara, Mouawiyatou Bouraima, Virginio Pietra, Laurencia Toulsoumdé Songré-Ouattara, Mamoudou Hama Dicko	*Knowledge and Practices on Complementary Feeding among Mothers of Children Aged 6-12 Months in Sissili Province, Burkina Faso*	doi.org/10.30476/ijns.2025.103834.1342	NA	NA
RABiotech	Journal of Advanced Pharmacy Education and Research	Fatouma Mohamed Abdoul-Latif, Ahmed Abdallah Okieh, Ali Merito Ali, Abdirahman Elmi, Houda Mohamed, Ibrahim Houmed Aboubaker, Ayoub Ainane, Stefano Cacciatore, Tarik Ainane	*Epidemiology of chronic inflammatory bowel diseases in Djibouti: A cross-sectional study and analysis of immunopathological mechanisms*	doi.org/10.51847/eA4LhV0BWz	NA	NA
RABiotech	Journal of Agriculture and Food Research	Médérice Sènanmi Béhanzin, Adrien Servent, Romain Kapel, Christian Mertz, Ifagbémi Bienvenue Chabi, Manuel Dornier, Polycarpe Kayodé	*Analyzing the miraculin content of Beninese Sisrè berries (Synsepalum dulcificum Schumach. & Thonn.) and exploring its thermal behavior*	doi.org/10.1016/j.jafr.2025.102221	2024(6.2)	1
RABiotech	Journal of Applied Biology and Biotechnology	Hamsatou Soumana Hassane, Fatoumata Hama-Ba, Issoufou Amadou, Abdoul Aziz Saïdou, Balla Abdourahmane, Imael Nestor Bassolet, and Charles Parkouda	*Selection of new recombinant inbred lines and dual-purpose cowpea genotypes based on total protein and its fractions, amino acids, and nutritional quality*	doi.org/10.7324/JABB.2025.189615	NA	1
RABiotech	Journal of Food Processing and Preservation	Ezéchiel Akakpo, Marius Eric Badoussi, Ifagbémi Bienvenue Chabi, Ambroise Kodjeyi, Hermance Yénoukounmey Houngbo, Claude Kouassi Gnacadja, Philippe Sessou, Valentin Wotto, Lamine Baba-Moussa, Paulin Azokpota	*Development of an Optimized Green Extraction Method for the Recovery of the Biocolorant from Bixa orellana L. Seeds*	doi.org/10.1155/jfpp/7243915	2.609	0
RABiotech	Journal of Food Protection	Amidou S. Ouili, Iliassou Mogmenga, Assiètta Ouattara, Cheik Omar Tidiane Compaoré, Ynoussa Maiga, Mahamadi Nikiema, Aboubakar Sidiki Ouattara	*Assessment of the probiotic properties of pediococcus acidilactici, pediococcus pentosaceus, and lactiplantibacillus plantarum strains isolated from fermented maize grains*	doi.org/10.1016/j.jfp.2025.100514	2.753	1
RABiotech	Journal of Food Protection	Michel Dione, Guy Ilboudo, Adama Paré, Laurencia T. Songré-Ouattara, Michelle D. Danyluk, Claudia Ganser, Theodore J.D. Knight-Jones, Arie H. Havelaar	*Washing chicken carcasses with water proves unreliable as a means of reducing bacterial contamination in unhygienic market conditions in Burkina Faso*	doi.org/10.1016/j.jfp.2025.100598	2.753	1
RABiotech	Journal of Food Quality	Jean Axel T. Kabore, Ella W.R.Compaore, Inoussa Ky, Ousmane Ouedraogo, Kayaba Kabore, Fulbert Nikiema, Elie Kabre, Mamoudou H. Dicko	*Formulation and quality characterization of energy-dense foods from local ingredients targeted for high-performance nutrition*	doi.org/10.1155/jfq/2475730	3.200	0
RABiotech	Journal of Medicinal Food	Ala Ayari, Saber Jedidi, Fatma Arrari, Nouha Dakhli, Hichem Sebai	*Counteracted severity action of beta vulgaris juice on dextran sulfate sodium–induced ulcerative colitis in rats through inflammatory and oxidative stress indicator depletion*	doi.org/10.1177/10966220X251367677	2.542	1

RABiotech	Journal of Medicinal Food	Houcem Sammari, Anouar Abidi, Saber Jedidi, Nourhène Dhawefi, Hichem Sebai	*Laxative Effect of Crataegus azarolus Leaves Decoction Extract Against Loperamide-Induced Constipation and Oxidative Stress in Rats*	doi.org/10.1089/jmf.2023.0255	2.542	1
RABiotech	Journal of the Science of Food and Agriculture	Slimen Selmi, Wael Taamalli, Mariem Mhimdi, Manel Hraoui, Mourad Jridi, Hichem Sebai	*Antibacterial properties of Moringa oleifera, Cynara scolymus and Allium fistulosum leaf extracts: molecular docking insights into quercetin's mechanism of action*	doi.org/10.1002/jsfa.14235	4.125	1
RABiotech	Malaria Journal	Isidore Hoyochi, Rock Aikpon, Arthur Sovi, Alphonse Keller Konkon, David Mahouton Zoungbédji, Casimir Dossou Kpanou, Roseric Azondekon, Albert Sourou Salako, Come Z. Koukpo, Edmond Sossoukpe, Lamine Baba-Moussa, Martin Codjo Akogbéto, Germain Gil Padonou	*Mechanism of metabolic resistance in Anopheles coluzzii to insecticides in two urban areas of southern Benin*	doi.org/10.1186/s12936-025-05596-z	3.469	1
RABiotech	Malaria Journal	N'cho Bertin Tchiekoi, Mahugnon Barnabas Zogo, Ludovic P. Ahoua Alou, Anthony Somé, Diloma Dieudonné Soma, Issa Coulibaly, Aboubacar Koné, Florence Fournet, Paul Taconet, Amal Dahounto, Lamine Baba-Moussa, Roch K. Dabiré, Nicolas Moiroux, Alphonsine A. Koffi, Cédric Pennetier, Serge Brice Assi	*Malaria epidemiology in the Korhogo area, Northern Côte d'Ivoire: baseline assessment prior to a randomized controlled trial*	doi.org/10.1186/s12936-025-05571-8	3.469	1
RABiotech	Malaria Journal	Steve Zinsou Hougbe, Razaki A. Ossé, Roseric Azondékon, Casimir Kpanou, Minassou Juvénal Ahouandjinou, Zul Kifl Affolabi, Koffi Djigbodi Koumodji, Hermann Sagbohan, Esdras Mahoutin Odjo, Constantin Adoha, Boulais Yovogan, Serge Akpodji, Linda Towakinou, Bruno Akinro, Albert Salako, Filémon Tokponnon, Germain Gil Padonou, Lamine Baba-Moussa, Martin Akogbeto	*Two decades of insecticide resistance in Benin: a retrospective analysis of evolution and drivers*	doi.org/10.1186/s12936-025-05403-9	3.469	1
RABiotech	Marine Drugs	Fatouma Mohamed Abdoul-Latif, Houda Mohamed, Ibrahim Houmed Aboubaker, Omaima Saoudi, Ayoub Ainane, Ali Merito Ali, Stefano Cacciatore, Luiz Fernando Zerbini, Abdelmjid Abourriche, Tarik Ainane	*Cynthichlorine extracted from ascidian cynthia savignyi from Djibouti: optimization of extraction, in vitro anticancer profiling, and in silico approach*	doi.org/10.3390/md23040172	6.085	1
RABiotech	Microbe (Netherlands)	Amidou S. Ouili, Assiètta Ouattara, Iliassou Mogmenga, Cheik Omar Tidiane Compaoré, Ynoussa Maiga, Mahamadi Nikiema, Aboubakar Sidiki Ouattara	*In vitro screening for potential probiotic properties of Pediococcus pentosaceus strains isolated from fermented Bambara groundnut (Vigna subterranea L.) grains: A legume native to West Africa*	doi.org/10.1016/j.microb.2025.100418	NA	NA
RABiotech	Microbe (Netherlands)	Baya Mhamdi, Jazia Sriti, Manel Hraoui, Mourad Jridi, Hichem Sebai	*Comparison of antibacterial activity of methanolic and aqueous extracts of Ziziphus lotus leaves*	doi.org/10.1016/j.microb.2025.100458	NA	NA

RABiotech	Microbes and Infectious Diseases	Christian Italen Bingangoye, Sévérin Medzégué Nguéma, Rick-Leonid Ngoua Meye Misso, Mey-Leslie Eyang Nze, Louis-Clément Obame Engonga, Armel Ndong Mintsa, Joel Fleury Djoba Siawaya, Joseph Privat Ondo	*Diversity of antibiotic resistance phenotypes in bacteria responsible for childhood diarrhea and their influence on the success of probabilistic (empirical) treatments*	doi.org/10.21608/mid.2025.336675.2350	NA	NA
RABiotech	Microbes and Infectious Diseases	Sanhitouo Charlemagne Dabiré, Marius K. Somda, Léon W. Nitièma, Dinanibè Kambiré, Abdou Azaque Zouré, Tani Sagna, Tegwindé Rebeca Compaoré, Samiratou Kiemtoré, Serge Théophile Soubeiga, Oumarou Ouédraogo, Rahamani A. Nikièma, Alidou Kagambèga, Henri Gautier Ouédraogo, Mamoudou H. Dicko	*Study of the correlation between antibiotic resistance genes, susceptibility profiles and biotopes of enterobacteria in Burkina Faso*	doi.org/10.21608/mid.2024.329376.2297	NA	0
RABiotech	Microbiology Resource Announcements	Blaise Waongo, François Tapsoba, Pingdwindé Marie Judith Samadoulougou-Kafando, Libère Ndayishimiye, Hama Cissé, Abakar Idriss Lawane, Donatien Kaboré, Aly Savadogo	*Whole-genome sequence of Bacillus subtilis ka15: a potent starter isolated from Kawal, a fermented condiment*	doi.org/10.1128/mra.00055-25	2024(0.6)	0
RABiotech	Molecules	Fatouma Mohamed Abdoul-Latif, Ibrahim Houmed Aboubaker, Houda Mohamed, Ayoub Ainane, Mouhcine Chakrouni, Ali Merito Ali, Pannaga Pavan Jutur, Tarik Ainane	*Evaluation of the Anticancer Properties of Lamellar Alkaloid Drivatives Extracted from the Tunicate Didemnum abradatum (Moucha Island Sea, Djibouti): Pharmacological and Computational Approach*	doi.org/10.3390/molecules30163338	4.928	0
RABiotech	Molecules	Fatouma Mohamed Abdoul-Latif, My Ismail El Mhamdi, Ayoub Ainane, Ali Merito Ali, Khadija Oumaskour, Sanaa Cherroud, Stefano Cacciatore, Tarik Ainane	*Development and Perfection of Marine-Based Insecticide Biofilm for Pea Seed Protection: Experimental and Computational Approaches*	doi.org/10.3390/molecules30071621	4.929	0
RABiotech	Molecules	Giang Nam Pham, Matteo Florio Furno, Juan A. Garcia-Sanchez, Patrick Munro, Fatouma Mohamed Abdoul-Latif, Laurent Boyer, Giovanna Cristina Varese, Mohamed Mehiri	*Amesilide, a New Bicyclic Polyketide from the Marine Fungus Amesia nigricolor MUT6601*	doi.org/10.3390/molecules30153169	4.930	0
RABiotech	Molecules	Monia Bouzazi, Houcine Selmi, Fatma Tajini, Mourad Jridi, Selim Jallouli, Abid Ouerghui, Hichem Sebai	*Biochemical properties, antioxidant activity, and in vitro ruminal fermentation of four medicinal plant species grown in northwestern Tunisia*	doi.org/10.3390/molecules30224451	4.931	0
RABiotech	Nutrients	Achil Tia, Amoin G. Konan, Jonas Hauser, Kouassi Y. Ndri, Olivier Ciclet, Lasme E. Esso, Charlemagne Nindjin	*A Cross-Sectional Study of the Relationship Between Dietary Micronutrient Intake, Cognition and Academic Performance Among School-Aged Children in Taabo, Côte d'Ivoire*	doi.org/10.3390/nu17223602	6.706	1

RABiotech	Pharmacognosy Research	Essimanam Rosalie Awesso, Kathrin Arndts, Gnatoulma Katawa, Fekandine Victoire Douti, Fagdéba David Bara, Simplice Damintoti Karou, Achim Hoerauf, Manuel Ritter	*Medical plants aframomum melegueta and xylopia aethiopica show low toxicity in vitro and in vivo highlighting their potential for therapeutic applications*	doi.org/10.5530/pres.20250030	2024(1.0)	NA
RABiotech	Physical Chemistry Research	M. Achira, F. Mohamed Abdoul-Latif, A. Ainane, R. Abbi, R. Isemin, D. Klimov, R. I. Zoghlami, S. Jaziri, N. Chahboune, T. Ainane	*Phenoxyacetic Herbicide Removal by Biscogniauxia Nummularia Mushroom-Activated Argan Biochar: Biomass Elaboration, Modeling of Sorption and Computational Analysis*	doi.org/10.22036/pcr.2025.512808.2656	2024(2.5)	NA
RABiotech	Physiological Reports	Ala Ayari, Saber Jedidi, Houcem Sammari, Nourhene Dhawefi, Soumaya wahabi, Hichem Sebai	*Beetroot leaf extract enhances gut motility in a model of loperamide-induced constipation in male rats: A phytopharmacological study*	doi.org/10.14814/phy2.70467	2024(1.9)	1
RABiotech	Physiological Reports	Chirine Brinsi, Yassin Khadraoui, Mariem Mhimdi, Slimen Selmi, Houcem Sammari, Saber Jedidi, Houcine Selmi, Hichem Sebai	*Protective effects of dill fruit against acute acetic acid-induced ulcerative colitis by reducing inflammation and oxidative stress in rats*	doi.org/10.14814/phy2.70393	2024(1.9)	1
RABiotech	Physiological Reports	Houcem Sammari, Anouar Abidi, Saber Jedidi, Nourhen Dhawefi, Hichem Sebai	*Antioxidant activity and protective effect of phyto-active compounds of Crataegus azarolus berries decoction extract against acetic acid-induced hepatorenal injuries in male rats*	doi.org/10.14814/phy2.70240	2024(1.9)	1
RABiotech	Physiological Reports	Mhimdi Mariem, Selmi Slimen, Sut Stefania, Peron Gregorio, Jridi Mourad, Dallacqua Stefano, Sebai Hichem	*Myrtus communis essential oil mitigates bisphenol A-induced reproductive and lipidomic alterations in a male rat model*	doi.org/10.14814/phy2.70628	2024(1.9)	1
RABiotech	Physiological Reports	Naoures Ochi, Anouar Abidi, Wael Taamalli, Ayda Ayedi, Hichem Sebai	*Ameliorative effects of avocado oil on bleomycin-induced lung fibrosis and oxidative stress in rats*	doi.org/10.14814/phy2.70228	2024(1.9)	1
RABiotech	Plants People Planet	Baye Magatte Diop, Mame Codou Guèye, Christian Leclerc, Monique Deu, Leila Zekraoui, Carolina Calatayud, Ronan Rivallan, Justin Raymond Kaly, Momar Cissé, Marie Piquet, Omar Diack, Ablaye Ngom, Angélique Berger, Ibrahima Ndoye, Khadidiatou Ndir, Yves Vigouroux, Ndjido Ardo Kane, Adeline Barnaud, Claire Billot	*Ethnolinguistic and genetic diversity of fonio (Digitaria exilis) in Senegal*	doi.org/10.1002/ppp3.10428	5.695	1
RABiotech	PLoS ONE	Edwige Hermione Dagba Gbessin, Edmond Tchiakpe, René Kpemahouton Keke, Nicole Vidal, Michel Kiréopori Gomgnimbou, Haziz Sina, Euloge Senan Adjou, Aldric Afangnihoun, Moussa Bachabi, Akadiri Yessoufou, Abdoul Salam Ouedraogo, Lamine Baba-Moussa	*HIV-1 resistance mutations and genetic diversity among children failing antiretroviral treatment in five healthcare facilities in Benin, West Africa*	doi.org/10.1371/journal.pone.0317882	3.752	1
RABiotech	Results in Engineering	Jotham Yhi pênê N'do, Dramane Paré, Harouna Soré, Ernest Nogma Sombié, Mindiédiba Jean Bangou, Adama Hilou, Martin Kiendrébéogo	*Ethnobotany and quality control of bioproducts: Sustainable management of natural resources in urban environments*	doi.org/10.1016/j.rineng.2025.106300	2024(7.9)	1

RABiotech	Scientific Reports	Anaïs K. Coulybaly, Aimée W.D.B. Guissou, Edwige Bahanla Oboulbiga, Rasmata Dabo, Aboubakar Sidiki Dao, Fatoumata Hama-Ba, Charles Parkouda, Aly Savadogo	*Sensory properties of fermented Zamné (Senegalia macrostachya seeds) and their influence on the broth quality and sensory profile*	doi.org/10.1038/s41598-025-13819-1	4.997	x
RABiotech	Scientific Reports	Salamata Tiendrebeogo, Clarisse Sidbewendé Compaore, Leguet Ganou, Sandrine Zongo, Raymond Poussian Barry, Edwige Noëlle Roamba, Elisabeth Rakiswendé Ouedraogo, Mamoudou H. Dicko	*Nutritional potential of Saba senegalensis fruits seeds and hulls from Burkina Faso: a source of essential nutrients*	doi.org/10.1038/s41598-025-94552-7	4.997	x
RABiotech	Scientific Reports	Sandrine Zongo, Souleymane Zongo, Clarisse S. Compaore, Fréderic Anderson Konkobo, Poussian Raymond Barry, Edwige Noëlle Roamba, David Bazie, Roger Dakuyo, Mamounata Diao, Kiessoun Konate, Mamoudou H. Dicko	*Phenolic compounds and safety of improved and local peanut varieties grown in Burkina Faso*	doi.org/10.1038/s41598-025-92018-4	4.997	x
RABiotech	South African Journal of Botany	Dramane Paré, Jotham Yhi-pênê N'do, Nikodème Vonogo Kabré, Mahamadi Nikiema, Emmanuel Zongo, Roland Nâg Tiero Méda, Adama Hilou	*Ethno pharmacological evidence and exploration of the phytochemical profile by GC-MS of bioactive compounds extracted from Sterculia setigera*	doi.org/10.1016/j.sajb.2025.03.039	3.111	1
RABiotech	Sustainability	Blessing Masasi, Niroj Aryal, Vinsoun Millogo, Jonathan Masasi, Ajit Srivastava, and Prasanta K. Kalita	*Assessing the impacts of mulching on vegetable production under drip irrigation in Burkina Faso*	doi.org/10.3390/su17030916	3889	0
RABiotech	Sustainability (Switzerland)	Fatouma Mohamed Abdoul-Latif, Ayoub Ainane, Houda Mohamed, Ali Merito Ali, Stefano Cacciatore, Tarik Ainane	*Advanced formulation of ecological bioinsecticides based on citrus limonum in clayey matrices: Optimization of diffusive dynamics*	doi.org/10.3390/su17020785	3889	0
RABiotech	Journal of Basic and Applied Zoology	Steve Zinsou Hougbe, Minassou Juvenal Ahouandjinou, Zul-kifl Affolabi, Koffi Djigbodi Koumodji, Arsene Jacques Fassinou, Come Zinsou Koukpo, Linda Towakinou, Andil Agbo-Ola, Said Chitou, Filémon Tokponnon, Hermann Sagbohan, Casimir Kpanou, Germain Gil Padonou, Martin Akogbeto, Lamine Baba -Moussa, Razaki A. Ossé	*Susceptibility of the chlorfenapyr on wild populations of Anopheles gambiae s.l. resistant to pyrethroids along the south–north transect of Benin*	doi.org/10.1186/s41936-025-00494-x	2024(1.1)	NA
RABiotech	Tropical Medicine and Health	Alphonse Keller Konkon, David Mahouton Zoungbédji, Rock Aïkpon, Isidore Hoyochi, Albert Sourou Salako, Camus Konkon, Antoine Salomon Lokossou, Brice Dangnon, Lamine Baba-Moussa, Martin Codjo Akogbéto, Germain Gil Padonou	*Bionomics of the primary arbovirus vectors Aedes aegypti and Aedes albopictus in southeastern Benin*	doi.org/10.1186/s41182-025-00794-6	2024(3.5)	1

RABiotech	Tropical Medicine and Health	Alphonse Keller Konkon, Rock Aikpon, Isidore Hoyochi, David Mahouton Zoungbédji, Arthur Sovi, Albert Sourou Salako, Camus Konkon, Brice Dangnon, Geoffroy Yahoue, Romuld Victoir Adjovi, Lokossou Antoine, Juvenal Ahouandjinou, Nsele Kisambu Grace, Bruno Adjottin, Lamine Baba-Moussa, Razaki Osse, Martin Akogbéto, Germain Gil Padonou	*Insecticide resistance in Aedes aegypti and Aedes albopictus in southern Benin: quantification, investigation of kdr mutations, and detection of detoxification enzyme activity*	doi.org/10.1186/s41182-025-00875-6	2024(3.5)	1
RABiotech	Tropical Medicine and Health	Isidore Hoyochi, Germain Gil Padonou, Tatchémè Filémon Tokponnon, Alphonse Keller Konkon, David Mahouton Zoungbédji, Albert Sourou Salako, Brice Dangnon, A. Virgile Onésime Akowanou, Luc Olivier Sintondji, Edmond Sossoukpe, Lamine Baba-Moussa, Martin Codjo Akogbéto	*Influence of the physicochemical characteristics of mosquito breeding sites in domestic environments on the distributions of Anopheles, Aedes and Culex mosquitoes in Benin*	doi.org/10.1186/s41182-025-00786-6	2024(3.5)	1
RABiotech	Tropical Medicine and Health	Steve Zinsou Hougbe, Arthur Sovi, Koffi Koumodji, Minassou Juvénal Ahouandjinou, Zul Kifl Affolabi, Linda Towakinou, Saïd Chitou, Andil Agbo-Ola, Filémon Tokponnon, David Mahouton Zoungbédji, Hermann Sagbohan, Casimir Kpanou, Germain Gil Padonou, Lamine Baba-Moussa, Razaki A. Ossé	*Susceptibility of Anopheles gambiae s.l. to the neonicotinoid insecticide clothianidin in eighteen sites located along the south–north transect of Benin*	doi.org/10.1186/s41182-025-00694-9	2024(3.5)	1
RABiotech	Veterinary Medicine and Science	Tchilabalo Parobali, Hai Lin, Justin Adébayo Hounkpevi, Benjamin Adjei-Mensah, Oumbortime N'nanle, Simplice Damintoti Karou, Koukou Tona, Kwashie Eklu-Gadegbeku	*Influence of Citrus sinensis Seeds on the Growth Performance, Ceca Bacterial Population and the Immune System Response of Broiler Chickens*	doi.org/10.1002/vms3.70553	1.776	1
RABiotech	World Development Perspectives	Lloyd J.S. Baiyegunhi, Linley Chiwona-Karltun	*Livelihood strategies and NTFP utlisation among rural female-headed households in Limpopo Province, South Africa*	doi.org/10.1016/j.wdp.2026.100765	2024(2.3)	1
RWA:01	Advanced NanoBiomed Research	Theoneste Muyizere; Julien Milon Essola; Eric Nyirimigabo; Janvier Mukiza; Jean Felix Mukerabigwi	*Endogenously triggered dnazyme-based nanostructures for gene-combined therapy*	doi.org/10.1002/anbr.202500044	2024(4.4)	1
RWA:01	Biomolecules	Wasim Sajjad; Yongqiang Xiong; Waqas Ahmad; Debabrata Dutta; Jean Felix Mukerabigwi; Muhizi Theoneste, Teng Lu; Zhishen Ge	*Multifunctional bacterial cellulose hydrogel membranes with antibacterial and tissue-regenerating properties for treatment of infected diabetic wound*	doi.org/10.1021/acs.biomac.5c00841	6.064	1
RWA:01	Journal of Chemical Education	Zici Wang, Jiaying Qu, Huiying Zhong, Jean Felix Mukerabigwi, Jing Zeng, Yuhang Wang, Yu Cao	*An enhanced undergraduate experiment on chitosan purification and hydrogel preparation using a safer cross-linking approach*	pubs.acs.org/doi/abs/10.1021/acs.jchemed.5c00283	3.208	1

RWA:01	Journal of Colloid and Interface Science	Shuo Liu, Yufan Zhang, Lin Hao, Wei Shen, Anaclet Nsabimana, Shigang Shen	*Enhanced oxygen evolution reaction performance of Cr-CoFe-layered double hydroxide via the synergistic roles of Fe etching, Cr doping, and anion intercalation*	doi.org/10.1016/j.jcis.2025.137449	9.965	1
RWA:01	Materials Letters	Hualong He, Yifeng Wang, Enqi Zhong, Jiaying Qu, Jean Felix Mukerabigwi, Yu Cao	*Development of silicon carbide and nanodiamond composite material electrode*	doi.org/10.1016/j.matlet.2025.138054	3.574	1
RWA:01	Sensors and Actuators B: Chemical	Jiaying Qu; Zhuoxia Li; Huiying Zhong; Li Peng; Didi Chen; Min Li; Jean Felix Mukerabigwi; Yu Cao	*ND-TPE-COOH: Protein-activated fluorescent diagnostic probes for rapid identification and resection of liver tumors*	doi.org/10.1016/j.snb.2025.138094	9.221	1
UGA:01	Science of The Total Environment	M Natuhwera, P Ssebugere, K Arinaitwe, P Oswald, E Mubiru, F Nantaba, Z Shehu, K Urban, L Khvalbota, NA Alygizakis, Nikolaos S. Thomaidis, D Triantafyllos Gerokonstantis, GW Atwoki Nyakairu, R Tshimanga Muamba, I Špánik	*Emerging organic pollutants in sediments from Lake Victoria: Spatial patterns, sources and ecological risks*	doi.org/10.1016/j.scitotenv.2025.181328	10.754	2
UGA:02	Discover Catalysis	Collins Letibo Yikii, Simon Bbumba, Emmanuel Tebandeke, Moses Kigozi, Ibrahim Karume, Betty Naziriwo, George William Nyakairu, Solomon Yiga, John Ssekatawa, Joan Talibawo, Geofrey Kaddu Muhammad Ntale	*Application of carbon dioxide as a soft oxidant and promoter in metal-catalyzed oxidation reactions*	doi.org/10.1007/s44344-025-00019-2	NA	NA
UGA:02	Discover Materials	Emmanuel Tebandeke, Ruth Mbabazi, Moses Kigozi, Patrick Mulindwa, Steven Allan Nyanzi and Betty Naziriwo	*Carbon dioxide derived poly (propylene carbonate-propylene oxide) as electrode material for energy storage*	doi.org/10.1007/s43939-025-00490-6	2024(5.1)	1
ANCAP/ Uganda	Journal of Environmental Ecology	Mbugua, J. K., Mbugua, M. N., Mbugua, L. M., & Andati, G. W.	*The role of Biochar in sustainable wastewater management in Kenya: current practices, challenges, and future prospects*	doi.org/10.64229/c4qpb212	NA	NA
ANCAP/ Uganda	Journal of Hazardous Materials Advances	Kagoya, A., Arinaitwe, K., Odongo, S., Sifuna, D., Matovu, H., Matsiko, J., ... & Ssebugere, P	*Anthropogenic footprint and ecological risk assessment of organochlorine pesticides and polychlorinated biphenyls in sediments from Lake Victoria, East Africa*	doi.org/10.1016/j.hazadv.2025.100979	2024(7.7)	1
ZIM:01	BMC Complementary Medicine and Therapies	Sigcono Mlilo, Samson Sibanda, Simbarashe Sithole, Stanley Mukanganyama & Yogehkumar S. Naik	*Evaluation of the antiproliferative, cytotoxic and phytochemical properties of Zimbabwean medicinal plants used in cancer treatment*	doi.org/10.1186/s12906-025-04883-1	2.838	2
ZIM:01	BMC Complementary Medicine and Therapies	Simbarashe Sithole, Paul Mushonga, Matthias Heydenreich, Cephas Mawere & Stanley Mukanganyama	*Antiproliferative activities of phytochemicals isolated from the leaves of Dolichos kilimandischaricus (Harms) ex Taub. (Fabaceae) on Jurkat and HL-60 leukemic cells*	doi.org/10.1186/s12906-025-04977-w	2.838	2
ZIM:02	Journal of Agricultural Chemistry and Environment	N. Basopo	*Inhibition and Restoration of Esterase Activity in Freshwater Snails after Exposure to the Pesticides; Profenofos, Carbofuran, and Thiamethoxam*	10.4236/jacen.2025.142016		0
ZIM:02	Physics and Chemistry of the Earth Parts A-C	D. Tapfuma, D. Mwembe, Y. Naik	*Non-lethal method for the assessment of bioavailable metals in aquatic ecosystems surrounding ASGM activity*	10.1016/j.pce.2025.103874	3.311	1

2.5.2 Mathematics publications

Table 9. Summary by region of publication data for the mathematics programme in 2025. The number of publications (Publ.) in scientific journals is specified to those with and without Thomson Reuters (TR) impact factors (IF) or/and Norwegian Centre for Research Data (NCDR) ranking (see explanation in the first paragraphs of this appendix), and whether ISP funding was acknowledged. Three publications did not report whether any acknowledgement was given to Sida/ISP.

Publication category	Africa		Asia		Latin America		Total	
ISP acknowledged	yes	no	yes	no	yes	no	yes	no
Publ. in Scientif. Quality J. (TR or/and NCRD ranked)	8	70	0	0	0	0	8	70
Publ. in Other Scientific Journals ("unranked")	4	54	0	0	0	0	4	54
Publ. in Journals by "predatory publishers"	0	24	0	0	0	0	0	24
Books, Chapters, Popular Publ., Technical Reports, etc.	1	2	0	0	0	0	1	2
Total number of publications (yes/no)	13	150	0	0	0	0	13	150
Grand total	163		0		0		163	

List of Mathematics publications. Journals marked in red occur on Cabells Blacklist, indicating a "predatory", non-scientific publication venue.

Group/ Network	Journal	Author(s)	*Title*	DOI	WoS, 1 yr IF 2021	Norwegian Register
BURK:01	Abstract and Applied Analysis	Wendpanga Alain Tapsoba, Yacouba Simpore and Oumar Traore	*Mathematical modeling and optimal control of the dynamics of an internal radicalization process*	doi.org/10.1155/aaa/9956552	N/A	1
BURK:01	Advances and Applications in Discrete Mathematics	12- J. Kabore, M. E. Charkani	*Construction of DNA codes using ϑ-skew cyclic codes over F4 + vF4*	10.17654/0974165825047	N/A	1
BURK:01	American Journal of Applied Mathematics	Gilbert Tapsoba, Stéphane Aimé Metchebon Takougang, Désiré Ouédraogo	*Multi-criteria decision making using KEMIRA-sort method for assessing the suitability of wild animals to promote sustainable management of a wildlife farm*		N/A	no
BURK:01	Annals of Communications in Mathematics	63- Rosaire Ouedraogo, Ali Traore, Hamadoum Dicko	*A theoretical assessment of the effects of hospital resources on a host-vector disease*	doi.org/10.62072/acm.2025.080112	N/A	no
BURK:01	Annals of Mathematics and Computer Science	3- I. Nyanquini, B. Moussa, S. Ouaro	*Nonlocal discrete problem involving the anisotropic p(k)-capillarity differential operator*	doi.org/10.56947/amcs.v28.522	N/A	no
BURK:01	Annals of the University of Oradea – Mathematics Fascicle	B. Moussa, I. Nyanquini, S. Ouaro	*Nonlinear discrete Neumann problem involving p(k)-Laplacian type operator*		N/A	0
BURK:01	Applicable Nonlinear Analysis	B. Moussa, I. Nyanquini, S. Ouaro	*Multiplicity of solutions for the discrete Robin problem involving the p(k)-Laplace Kirchhoff type equations*	doi.org/10.69829/apna-025-0202-ta04	N/A	1
BURK:01	Applications of Mathematics	Hamadoum Dicko, Ali Traoré, Rosaire Ouedraogo	*Analysis and optimal control of a fractional tuberculosis model*	doi.org/10.21136/AM.2025.0075-25	0,7	1
BURK:01	Applied Set-Valued Analysis and Optimization	Diop, M. A., Elghandouri, M., & Ezzinbi, K.	*Optimal control of general impulsive VS-EIAR epidemic models with application to Covid-19*	*10.23952/asvao.7.2025.3.05*	N/A	no
BURK:01	Asia Pacific Journal of Mathematics	Boukary Tai, Mohamed Congo, Marie Françoise Ouedraogo, Arouna Ouedraogo	*On the boundedness of periodic fourier integral operators in lebesgue spaces with variable exponent*	10.28924/APJM/12-9	N/A	no
BURK:01	Asia Pacific Journal of Mathematics	Siaka Kambele, Safimba Soma, Aboudramane Guiro	*Optimal control of a dynamic seirds model for the spread of infectious diseases*	10.28924/APJM/12-2	N/A	no
BURK:01	Australian Journal of Mathematics Analysis and Applications	Abdou Wahidi Bello, Jamal Adetola, Djibo Moustapha, Saley Bisso	*A posteriori error analysis for a pollution model in a bounded domain of the atmosphere*		N/A	1
BURK:01	Boletim da Sociedade Paranaense de Matemática	Mohamed Badr BENBOUBKER, Urbain TRAORE	*Entropy solutions for nonlinear parabolic problems involving the generalized p(x)-Laplace operator and L 1 data*	doi.org/10.5269/bspm.64565	N/A	0
BURK:01	Canadian Journal of Mathematics	Safimba Soma, Ibrahime Konaté, Adama Kaboré	*Diffusive convective elliptic problem in variable exponent space and measure data*	dx.doi.org/10.4153/S0008414X24001196	0,7	1
BURK:01	Canadian Journal of Mathematics	Soma Safimba, Kambélé Siaka, Guiro Aboudramane	*Global existence of a weak solution for a reaction-diffusion system in a porous medium with membrane conditions and mass control*	dx.doi.org/10.4153/S0008414X24000737	0,7	1
BURK:01	Creative Mathematics and Informatics	Camara, Bekaye; Sene, Moustapha; Djitte, Ngalla	*A new Mann-type iterative algorithm for maximal monotone mappings in classical Banach spaces*	doi.org/10.37193/CMI.2025.02.09	N/A	0

BURK:01	Electronic Journal of Mathematics	N. Rabo, U. Traoré, S. Ouaro	*Numérical analysis of a quasilinear parabolic problem with variable exponent*	10.47443/ejm.2024.056	N/A	no
BURK:01	European Journal of Pure and Applied Mathematics	Mahamane Saminou Ali, Ibrahima Hamidine, Abdoulay Tankary Banao, Mouhamadou Hassirou	*Characterization of three dimensional Jacobi- Poisson manifolds*	doi.org/10.29020/nybg.ejpam.v18i3.5743	1	1
BURK:01	Facta Universitatis. Series: Mathematics and Informatics	I. Konaté, S. Ouaro	*p(.)-Elliptic inclusion problem with natural growth term and Fourie type Boundary condition*	doi.org/10.22190/FUMI241214075K	N/A	no
BURK:01	Far East Journal of Dynamical Systems	Alassane Abdourahamane Abdoul Rachid, Abani Madaoua Ali, Djibo Moustapha, Saley Bisso	*Numerical approach for the identification of a parameter in a nonlinear diffusion problem*		N/A	1
BURK:01	Far East Journal of Dynamical Systems	Djibo Moustapha, Harouna Yagi Rabiou, Ousmane Toudou Issa, Saley Bisso	*Resolution and numerical simulation of a prey-predator model with individual migration*	10.17654/0972111825009	N/A	1
BURK:01	Filomat	M. B. Benboubker, H. Benkhalou, H. Hjiaj, S. Ouaro	*Existence of solutions for nonlinear degenerate elliptic equations with L^{m}-data and Neumann boundary condition*	*doi.org/10.2298/FIL2516553B*	0,9	1
BURK:01	Global Journal of Advanced Research on Classical and Modern Goemetries	Mahamane Saminou Ali, Ali Zakary Dan Azoumi, Mouhamdou Hassirou	*Totally ombilic and totally goedesic hpersurfaces of a silver-Riemann manifolds*		N/A	no
BURK:01	Gulf Journal of Mathematics	Mohamed Bance, Safimba Soma	*On uniqueness of local entropy solution of a convection-diffusion type integro-differential equation*	doi.org/10.56947/gjom.v19i2.2660		1
BURK:01	International Journal of Advances in Applied Mathematics and Mechanics	YAYÉ ARBI Ismaël, OUSMANE TOUDOU Issa, HASSIROU Mouhamadou	*Finsler manifolds with applications in fluid flow mechanics*		N/A	no
BURK:01	International Journal of Advances in Applied Mathematics and Mechanics	H. B. Dan Tchidadé, I. Hamidine, M. S. Ali, M. Hassirou	*Helicoidal surfaces in 3-dimensional Lorentz-Minkowski space satisfying the condition Δ II G = ƒ (G + C)*		N/A	no
BURK:01	International Journal of Advances in Applied Mathematics and Mechanics	TAHIROU ABOUBACAR Haboubacar, DJIBO Moustapha, TRAORE Aboubakari, SALEY Bisso	*Study and numerical resolution of a temperature control problem in a climate model*		N/A	no
BURK:01	International Journal of Applied and Computational Mathematics	Temfack, D., Tsanou, B., Lubuma, J., & Diaby, M	*A sex-structured mathematical model of mosquito infection with Microsporidia MB: Model reduction and release strategies*	doi.org/10.1007/s40819-025-01899-6	N/A	1
BURK:01	International Journal of Mathematics And its Applications	Mahamane Saminou Ali, Ali Zakary Dan Azoum, Mouhamdou Hassirou	*A class of ligthlike hypersurface of meta-metallic pseudo-Riemannian manifolds*		N/A	no
BURK:01	International Journal of Mathematics and Mathematical Sciences	Boulkhairy Sy, Abass Sow, Cheikh Seck	*A new approach to the study of the existence and uniqueness of mild solutions for an evolving system by using fractional derivatives in the deformable sense*	doi.org/10.1155/ijmm/2249500	1,1	1
BURK:01	International Journal of Numerical Methods and Applications	I. Ly, T. Dabré and B. Bella	*Nonregular boundary value problems with a parameter*	10.17654/0975045225002	N/A	1
BURK:01	International Journal of Numerical Methods and Applications	DJIBO Moustapha, Badjo Kimba Abdoul Wahid, ABANI MADAOUA Ali, SALEY Bisso	*Pgd method for passive scalar transport in a viscous fluid*	10.17654/0975045225014	N/A	1
BURK:01	International Journal of Numerical Methods and Applications	74- I. Ly, M. Ouédraogo, B. Bella and T. Ouédraogo	*Removable sets for the wave equations in terms of Hausdorff measure*	10.17654/0975045225004	N/A	1
BURK:01	Journal of Applied and Pure Mathematics	Hamadoum Dicko, Rosaire Ouedraogo, Ali Traore	*Analysis of a co-infection model considering the influence of information dynamics*	doi.org/10.23091/japm.2025.331	N/A	no

BURK:01	Journal of Applied and Pure Mathematics	KONANE, V. F, BALMA, B	*Mean (μ, v)-pseudo almost periodic solutions of class r under the angle of measure theory to some stochastic evolution equations*	doi.org/10.23091/japm.2025.019	N/A	no
BURK:01	Journal of Applied Mathematics	Samaké, Mahamadou Alassane, Amadou Mahamane	*A numerical framework for pollutant transport in shallow-water flows: application to the Niger River in Bamako*	doi.org/10.1155/jama/6702536	1,3	1
BURK:01	Journal of Applied Mathematics and Computing	Hamadoum Dicko, Ali Traoré	*Analysis of tuberculosis model with the impact of hospital resources*	doi.org/10.1007/s12190-024-02356-1	2,7	1
BURK:01	Journal of Contemporary Applied Mathematics	DJIBO Moustapha, YANOUSSA MAMANE Bassirou, TRAORE Aboubakari, SALEY Bisso	*Simulation of an age-structured optimal harvest control model*	doi.org/10.62476/jcam.151.12	N/A	0
BURK:01	Journal of Geometry and Graphics	Mahamane Saminou Ali, Ibrahima Hamidine, Issa Ousmane Toudou and Mouhamadou Hassirou	*Poisson structures compatible with the metric of the three-dimensional walker manifold*		N/A	no
BURK:01	Journal of Mathematics	Ali Traore, Fourtoua Victorien Konane	*On the dynamics of a SEIHR model with delays in diagnosis and a class of general incidence functions*	doi.org/10.1155/jom/8843842	1,3	1
BURK:01	Journal of Nonlinear Evolution Equations and Applications	Djendode Mbainadji, Issa Zabsonre	*Square-mean pseudo almost automorphic Solutions of class r in the α-norm under the light of measure theory*		N/A	no
BURK:01	Journal of scientific and Engineering Research	Kruoch Gael, DJIBO Moustapha, YAHAYA ALASSANE, Mahamane Nouri, SALEY Bisso	*Optimal Control of An Atmospheric Pollution Model*		N/A	no
BURK:01	JP Journal of Algebra, Number Theory and Applications	Savadogo Souleymane, Konkobo Amido, Ouattara Moussa	*Evolution algebras satisfying degree four identities not implied by commutativity and with no unit element*	*doi.org/10.17654/0972555525024*	N/A	no
BURK:01	Le Matematiche	M. Niang., M. P. Ly, A. A. Ndiaye and Diop, M. A.,	*Controllability of nonautonomous measure driven integrodifferential evolution equations with nonlocal conditions*	doi: 10.4418/2025.80.2.6	N/A	1
BURK:01	Malaya Journal of Matematik	SABA, D., I. OUEDRAOGO, and G. BAYILI	*Rational stabilization of the multidimensional wave equation with dynamical control and time-varying delay*	*http://doi.org/10.26637/mjm1302/003*	N/A	no
BURK:01	Matematicki Vesnik (Mat. Vesnik)	Y. Ouédraogo, B. Koné, S. Ouaro	*Multiple homoclinic solutions for the discrete $p(X)$-Laplacian problems of Kirchhoff type*		0,3	1
BURK:01	Mathematics and Computers in Simulation	R. Seck, D. Ngom, B. Ivorra, A.M. Ramos	*An age-structured mathematical model for studying malaria transmission dynamics: applications to some areas of Senegal*		4,4	1
BURK:01	Mathematics Letters	Hamidou Ouedraogo, Wendkouni Ouedraogo, Desire Ouedraogo, Boureima Sangare	*A circular spatial-diffusion mathematical model to analysis hopf-turing bifurcation in plankton population under the toxin control variation in 2D*	*10.11648/j.ml.20251101.12*	N/A	no
BURK:01	Memoirs on Differential Equations and Mathematical Physics	N. Sawadogo, S. Ouaro	*Multivalued nonlinear Dirichlet Boundary p(u)-Laplacian problem*		0,5	1
BURK:01	Optimal Control Applications and Methods	No data	*Optimal control of sediment deposition in shallow waters.*	doi.org/10.1002/oca.3269	1,5	1
BURK:01	Research in Mathematics	Garba, C. A., Ndiaye, O., Hmoyed, H., Didiya, M. D., & Diop, M. A	*Impulsive integrodifferential stochastic equations with nonlocal conditions: Solvability and optimal controls*	doi.org/10.1080/27684830.2025.2471710	1,1	no
BURK:01	Systems & Control Letters	Mamadou Pathe LY, Ravikumar Kasinathan, Ramkumar Kasinathan, Dimplekumar Chalishajar, Mamadou Abdoul Diop	*Approximate controllability of nonlocal stochastic integrodifferential system in Hilbert spaces*	doi.org/10.1016/j.sysconle.2025.106122	2,5	2

CoRE-Math MAK	Agricultural Systems	Nampeera, E. L., Kayondo, H. W., Sebikeje, T. M., Ddumba, G., Mubiru, S., & Gabriel, D.	*Farmers' pest management strategies in oil palm production in Lake Victoria Islands, Uganda*	doi.org/10.1016/j.agsy.2025.104354	6,1	2
CoRE-Math MAK	Asia-Pacific Journal of Risk and Insurance	Afazali, Z., Støve, B., Omala, S. K., & Kasozi, J.	*Modeling insurance claim count dynamics using regime-switching INGARCH model*	dx.doi.org/10.2139/ssrn.5225400	N/A	0
CoRE-Math MAK	BMC chemistry	Bbumba, S., Ssekatawa, J., Karume, I., Tebandeke, E., Kigozi, M., Yiga, S., ... & Ntale, M.	*Prediction and optimization of Rhodamine B removal from water using metal-organic frameworks: RSM-CCD, ANN, non-linear kinetics, and isotherm studies*	doi.org/10.1186/s13065-025-01590-3	4,6	1
CoRE-Math MAK	Dependence Modeling	Afazali, Z., Gundersen, K., Kasozi, J., Omala, S. K., & Støve, B.	*Dependence modeling in general insurance using local Gaussian correlations and hidden Markov models*	doi.org/10.1515/demo-2025-0014	0,8	1
CoRE-Math MAK	Engineering Letters	Mango, J. M., Katende, R., & Kasumba, H.	*Adaptive error-bounded hierarchical matrix compression for efficient and accurate physics-informed neural networks*		0,6	0
CoRE-Math MAK	Indagationes Mathematicae-New Series	Batte, H., Ddamulira, M., Kasozi, J., & Luca, F.	*Multiplicative independence in the sequence of k-generalized Lucas numbers*	doi.org/10.1016/j.indag.2024.09.002	0,8	1
CoRE-Math MAK	Insurance Markets and Companies	Bett, N., Kasozi, J., & Ruturwa, D.	*Hierarchical forecasting of causes of death with trend breaks in mortality modeling: Kenyan case*	dx.doi.org/10.21511/ins.16(1).2025.02	N/A	0
CoRE-Math MAK	Modeling Earth Systems and Environment	Muhumuza, C., Mugisha, J. Y., Mayambala, F., & Kitayimbwa, J.	*Seasonal dynamics and optimal control analysis of fowlpox disease*	doi.org/10.1007/s40808-025-02292-4	2,9	1
CoRE-Math MAK	Periodica Mathematica Hungarica	Herbert Batte, Mahadi Ddamulira, Juma Kasozi & Florian Luca	*On a problem of Pillai involving S-units and Lucas numbers*	doi.org/10.1007/s10998-025-00649-x	0,5	1
CoRE-Math MAK	Physica A: Statistical Mechanics and its Applications	Namugera, F., Katende, R., Kurama, O., & Magero, J. M.	*Long-range epidemic spreading with aging in structured networks*	doi.org/10.1016/j.physa.2025.130841	3,1	1
CoRE-Math MAK	Scientific African	Walle, Y., Mugisha, J. Y., Melese, D., & Tessema, H.	*The impact of movement and vaccination on Peste des Petits Ruminants disease spread between two different agroecological zones.*	doi.org/10.1016/j.sciaf.2025.e02532	3,3	1
CoRE-Math MAK/ EAALG	Journal of Algebra and its Applications	Kimuli P., I., Ssevviiri D.,	*Modules with reduced endomorphism rings*	doi.org/10.1142/S0219498826500428	N/A	1
CoRE-Math MAK/ EAALG	Quaestiones Mathematicae	Ssevviiri, D., & Kyomuhangi, A.	*Nil modules and the envelope of a submodule.*	doi.org/10.2989/16073606.2025.2536068	0,8	1
CoRE-Math UDSM	Abstract and Applied Analysis	Sosoma, Innocent, Eunice Mureithi, and Nyimvua Shaban Mbare	*Mathematical modeling of brucellosis transmission dynamics and its age-specific applications: A case study of Tanzania*	doi.org/10.1155/aaa/6552487	N/A	1
CoRE-Math UDSM	Business Management Review	Grayson Kisinga; Severine Kessy; Mashaka Mkandawile	*The influence of ICT adoption on tax revenue: The mediation role of economic growth*	10.1007/s43069-025-00567-1	N/A	no
CoRE-Math UDSM	Communications in Statistics: Case Studies, Data Analysis and Applications	Samya Suleiman; Karl Lundengård; John Andongwisye; Emmanuel Evarest	*Modelling and forecasting time-dependent mortality rate in Tanzania*	10.1080/23737484.2025.2534886	N/A	no

CoRE-Math UDSM	Comparative Immunology, Microbiology and Infectious Diseases	Sosoma, Innocent, Eunice Mureithi, Guttorm Alendal, Zachariah Makondo, and Nyimvua Shaban Mbare	*A data-driven dynamical system model for assessing targeted interventions against brucellosis in Tanzania*	10.1016/j.cimid.2025.102324	N/A	1
CoRE-Math UDSM	Heliyon	Leandry, Leonce, Egbert Mujuni, Morten Brun, Eunice W. Mureithi, Mbazi Senkoro, and Saidi Mfaume	*Modelling the evolutionary dynamics of drug resistance in tuberculosis using hypercube and Baum-Welch algorithm inference: a case study of Tanzania*	10.1016/j.heliyon.2025.e42781	3,6 (2024)	1
CoRE-Math UDSM	International Journal of Mathematics and Mathematical Sciences	Slaa, Peter Masong, Santosh Kumar, and Marco Mpimbo.	*On some subspace codiskcyclic operators in banach spaces*	10.1155/ijmm/5543431.	1,1	1
CoRE-Math UDSM	Nonlinear Science	Abdul-rahman Mumbu, Goodluck Mlay, Guttorm Alendal, Nyimvua Shaban	*A deterministic modeling dynamics of tuberculosis infections with PAWN and elementary effects sensitivity analysis*	doi.org/10.1016/j.nls.2025.100052	N/A	no
CoRE-Math UDSM	Operations Research Forum	Jean Pierre II Kouenkam; Joseph Mbang; Gilbert Chendjou; Herieth Rwezaura; Jean Tchuenche	*Modeling the impact of treatment on hepatitis B burden: Mathematical analysis and simulation*	10.1016/j.cimid.2025.102324	N/A	1
CoRE-Math UDSM	Research in Mathematics	Bihiye, Zacharia Mtemba, Morten Brun, Marco Mpimbo, and Elizabeth Mrema	*On interleaving distance as a complete metric for bifiltrations in R n*	10.1080/27684830.2025.2573572	1,1	no
CoRE-Math UDSM	Research in Mathematics	Elisamehe, Bright, Expeditho Laurent Mtisi, Augustino Isdory Msigwa, and Nyimvua Shaban Mbare	*Modelling the impact of temperature and rainfall on the transmission dynamics of early blight disease in tomatoes*	doi.org/10.1080/27684830.2025.2579386	1,1	no
CoRE-Math UDSM	Research in Mathematics	Janes, Faustine, Marco Mpimbo, and Makungu Mwanzalima.	*On theoretical construction of bifiltrations*	doi.org/10.1080/27684830.2025.2474773	1,1	no
CoRE-Math UDSM	Scientific African	Leonce Leandry, Egbert Mujuni, Eunice W. Mureithi, Morten Brun, Mary Mayige	*Investigating the evolutionary dynamics of second-line Mycobacterium tuberculosis drug resistance in Tanzania using hypercubic modelling and the Baum–Welch algorithm*	10.1016/j.sciaf.2025.e02627	3,3	1
CoRE-Math UDSM	Scientific African	Mumbu, Abdul-rahman, Goodluck Mlay, Mary Mayige, and Nyimvua Shaban.	*Modeling the transmission dynamics of Two-strain TB with drug-sensitive and drug-resistant in Tanzania: A fractional order approach*	10.1016/j.sciaf.2025.e02731.	3,3	1
CoRE-Math UDSM	Tanzania Journal of Engineering and Technology	Ikuja, Fatuma S., Idrissa S. Amour, and Abdi T. Abdalla.	*Affordability and usability of digital learning resources in higher education: a case of online mathematics tutorials for engineering students at the University of Dar es Salaam*	doi.org/10.65085/2619-8789.1050	N/A	1
CoRE-Math UDSM	Tanzania Journal of Science	Mohamed, Mohamed H., and Makungu J. Ng'oga	*Evaluating weather research and forecasting model in simulating march-may rainfall in Tanzania: Implications of selecting parameterization schemes*	doi.org/10.65085/2507-7961.1053	N/A	no
CoRE-Math UDSM	Tanzania Journal of Science	Judith R. Pande; David Koloseni; Septimi Kitta	*FAHP-TOPSIS model in ranking critical success factors of e-learning: A comparative analysis of normalization methods*	*10.65085/2507-7961.1048*	N/A	no
CoRE-Math UDSM	Tanzania Journal of Science	Shabani Makwaru; Raji, Marco Mpimbo, Yahaya Danjuma	*Fixed point results for ϐ-ψ-φ contractive mappings in $\mathcal{F}$-metric spaces with l-fuzzy mappings*	10.4314/tjs.v51i1.5	N/A	no
CoRE-Math UDSM	Tanzania Journal of Science	Ntagalinda, Elimercy, Eunice Mureithi, Theresia Marijani, and Guttorm Alendal.	*Mathematical modeling of antimicrobial resistance of typhoid fever incorporating public health education*	10.4314/tjs.v51i2.13.	N/A	no

CoRE-Math UDSM	Tanzania Journal of Science	Janeth Michael, Herieth Rwezaura, Goodluck Mlay, Nyimvua Shaban Mbare	*Modeling the effects of screening, vaccination, treatment, and non-pharmaceutical controls on leptospirosis transmission dynamics*	10.65085/2507-7961.1052	N/A	no
CoRE-Math UNZA	African Journal of Law, Political Research and Administration	CN Mayungo, T Chowa	*Integration of Climate Change Risk Management into Corporate Strategy: A Case of the Disaster Management and Mitigation Unit (DMMU) In Zambia*	10.52589/AJLPRA-DAM5OECC	N/A	no
CoRE-Math UNZA	AIMS Mathematics	S Nadarajah, V Nawa	*A compendium of expressions for dependence measures of bivariate copulas*	dx.doi.org/%2010.3934/math.2025995	1,8	1
CoRE-Math UNZA	Anais da Academia Brasileira de Ciências	V Nawa, S Nadarajah	*Closed-form estimators for the inverse Nakagami distribution*	doi.org/10.1590/0001-3765202520240838	1,1	1
CoRE-Math UNZA	College Mathematics Journal	V Nawa, S Nadarajah	*Fisher Information is Invariant Under One-to-One Transformations*	doi.org/10.1080/07468342.2024.2385072	N/A	1
CoRE-Math UNZA	International Journal of Advances in Applied Mathematics and Mechanics	A Katakwe, D Mukonda, LK Matindih, T Kafunda, S Jere, K Davy	*Existence and uniqueness of solutions of system of linear equations and non-linear differential equations using modular b-metric integral type contractions.*		N/A	1
CoRE-Math UNZA	International Journal of Science, Technology and Society	J Pamba, ID Tembo	*On fixed point results of Suzuki-type contractions on controlled metric spaces with applications*	doi.org/10.11648/j.ijsts.20251305.14	N/A	no
CoRE-Math UNZA	Journal of Computational and Applied Mathematics	V Nawa, S Nadarajah	*Logarithmic method of moments estimators for the fréchet distribution*	doi.org/10.1016/j.cam.2024.116293	2,6	1
CoRE-Math UNZA	Mathematical Sciences	S Nadarajah, V Nawa, AA Umar	*Exact expressions for dependence measures of bivariate extreme value copulas*	doi.org/10.57647/mathsci.2025.1903.12	2,3	1
CoRE-Math UNZA	Sankhya A	S. Nadarajah and V. Nawa	*On the moments of the nonnegative adjusted estimator of squared multiple correlation*	doi.org/10.1007/s13171-025-00407-8	0,5	1
CoRE-Math UoN	Applied Mathematical Sciences	Idah Orowe	*Use of machine learning models to predict viral suppression and associated factors*	doi.org/10.12988/ams.2025.919280	N/A	0
CoRE-Math UoN	Far East Journal of Mathematical Sciences	Faith M. Mwangi, Benard M. Nzimbi, Stephen W. Luketero	*Geometric and differential invariants of numerical ranges under unitary equivalence*	doi.org/10.17654/0972087126002	N/A	no
CoRE-Math UoN	Global Epidemiology	Daniel M. Mwanga, Isaac C. Kipchirchir, George O. Muhua, Charles R. Newton, Damazo T. Kadengye	*Modeling the determinants of attrition in a two-stage epilepsy prevalence survey in Nairobi using machine learning*	doi.org/10.1016/j.gloepi.2025.100183		1
CoRE-Math UoN	Mathematical Biosciences	Vincent Nandwa Chiteri, Victor Ogesa Juma, James Mariita Okwoyo, Stephen Kibet Moindi, Anotida Madzvamuse, and Kudzanayi Zebedia Mapfumo	*Exploring the spatio-temporal dynamics in activator-inhibitor systems through a dual approach of analysis and computation*	doi.org/10.1016/j.mbs.2025.109449	1,8	1
CoRE-Math UR	African Journal of Biomedical Research	Angelique Dukunde, Jean Marie Ntaganda, Juma Kasozi, and Joseph Nzabanita	*Prediction of Hypertension, Tobacco use, Overweight, Obesity in Rwanda using Hamiltonian Monte Carlo Sampling and Gibbs Sampling Method*	doi.org/10.53555/AJBR.v27i4S.4906	N/A	1
CoRE-Math UR	BMC Public Health	Francois Niragire, Innocent Ngaruye, Joseph Nzabanita et.al	*Spatio-temporal variation of child stunting and associated risk factors in Rwanda*	doi.org/10.1186/s12889-025-22335-w	3,6	1
CoRE-Math UR	IEEE Access	Ngong'ho Bujiku Sende, Snehanshu Saha, Leon Ruganzu, and Saibal Kar	*Prediction of multidimensional poverty status with machine learning classification at household level: Empirical evidence from Tanzania*	doi.org/10.1109/ACCESS.2025.3537807	3,6	1

CoRE-Math UR	IEEE Access	Ngong'ho Bujiku Sende, Snehanshu Saha and Leon Fidele Ruganzu Uwimbabazi	*Spatial distribution of poverty clusters and its prediction algorithms: A visual analytics approach to understanding the disparities of poverty across zones*	doi.org/10.1109/ACCESS.2025.3575577	3,6	1
CoRE-Math UR	International Journal of Applied and Computational Mathematics	Jean Pierre Ngendahayo, Froduald Minani, Johan Thim and Fredrik Berntsson	*Convergence analysis of iterative tikhonov regularization applied to an inverse heat conduction problem*	link.springer.com/article/10.1007/s40819-025-01972-0	N/A	1
CoRE-Math UR	International journal of mathematical sciences and optimization: Theory & applications	Nyirishema Etienne, Ngarmadji, Ntaganda Jean Marie	*Testing Homeostasis using the designed Matlab GUI of cardiovascular-respiratory system mathematical model*	doi.org/10.5281/zenodo.	N/A	no
CoRE-Math UR	Journal of Cheminformatics	Areen Rasool, Jamshaid UI Rahman and Rongin Uwitije	*Enhancing molecular property prediction with quantized GNN models*	doi.org/10.1186/s13321-025-00989-3	5,7	1
CoRE-Math UR	Journal of Mathematical Analysis	Bosco Nyandwi	*Extending Pólya Shire's Theorem*	www.ilirias.com/jma/repository/docs/JMA16-3-3.pdf	0,4	1
CoRE-Math UR	Journal of Multivariate Analysis	Justine Dushimirimana, Joseph Nzabanira, and Ronald Waliaula Wanyonyim	*Test for a general trilinear hypothesis in the generalized growth curve model*	doi.org/10.1016/j.jmva.2025.105470	1,7	1
CoRE-Math UR	Journal of Statistical Computation and Simulation	Niyigena Jean de Dieu, Innocent Ngaruye, Joseph Nzabanita and Martin Singull	*Approximation of misclassification probabilities for quadratic classification of repeated measurements*	doi.org/10.1080/00949655.2025.2532003	1,2	1
CoRE-Math UR	Modelling Earth Systems and Environment	Abdul Mannan, Nimra Shoket, Jamshaid UI Rahman, and Rongin Uwitije	*Dyanamic analysis of ebola virus disease with non-linear incidence rate using morlet wavelet neural networks and hybrid optimization techniques*		2,9	1
CoRE-Math UR	Rwanda Journal of Engineering, Science, Technology, and Environment	Celestin Kurujyibwami, Mahara Isidore and Venuste Nyagahakwa	*Light-like parallel vector fields and Einstein's equations of gravity*	dx.doi.org/10.4314/rjeste.v7i2.8	N/A	no
CoRE-Math UR	Rwanda Journal of Engineering, Science, Technology, & Environment	Celestin Kurujyibwami, Mahara Isidore and Venuste Nyagahakwa	*Moving objects and moving clocks*	dx.doi.org/10.4314/rjeste.v7i2.2	N/A	no
CoRE-Math UR	Rwanda Journal of Engineering, Science, Technology, & Environment	Solange Mukeshimana, Justine Dushimirimana et al.	*On 1+3 covariant perturbation with Chaplygin-stiff fluid system in modified Gauss-Bonnet gravity*	dx.doi.org/10.4314/rjeste.v7i1.1	N/A	no
CoRE-Math UR	Rwanda Journal of Engineering, Science, Technology, & Environment	Venuste Nyagahakwa, Celestin Kurujyibwami, Beatrice Byukusenge and Gratien Haguma	*Sets with the Baire property in topologies defined from Vitali selectors on the real line*	dx.doi.org/10.4314/rjeste.v7i2.9	N/A	no
CoRE-Math UR	Rwanda Journal of Engineering, Science, Technology, & Environment	Jean de Dieu Mutima and Banzi Wellars	*Stochastic partial differential equations and their applications*	dx.doi.org/10.4314/rjeste.v7i2.4	N/A	no
CoRE-Math UR	Sankhya B	Niyigena Jean de Dieu, Innocent Ngaruye, Joseph Nzabanita and Martin Singull	*Moment-based misclassification probability for a quadratic classifier of growth curves using an edgeworth-type expansion*	link.springer.com/article/10.1007/s13571-025-00395-7	0,7	1
CoRE-Math UR	Scientific reports	Ahlem Ghouar, Alexis Habineza et al.	*Theoretical aspects and simulation with the application of a new two parameter distribution*	doi.org/10.1038/s41598-025-26965-3	3,9	1
CoRE-Math UR	Theoretical and Applied Climatology	John Bagiliko, David Stern, Denis Ndanguza and Francis Feehi Torgbor	*Validation of satellite and reanalysis rainfall products against rain gauge observations in Ghana and Zambia*	doi.org/10.1007/s00704-025-05462-7	2,7	1

CoRE-Math UR/ PDEAAP	Rwanda Journal of Engineering, Science, Technology, & Environment	Innocent Ngaruye, Joseph Nzabanita et.al	*The effect of meteorological factors on extreme covid-19 infection in Rwanda: The generalized additive extreme value modeling approach*	dx.doi.org/10.4314/rjeste.v7i1.8	N/A	no
EAALG	Bulletin of the International Mathematical Virtual Institute	T Abebaw, A Mamo, D Ssevviiri, Z Teshome	*On complete modules and torsion modules*	10.7251/BIMVI2601028A	N/A	no
EAALG	Communications in Algebra	Philly Ivan Kimuli	*Endo-reduced modules and the regularity property*	doi.org/10.1080/00927872.2025.2584415	0,6	1
EAALG	Communications in Algebra	V Fadinger, S Frisch, S Nakato, D Smertnig, D Windisch	*Primes and absolutely or non-absolutely irreducible elements in atomic domains*	doi.org/10.1080/00927872.2025.2586234	0,6	1
EAALG	Quaestiones Mathematicae	A. S Bamunoba and I. Ndikubwayo	*On the location of ratios of zeros of special trinomials*	doi.org/10.2989/16073606.2025.2547044	0,8	1
EAALG	Quarterly Journal of Mathematics	Brian Makonzi	*Deformations and simultaneous resolution of determinantal surfaces*	doi.org/10.1093/qmath/haaf044	0,5	1
ETH:01	Aequationes Mathematicae	Michael Ruzhansky and Markos Fisseha Yimer	*Levin-Cochran-Lee inequalities and best constants on homogeneous groups*	doi.org/10.1007/s00010-024-01143-4	0,7	1
ETH:01	Asymptotic Analysis	Erimyas Kefale Aboret, Tsegaye Gedif Ayele and Ahmed Mohammed	*Infinite Boundary Value Problems for the -Laplacian with Nonlinear Gradient Terms*	doi.org/10.1177/09217134251331667	0,9	1
ETH:01	Discrete Applied Mathematics	Mesfin Masre and Carl Johan Casselgren	*General degree-eccentricity index of unicyclic graphs of given order, girth and maximum degree*	doi.org/10.1016/j.dam.2025.02.017	1,1	1
ETH:01	East African Journal of Biophysical and Computational Sciences	Tseganesh Getachew Gebrehana and Hunduma Legesse Geleta	*Hilbert space of complex-valued harmonic functions in the unit disc*	doi.org/10.20372/s5wm6085	N/A	N/A
ETH:01	F1000 Research	Nibret Melese Kassahun, Berhanu Assaye Alaba, Yohannes Gedamu Wondifraw and Zelalem Teshome Wale	*Group structures and derivations on PMS-algebras*	10.12688/f1000research.159712.1	N/A	1
ETH:01	F1000 Research	Nibret Melese Kassahun, Berhanu Assaye Alaba, Yohannes Gedamu Wondifraw and Zelalem Teshome Wale	*On t-Derivations of PMS-algebras*	10.12688/f1000research.159711.1	N/A	1
ETH:01	Global Journal of Pure and Applied Mathematics	Mengistu Goa Sangago, Gezahegn Anberber Tadesse, Ronald Tshelametse, Bahru Tsegaye Leyew, and Habtu Zegeye Hailu	*Approximation of Common Fixed Points of Two Commuting Generalized Nonexpansive Mappings*	doi.org/10.28919/afpt/8547	N/A	1
ETH:01	Journal of Algebra and Related Topics	Biadiglign Asmare, Tilahun Abebaw, K. Venkateswarlu	*Strongly Weak Idempotent Nil-Clean Rings*		N/A	1
ETH:01	Journal of Algebraic Systems	Biadiglign Asmare, Tilahun Abebaw, K. Venkateswarlu	*Weak Idempotent Nil-Clean Rings*	doi.org/10.22044/JAS.2023.13177.1725	0,2	1
ETH:01	Journal of Applied Mathematics	Markos Fisseha Yimer	*Some New Integral Inequalities via Strong Convexity*	doi.org/10.1155/jama/6688424	1,3	1
ETH:01	Journal of Applied Mathematics	Mohammed Amare Mohammed, Berhanu Bekele Belayneh, Zelalem Teshome Wale and Gezahagne Mulat Addis	*The spectral space of H-fuzzy prime ideals in distributive join semilattices*	doi.org/10.1155/jama/5182947	1,3	1

ETH:01	Journal of Function Spaces	Mohammad Mazyad Hazzazi; Muhammad Nadeem; Muhammad Kamran; Muhammad Arshad; Samuel Asefa Fufa	*A unified approach to image recognition and cryptography via flexible weak inverse property quasigroups*	doi.org/10.1155/jofs/9426301	1,3	1
ETH:01	Journal of Function Spaces	Mohammad Mazyad Hazzazi, Muhammad Imran, Muhammad Nadeem, Muhammad Kamran, Samuel Asefa Fufa	*Approximation of algebraic curves in function spaces of topological sequences connected to specific simple graph families*	doi.org/10.1155/jofs/9982425	1,3	1
ETH:01	Journal of Mathematical Analysis and Applications	Erimyas Kefyalew Aboret, Tsegaye Gedif Ayele and Ahmed Mohammed	*Large solutions to p-Laplace equations with nonlinear gradient terms: Existence, asymptotic boundary behavior and uniqueness*	doi.org/10.1016/j.jmaa.2025.130182	1,2	1
ETH:01	Journal of Mathematical Sciences	Tsegaye Gedif Ayele and Goitom Wollu Hagos	*Analysis of BDI and intgro-differential equations to the dirichlet problem for compressible stokes system with variable viscosity*	doi.org/10.1007/s10958-025-08004-8	N/A	1
ETH:01	Journal of Mathematical Sciences	Shumatir Yohannis Monijore, Mulugeta Alemayehu Dagnaw and Tsegaye Gedif Ayele	*Boundary-domain integral equations for nonsmooth coefficient Dirichlet*	doi.org/10.1007/s10958-025-07684-6	N/A	1
ETH:01	Journal of Mathematics	Mesfin Masre	*Extremal values on the general degree–eccentricity index of unicyclic graphs of fixed diameter*	doi.org/10.1155/jom/8747918	1,3	1
ETH:01	Journal of Optimization Theory and Applications	Asmamaw Msgan Ayele, Addis Belete Zewde, Semu Mitiku Kassa	*Further on potential differential games and its applications in multi-leader multi-follower differential games*	doi.org/10.1007/s10957-025-02902-2	1,5	1
ETH:01	Korean Journal of Mathematics	Berhanu Bekele, Dawit Solomon, and Mohammed Tesemma	*Univariate Polynomials of Consecutive Degrees That Form a Sagbi Basis*	doi.org/10.11568/kjm.2025.33.3.193	0,5	no
ETH:01	Mathematical Biosciences and Engineering	Bruno Buonomo, Rossela Della Marca, Manalebish D Asfaw	*Modelling human response to information in voluntary vaccination behaviour using epidemic data*	10.3934/mbe.2025043	2,6	1
ETH:01	Mathematical Modelling and Numerical Simulations with Applications	Worku T. Bitew, Temesgen B. Getahun, Tsegaye G. Ayele, Simon D. Zawka	*Optimizing shellfish aquaculture in nitrogen and fisheries management*	doi.org/10.53391/mmnsa.1525113	N/A	no
ETH:01	Mathmatical Inequalities & Applications	Markos Fisseha Yimer, Lars-Erik Persson, Michael Ruzhansky, Natasha Samko and Tsegaye Gedif Ayele	*Hardy-Hilbert Type Inequalities on Homogeneous Groups-An Introduction*	doi.org/10.7153/mia-2025-28-16	N/A	1
ETH:01	Palestine Journal of Mathematics	Biadiglign Asmare, Dereje Wasihun, K. Venkateswarlu	*Commutative weak idempotent nil-neat rings*		N/A	0
ETH:01	Research in Mathematics	Mohammed Amare, Berhanu Bekele, Zelalem Teshome, Gezahagne Mulat and Mohammed Tesemma	*Construction of soft modules over soft abelian groups*	doi.org/10.1080/27684830.2025.2605729	1,1	no
ETH:01	Research in Mathematics	Nibret Melese Kassahun, Berhanu Assaye Alaba, Yohannes Gedamu Wondifraw and Zelalem Teshome Wale	*On f derivations, regular f-derivations and semigroup of f-derivations on PMS Algebras*	doi.org/10.1080/27684830.2025.2452697	1,1	no
ETH:01	Sceintfic Report	Rashad Ismail, Rimsha Saher, Muhammad Farhan Hanif, Muhammad Faisal Hanif, Muhammad Kamran Siddiqui & Samuel Asefa Fufa	*On statistical analysis of topological indices and heat of formation for titanium diboride network*	doi.org/10.1038/s41598-025-13793-8	1,1	x
ETH:01	Scientific Reports	Nighat Rehman Rukhshanda Anjum & Fikre Bogale Petros	*Consensus based sustainable decision making using probability hesitant fuzzy preference relations with application on risk assessment in food industry*	doi.org/10.1038/s41598-025-88859-8	1,1	x

ETH:01	Scientific Reports	Olumuyiwa James Peter, Shewafera Wondimagegnhu Teklu, Ghaniyyat Bolanle Balogun, Gbolahan Bolarin, Manalebish Debalike Asfaw	*HIV/AIDS compartmental model analysis with drug resistance treatment, vertical transmission, and optimal control theory*	doi.org/10.1038/s41598-025-26943-9	1,1	x
ETH:01	Scientific Reports	Hafiz Muhammad Bilal, Kiran Naz, Sarfraz Ahmad, Muhammad Kamran Siddiqui & Fikre Bogale Petros	*On computing extended graph energies and their thermodynamic properties for benzenoid hydrocarbons*	doi.org/10.1038/s41598-025-89909-x	1,1	x
ETH:01	SINET Ethiopian Journal of Science	Ayantu Guteta Fite and Hunduma Legesse Geleta	*Boundary Behaviour and zeros of harmonic products of complex-valued harmonic functions in a simply connected domain*	doi.org/10.4314/sinet.v48i2.3	N/A	0
ETH:01	SINET Ethiopian Journal of Science	Yohannes Taye Jemberie, Samuel Asefa Fufa, Berhanu Bekele Belayneh, D.P Sharma and Zelalem Teshome Wale	*Soft Lattices Based on Soft Binary Operations*	doi.org/10.4314/sinet.v48i2.2	N/A	0
ETH:01 /CoRE-Math MAK/ EAALG	Research in Mathematics	Tilahun Abebaw, Amanuel Mamo, David Ssevviiri and Zelalem Teshome	*On the Greenlees-May duality and the Matlis-Greenlees-May equivalence*	doi.org/10.1080/27684830.2025.2469953	1,1	no
PDEAAP	Bishop Stuart University Journal of Development Education & Technology	Asaph Muhumuza, Sheldon Fred Mwesigwa	*Integrating STEM education, religion and entrepreneurship for sustainable economic growth: A Case Study of Uganda*	10.59472/2edbjc21	N/A	N/A
PDEAAP	International Journal of Engineering Research & Technology (IJERT)	Sarah Kobusingye; Twaibu Ssemwogerere; Asaph Keikara Muhumuza; Rebecca Muhumuza Nalule	*Optimizing the efficiency of agricultural direct solar dryers using computational fluid dynamics*	doi.org/10.5281/zenodo.18104636	N/A	1
PDEAAP	Scientific African	Sylas Oswald, Eunice Mureithi, Berge Tsanou, Michael Chapwanya, Kijakazi Mashato, Crispin Kahesa	*MCMC-Driven mathematical modeling of the impact of HPV vaccine uptake in reducing cervical cancer*	doi.org/10.1016/j.sciaf.2025.e02633	3,3	1
PDEAAP	SINET Ethiopian Journal of Science	Tadesse Abdi & Jemal Yessuf	*Almost Analytic Extensions and Ultradifferentiable Functions*	10.4314/sinet.v47i3.6	N/A	0
PDEAAP/ CoRE-Math UR	Rwanda Journal of Engineering, Science, Technology and Environment	Ndanguza, D., Nzabanita, J., Gashugi, E., Mukeshimana, S., Minani, F., & Banzi, W.	*Mathematical modeling of methane gas extraction from Lake Kivu*	dx.doi.org/10.4314/rjeste.v7i1.10	N/A	N/A

2.5.3 Physics publications

Table 10. Summary by region of publication data for the physics programme in 2025. The number of publications (Publ.) in scientific journals is specified to those with and without Thomson Reuters (TR) impact factors (IF) or/and Norwegian Centre for Research Data (NCDR) ranking (see explanation in the first paragraphs of this appendix, and whether ISP funding was acknowledged.

Publication category	Africa		Asia		Latin America		Total	
ISP acknowledged	yes	No	yes	no	yes	no	yes	no
Publ. in Scientif. Quality J. (TR or/and NCRD ranked)	46	24	12	31	0	0	**58**	**55**
Publ. in Other Scientific Journals ("unranked")	9	9	14	8	0	0	**23**	**17**
Publ. in Journals by "predatory publishers"	14	6	0	0	0	0	**14**	**6**
Books, Chapters, Popular Publ., Technical Reports, etc.	0	0	0	2	0	0	**0**	**2**
Total number of publications (yes/no)	**69**	**39**	**26**	**41**	**0**	**0**	95	80
Grand total	**108**		**67**		**0**		**175**	

List of physics publications. Journals marked in red occur on Cabells Blacklist, indicating a “predatory”, non-scientific publication venue.

Group/ Network	Journal	Author(s)	Title	DOI	WoS, 1 yr IF 2021	Norwegian Register
AFSIN	Afrique SCIENCE	Marie Florence YEBOUET, Sylvère DION, Kossan Olivier BAGUI, Assoumou Saint Doria YAMOA, Akyana BRITWUM, Jérémie ZOUEU	*Filtre SinSquare pour l’optimisation du multiplexage temporel de super résolution*		N/A	no
AFSIN	Applied Optics	Boateng, R., Opoku-Ansah, J., Amuah, C. L. Y., Adueming, P. O.-W., Huzortey, A., Taah, K., & Jojo Eghan, M.	*Laser-induced fluorescence spectroscopy combined with multivariate analysis for rice seeds and grains discrimination*	doi.org/10.1364/AO.546627	1,7	1
AFSIN	Applied Physics Research	GO Regnima, SM Adepo, EK Amany, A Kouacou, J Zoueu	*Separating absorption and scattering coefficients for the characterization of optical turbid Media using structured laser illumination planar imaging and conventional spectroscopy technique*	10.5539/apr.v17n1p10		
AFSIN	Circuits, Systems, and Signal Processing	Nguimdo, R.T., Tiedeu, A.	*Automated ECG analysis with dual channel squeeze-net using Hilbert-Huang transform, fuzzy entropy, and hurst exponent*	doi.org/10.1007/s00034-024-02986-7	2	1
AFSIN	Computational Water, Energy, & Environmental Engineering	Issa Bagayogo, Souleymane Sanogo, Issiaka Traoré	*Evaluation of the solar photovoltaic potential for electrification of rural areas off the national grid in Mali*	doi.org/10.4236/cweee.2025.142005	N/A	no
AFSIN	Discover Electronics	Djomo, AF, Yepdia, LMH, Nkandeu, YPK, Abanda, YA, Tiedeu, A	*Introducing a novel 3D Chen-Rössler map for NTRU-based image encryption with OFDM transmission over a noisy channel*	doi.org/10.1007/s44291-025-00102-w	N/A	no
AFSIN	Edelweiss Applied Science and Technology	Solagnon Edoh Koevidjin, Yawovi Nougbléga, Yawovi Mignanou Amouzouvi, Milohum Mikesokpo Dzagli, Messanh Agbéko Mohou	*Simulation studies of the solvent diethylamine for post-combustion CO2 capture at the WACEM cement manufacturing plant in southern Togo at Tabligbo*	doi.org/10.55214/25768484.v9i3.5747	N/A	no
AFSIN	European Journal of Advanced Chemistry Research	Thuku, J. M., Kaniu, M. I., Ndung'u, C. N., Kiruri, L. W., & Kaduki, K. A.	*Targeted detection of low-level chlorpyrifos residues in milk using chemometrics-aided raman spectroscopy*	doi.org/10.24018/ejchem.2025.6.3.165	N/A	no
AFSIN	Franklin Open	Fotsing, J, Kengne, R, Tiedeu, A, & Tonye, E	*Dynamic analysis and image encryption using a novel 4D map for secure transmission using WDM 4*20 Gbps techniques*	doi.org/10.1016/j.fraope.2025.100242	N/A	1
AFSIN	Iranian Journal of Medical Physics	Kapis, E O, Kaniu, M I, Iaccarino, G, Angeyo, H K	*Image analysis metrics in evaluation of generative adversarial network (GAN) models performance in prediction of 177Lu Dose Voxel Kernels*	doi.org/10.22038/ijmp.2025.89964.2590	N/A	no
AFSIN	Journal de physique de la SOAPHYS	Kokou Jean Baptiste Amewotepe, Kossivi Bienvenu Rodrigue Afoudji, Essoham Sylvain Adewi, Milohum Mikesokpo Dzagli, Messanh Agbeko Mohou	*Cowpea and cassava leaf responses to different levels of water stress using fluorescence and reflectance spectroscopies*	http://dx.doi.org/10.46411/jpsoaphys.2025.C25.01	N/A	no
AFSIN	Journal of Fluorescence	Pappoe, J A, Mongson, O., Amuah, C L Y, Opoku-Ansah, J, Adueming, P O W., Boateng, R, Eghan, M J, Sackey, S S, Anyidoho, E K, Huzortey, A A, Anderson, B, Vowotor, M K, Teye, E	*Classification of organic and conventional cocoa beans using laser-induced fluorescence spectroscopy combined with chemometric techniques*	doi.org/10.1007/S10895-023-03499-3/METRICS	3,1	1

AFSIN	Journal of Fluorescence	Opoku-Ansah, J, Boateng, R, Amuah, C L Y, Adueming, P O W, Pappoe, J A, Ntow, J, Quagraine, K, Yunus, S, Anderson, B, Eghan, M J	*Identification of spectral fingerprints in different batches of antimalarial herbal drugs using laser-induced autofluorescence and chemometric techniques*	doi.org/10.1007/s10895-025-04192-3	3,1	1
AFSIN	Journal of Geoscience and Environment Protection	Tji Souleymane Coulibaly, Souleymane Sanogo, Cheick Diarra, Moussa Ibrahim Maiga, Issiaka Traore.	*Simulation of the effects of SO2 injection into the stratosphere on precipitation and temperature regimes in the Sahel, West Africa*	doi.org/10.4236/gep.2025.133012	N/A	no
AFSIN	Journal of Materials and Environmental Science	ASD Yamoa, BK Kouakou, AY Gbogbo, JT Zoueu	*Monitoring anopheles mosquitoes through lidar, weather, and vegetation index data analysis: A study in Côte d'Ivoire*			
AFSIN	Journal of Nano- and Electronic Physics	ES Adewi, K Sesime, AD Hounsi, P Pissang, SAS Bonou, KJB Amewotepe, M Agbahoungbata, MM Dzagli, VA Adedeji, AC Ahyi, MA Mohou	*Green Synthesis of ZnO Nanoparticles Using Leaf Extracts, their Characterization and Antimicrobial Applications*	doi.org/10.21272/jnep.17(3).03004	N/A	1
AFSIN	Journal of Quantitative Spectroscopy and Radiative Transfer	D jacquemart, F K Gueye, O M Lyulin, A M Solodov, T M Patrova, A A Solodov, V I Perevalov	*New acetylene line list near 5µm - Part I: 12C2H2*	doi.org/10.1016/j.jqsrt.2025.109680	1,9	1
AFSIN	Journal of Raman Spectroscopy	Burde, R., Reuter, N., Pruccoli, A., Birech, Z., Winterhalder, M., & Zumbusch, A.	*Electronically preresonant coherent anti-Stokes Raman scattering microscopy*	doi.org/10.1002/jrs.6766	1,9	no
AFSIN	LWT-food science and technology	Thuku, J. M., Kaniu, M. I., Ndung'u, C. N., Kiruri, L. W., & Kaduki, K. A.	*Rapid trace detection of chlorpyrifos in vegetables using 2D Raman correlation spectroscopy and machine learning*	doi.org/10.1016/j.lwt.2025.118742	6,6	no
AFSIN	MRS Advances	Sidiki Zongo, Tongonmanegde Leonard Ouedraogo, Salamata Ouilli, Joël Martial Balkoulga, Sié Zacharie Kam, Moussa Sougoti, Antoine Béré	*Determination of plant based synthesized silver and copper hydroxide nanoparticles size using Mie theory compared with an experimental approach*	doi.org/10.1557/s43580-025-01394-6	0,9	1
AFSIN	Multimedia Tools and Applications	Tampa, H., Mekongo, M., Tiedeu, A.	*Deep learning-based algorithm for automated detection of glaucoma on eye fundus images*	doi.org/10.1007/s11042-024-19989-w	3	1
AFSIN	Optics	Yao Koffi, Jocelyne M Bosson, Marius Ipo Gnetto, Jeremie T Zoueu	*Sparsity-guided phase retrieval to handle concave-and convex-shaped specimens in inline holography, taking the complexity parameter into account*	doi.org/10.3390/opt6020015	1,6	1
AFSIN	Optics Continuum	Ilyes Betka, Moise Deroh, Moses Eshovo Ojo, Frederic Fauquet, Coralie Fourcade-Dutin, Herve Maillotte, Mathieu Chauvet, Patrick Mounaix, Damien Bigourd	*Generation of broadband THz radiation by polariton parametric scattering in a LiNbO3 waveguide*	doi.org/10.1364/OPTCON.527395	1,4	1
AFSIN	Optics Continuum	Boateng, R., Månefjord, H., Opoku-Ansah, J., Adueming, P. O.-W., Huzortey, A., Eghan, M. J., Anderson, B., Taah, K., & Amuah, C. L. Y.	*Modular 3D-printed biophotonic platform for cost-effective hyperspectral and polarimetric imaging*	doi.org/10.1364/OPTCON.575071	1,4	1
AFSIN	Physical and Engineering Sciences in Medicine	Nguimdo, R.T., Tiedeu, A. & Fotsing, J.	*Automated analysis of ECG signals using nonlinearity and nonstationarity features fed into the MobilenetV2 CNN powered by transfer learning*	doi.org/10.1007/s13246-025-01610-5	2	1
AFSIN	Physical Review A	A Malfondet, M Deroh, P Tchofo Dinda, G Millot	*Design of multifunctional nonlinear optical loop mirrors*	doi.org/10.1103/PhysRevA.111.033524	2,9	1
AFSIN	PloS One	Ondieki, A. M., Birech, Z., Kaduki, K. A., Mwangi, P. W., Juma, M., & Chege, B. M.	*Chemometrics-aided surface-enhanced Raman spectrometric detection and quantification of GH and TE hormones in blood*	doi.org/10.1371/journal.pone.0323697	2,6	1
AFSIN	Scientific African	Kossivi Anani Donkata, Katawoura Beltako, Milohum Mikesokpo Dzagli, Messanh Agbeko Mohou	*Numerical simulation and optimization of highly efficient inorganic lead-free perovskite solar cells using SCAPS-1D*	doi.org/10.1016/j.sciaf.2025.e02841	3,3	1

AFSIN	Scientific African	Thomas Koffi, Guy-Oscar Regnima, Emmanuel Gozoua, Mensah Edoe, Serge Adepo, Evariste Amany, Jocelyne Bosson, Jérémie Zoueu	*Optimization of a structured illumination spectrophotometric technique for optical properties determination of dense solutions*	doi.org/10.1016/j.sciaf.2025.e02749	3,3	1
AFSIN	Scientific Reports	Assoumou S Doria Yamoa, Benoit K Kouakou, Adolphe Y Gbogbo, Anna Runemark, Roel Van Klink, Jeremie T Zoueu, Mikkel Brydegaard	*Lidar reveals distinct insect daily activity and diversity between habitats.*	doi.org/10.1038/s41598-025-27432-9	1,1	x
AFSIN	Scientific Reports	Månefjord, H., Yamoa, A. S. D., Gbogbo, Y. A., Müller, L., Runemark, A., Kouakou, B. K., Boateng, R., Huzortey, A. A., Badu, I. K., Wahlberg, N., Brydegaard, M., Zoueu, J. T., Anderson, B., & Li, M.	*Stratification of insect diversity and daily activity patterns in the West African virgin forest Taï assessed by entomological Lidar*	doi.org/10.1038/s41598-025-05200-z	1,1	1
AFSIN	Scientific Research Publishing	Pavel Yale, Abadê Ange-Boris N'guessan, Jean Michel Edoukoua Konin, Michel Abaka Kouacou, Jérémie T Zoueu	*Human red blood cell stretching using optical tweezers*	doi.org/10.4236/ojapps.2025.154073		
AFSIN	Scientific Research Publishing	Pavel Yale, Abade Ange-Boris N'Guessan, Guy-Oscar Regnima, Jean Michel Edoukoua Konin, Henri Joel Kouassi Loukou, Michel Abaka Kouacou, Jérémie Thouakesseh Zoueu	*Impact of sugar on the mechanical properties of red blood cells assessed by optical tweezers*	doi.org/10.4236/jbm.2025.1312029		
AFSIN	Scientific Research Publishing	Pavel Yale, Abade Ange-Boris N'guessan, Jean Michel Edoukoua Konin, Michel Abaka Kouacou, Jérémie Thouakesseh Zoueu	*Mechanical properties measurement of sickle cell (SS) red blood cells using optical tweezers*	doi.org/10.4236/anp.2025.144012		
AFSIN	Smart Grid and Renewable Energy	Dembélé, Y, Bonkaney, A, Sanogo, S, Kumar, N, Tischbein, B, Madougou, S	*Performances Analysis of On-Grid-Tied Large-Scale Solar PV Plant in Mali: A Case Study in Kita*	10.4236/sgre.2025.162003	N/A	0
AFSIN	Solar Energy and Sustainable Development	K. A. Donkata, D. T. Cotfas, P. A. Cotfas, K. Beltako, M. M. Dzagli	*InGaP/InGaAs/Ge multi-junction solar cells efficiency improvements using interposed transport layers*	doi.org/10.51646/jsesd.v14i1.338	N/A	no
AFSIN	Surfaces	Alphonse Déssoudji Gboglo, Mazabalo Baneto, Komlan Segbéya Gadedjisso-Tossou, Ognanmi Ako, Ayayi Claude Ahyi, Muthiah Haris, Muthusamy Senthilkumar, Kekeli N'konou, Bruno Grandidier, Katawoura Beltako, Komi Apélété Amou, Milohum Mikesokpo Dzagli	*Co-effect of pH control agent and pH value on the physical properties of ZnO thin films obtained by chemical bath deposition for potential application in dye-sensitized solar cells*	doi.org/10.3390/surfaces8030046	2,9	0
AFSIN/ MAL:01	Journal of Atmospheric Science Research	Tji Souleymane Coulibaly, Cheick Diarra, Souleymane Sanogo, Issiaka Traore	*Analysis of the Climatic Impacts of SO2 Injection into the Stratosphere on Precipitation Indices in the Sahel*	doi.org/10.30564/jasr.v8i1.8603	N/A	no
AFSIN/KEN: 01/2	Radiation Protection Dosimetry	Mlay, G. W., Kaniu, M. I., Njenga, L. W., Njoroge, K. D., Gatari, M. J., Kilel, K. K., & Lugendo, I. J.	*Assessment of natural radioactivity and radiation risks in soil near the Manyoni uranium deposit, Tanzania*	doi.org/10.1093/rpd/ncaf021	0,7	no
BAN:02/2	AIP Advances	Md. Arman Hossain, Hasan Khaled Rouf, Murad Hossain, Mohammad Khurshed Alam, Mohammed Nazrul Islam Khan	*Synthesis and exploration of structural, optical, magnetic, and electrical properties of Ti-doped Mn–Ni–Zn ferrite*	10.1063/5.0265876	1,4	1
BAN:02/2	Biomedical Engineering Advances	Nazifa Zaman Khan, S. Manjura Hoque, Harinarayan Das, Arup Kumar, Rafiqul Islam, Mozammal Hossain	*Remineralization of demineralized teeth enamel with nHAp and nHAp-NaF-PEO nanocomposite*	10.1016/j.bea.2025.100192	N/A	no

BAN:02/2	Ceramics International	Arifur Rahman Bhuiyan, Zahid Hasan, Hasan Khaled Rouf, Mohammad Khurshed Alam, Md Razibul Hasan, Mohammed Nazrul Islam Khan	*Analyses of Lorentz-type negative dielectric, optical and magnetic behaviours in Ba0.9La0.1TiO3/Cobalt ceramic*	doi.org/10.1016/j.ceramint.2025.03.311	5,6	1
BAN:02/2	Ceramics International	Md. Masud Parvez, Md. Sarowar Hossain, Kamrul Hassan, M.D. Hossain, Sagar Dutta, Md. Razibul Hasan, Tusar Saha, M.D.I. Bhuyan	*Improved matching impedance detected by magneto-dielectric coupling in Bi1-xYxFeO3 ceramics for wave guided antenna*	doi.org/10.1016/j.ceramint.2025.04.197	5,6	1
BAN:02/2	Ceramics International	Nazmus Sakib, Farzana Nahid, S.F.U. Farhad, Nazia Khatun, Md Ali Rayhan, Sayed Syful Islam, Md Nur Amin Bitu, S. Manjura Hoque, Md Al-Mamun	*Significant improvement of photocatalytic activity of Bi25Fe0.5Ni0.5O40@ MWCNTs nanocomposites synthesized by various hydrothermal routes*	10.1016/j.ceramint.2025.09.037	5,6	1
BAN:02/2	Ceramics International	Jamal Uddin Ahamed, Rubyea Yeasmin Netol, Murad Hossain, Hasan Mahmud, Zahid Hasan, Mohammed Nazrul Islam Khan	*Synergistic Enhancement of Magnetic and Dielectric Properties in Mn-Nb Codoped Ba0.7Mg0.3TiO3 Perovskite Ceramics for High-Frequency Applications*	doi.org/10.1016/j.ceramint.2025.12.361	5,6	1
BAN:02/2	Current Drug Delivery	T. I. Aquib, S. Manjura Hoque, M. H. Uddin	*Lignin Nanoparticles as pH-responsive Nanocarriers for Gastric-Irritant Oral Drug Aspirin*	10.2174/0115672018318035240910050003	3	1
BAN:02/2	Journal of Alloys and Compounds	Fahim Sabab Siddique, Kristy Gourab Sinha, Safkat Islam Safin, Shah Azharul Islam, Md Nazmul Hassan, Md Abul Hasnat, Shahadat Hossain, A.K.M. Mizanur Rahman, Md Al-Mamun	*Exploring dysprosium doped lithium strontium borate based phosphor for dosimetry application*	10.1016/j.jallcom.2025.183628	6,3	1
BAN:02/2	Journal of Alloys and Compounds	M. Rahman, M. S. Ullah, K. Hanium Maria, M. R. Kasem, S. Manjura Hoque, Rimi Rashid, S. A. Jahan, M.S. Bashar, I.N. Esha	*Exploring the impact of Bi2O3 and MoO3 additives to enhance the sinterability and their effect on the electric and magnetic properties of Mg-Cu-Zn ferrite*	10.1016/j.jallcom.2025.185171	6,3	1
BAN:02/2	Journal of Alloys and Compounds	Redwanur Rahman Rubel, Md. Bahar Ullah, Zahid Hasan, Murad Hossain, Mohammad Khurshed Alam, Mohammed Nazrul Islam Khan, Jamal Uddin Ahamed	*Tailoring structural, optical and magnetic properties of Ti-doped Ba0.8Sr0.2Fe12O19 for advanced magnetic devices*	10.1016/j.jallcom.2025.183582	6,3	1
BAN:02/2	Journal of Applied Polymer Science	M. N. A. Mazumder Rupam, Md. Jahangir Alam, Mahbub Hossen Molla, Jannat Ara Mim, Md. Ehasanul Haque, Md. Sarowar Hossain, M. D. Hossain, Md Razibul Hasan	*Effect of Reinforcement Type and Epoxy-to-Hardener Ratio on the Curing Quality and Mechanical Properties of Epoxy Composites*	10.1002/app.58109	2,8	1
BAN:02/2	Journal of Magnetism and Magnetic Materials	N. Jahan, M.N.I. Khan, M.A. Ali, M.M. Hossain, M.S. Aktar, M.R. Hasan, Md. Akhtaruzzaman, M.M. Uddin	*A comprehensive study of RE ions Ho doped Ni-Zn nanoferrites synthesized by sol–gel auto-combustion techniques*	10.1016/j.jmmm.2025.173042	3	1
BAN:02/2	Journal of Magnetism and Magnetic Materials	S. Karimunnesa, M.R. Hasan, F. Alam, M.N.I. Khan	*Holmium-substituted magnesium ferrites: Structural, magnetic, and electrical transport properties*	10.1016/j.jmmm.2025.172917	3	1
BAN:02/2	Journal of Materials Science: Materials in Electronics	Md. Ariful Islam, Muhammad Shahriar Bashar, Md. Al-Mamun, Kamrunnahar Kali, and Md. Khalilur Rahman	*Effect of Co and Sn co-doping on tailoring the properties of CuO to enhance the absorption capacity of solar absorber layers*	10.1007/s10854-025-15167-2	2,8	1
BAN:02/2	Journal of Nepal Chemical Society	Surya Kumari Joshi, Dinesh Kumar Chaudhary, Md Al-Mamun, Sheikh Manjura Hoque, Surya Prasad Adhikari, Rabindra Prasad Dhakal, Rameshwar Adhikari	*Boehmite nanoparticle-enhanced jatropha oil nanofluid: synthesis, stability, and viscosity analysis*	10.3126/jncs.v45i2.83055	N/A	no

BAN:02/2	Journal of Radiation Research and Applied Sciences	Md Rabiul Islam, Sapan Kumar Sen, M.S. Manir, Arup Kumar, Zannath Ara, Pronabananda Das, Ajoy Kanti Mondal, Arifatun Nahar, A.K.M. Moshiul Alam, Md Abdun Nur	*Effects of gamma irradiation on phytochemically synthesized CuO nanoparticles using Mussaenda frondosa leaves and their X-ray crystallographic analysis*	10.1016/j.jrras.2025.101458	2,5	0
BAN:02/2	Journal of Radiation Research and Applied Sciences	Md Nazmul Hassan, Farzana Yousuf, Md Raghib Rahat, Md Sifatul Muktadir, Shahadat Hossain, Md Razzak, Zuhal Y. Hamd, Mayeen Uddin Khandaker, A.K.M. Mizanur Rahman, Md Al-Mamun	*Exploring the effect of Zn doping on the thermoluminescence behavior of lithium magnesium borate*	10.1016/j.jrras.2025.101787	2,5	0
BAN:02/2	Materials Advances	M. A. Islam, Mohasin Tarek, Rimi Rashid, M. A. A. Bally, Ferdous Ara, M. A. Basith	*Observation of Griffiths-like phase and magnetocaloric effect in disordered Y2CoCrO6 double perovskite*	10.1039/D4MA01092B	4,7	1
BAN:02/2	Materials Advances	Nusaibah Eshan, Md. Rafatul Haq, Sadiq Shahriyar Nishat, Quazi Shafayat Hossain, Shirin Akter jahan, M. N. I. Khan, Umme Sarmeen Akhtar, Muhammad Shahriar Bashar, Harinarayan Das, Dipa Islam, Md. Zakir Sultan, Sharmin Jahan, Khandker Saadat Hossain and Imtiaz Ahmed	*Unveiling Photocatalytic Functionalities of (Gd3+, Mo6+) Co-doped BiVO4 Nanoparticles: an experimental-DFT Approach*	10.1039/d5ma01129a	4,7	1
BAN:02/2	Materials Characterization	Mst. Arjumanara Bagum, M. Belal Hossen, F.-U.-Z. Chowdhury, Sheikh Manjura Hoque	*Influence of lightly doped Ca on the structural, magnetic and magnetocaloric properties of LaCaMnO3 nanoparticles*	10.1016/j.matchar.2025.115153	5,5	1
BAN:02/2	MRS Advances	M. H. Rahman, M. N. I. Khan, T. Hasan, R. Rashid, M. Razibul Hasan, M. K. Alam, M. Mahfuz Alam	*Structural, optical, and magnetic properties of Co–Mn–Zn ferrites with yttrium substitution*	doi.org/10.1557/s43580-025-01282-z	0,9	1
BAN:02/2	Next Nanotechnology	Md. Al Imran, Bithi Paul, Md. Ohiduzzaman, Pinak Chakraborty, Md. Razibul Hasan, Md. Shahriar Zaman, Md Shamsur Rahman, Md Nazmul Hasan Zilani, Md Nazmul Hasan, K.A. Khan	*Enhancement of antibacterial, photocatalytic, and electrical performances of bio synthesized Ag incorporated ZnO nanocomposites using Diplazium esculentum leaf extract*	10.1016/j.nxnano.2025.100237	N/A	no
BAN:02/2	Nuclear Engineering and Technology	Md Raghib Rahat, Homaira Afia Mimi, Shah Azharul Islam, Md Kamruzzaman, Md Abul Hasnat, Md Nazmul Hassan, Shahadat Hossain, Hamid Osman, Mustafa Mahmoud, Mayeen Uddin Khandaker, Md Al-Mamun, A.K.M. Mizanur Rahman	*Optimized LiZnBO3 phosphor as a promising candidate for low dose radiation dosimetry*	10.1016/j.net.2024.103427	2,6	1
BAN:02/2	Nuclear Engineering and Technology	Md Raghib Rahat, Md Nazmul Hassan, Umme Muslima, Md Kamruzzaman, Shahadat Hossain, Md Al-Mamun, A.K.M. Mizanur Rahman, Mayeen Uddin Khandaker	*Thermoluminescence study of electron-irradiated LiZnBO3 phosphor for dosimetry application*	10.1016/j.net.2025.103832	2,6	1
BAN:02/2	Polymer Reviews	A. K. M. M. Alam, Qiang Cai, M. S. Manir, M. R. Islam, Laiping Fang, Md. Al Mamun, M. N. K. Chowdhury, Xiaojun Cai, Robert Musiolg, and Quazi T. H. Shubhr	*Shellac: A sustainable natural bio-resin for emerging biomedical and technological applications—properties, modifications, and challenges*	10.1080/15583724.2025.2550257	11,9	1

BAN:02/2	Results in Engineering	Aynun Nahar, Md. Ahedul Akbor, Md. Atikur Rahman, Zannatul Ferdous, Md. Razibul Hasan, Sarker Kamruzzaman, Nusrat Tabassum Shristy, Pallabe Saha, Umme Sarmeen Akthar, Md. Shahriar Bashar	*Enhanced electrochemical performance of waste newspaper derived activated carbon aerogel electrode for the supercapacitor*	10.1016/j.rineng.2025.104043	7,9	1
BAN:02/2	Results in Materials	Md. Khalid Hossain Shishir, Md. Ashraful Alam, Md. Ashikur Rahaman, Md. Tarikul Islam, Aliza Rahman, Md. Razibul Hasan, Mehedi Hasan, Shirin Akter Jahan	*Crystallinity integration of Co-precipitate derived cubic bunsenite (NiO) phase crystalline nanomaterials*	10.1016/j.rinma.2025.100763	N/A	1
BAN:02/2	Results in Materials	Gobinda Mollik, Md Ifat-Al-Karim, Md Al Mamun, Tonmoy Paul, Md Rashedur Rahman, Farzana Nahid	*Spinel cobalt ferrite-based reduced graphene oxide nanocomposites: Synthesis, structural, morphological, optical and thermal analysis*	10.1016/j.rinma.2025.100819	N/A	1
BAN:02/2	RSC Adv	Md. Mahabur Rahman, Abdulla Al Mamun, Hideto Minami, Md. Kawsar Hossain, S. Manjura Hoque, Mostafa K. Sharafat and Hasan Ahmad	*Enhancement of the electrochemical response of a V2O5 integrated biochar@poly(aniline–pyrrole) hybrid composite-coated graphite electrode*	doi.org/10.1039/D5RA01022E	4,6	1
BAN:02/2	RSC Adv	Md. Nagib Mahfuz, Appy Feroz Nur, Md Shafayatul Islam, Tomal Saha, Koushik Roy Chowdhury, Sheikh Manjura Hoque, Md Abdul Gafur, Aninda Nafis Ahmed and Ahmed Sharif	*Ga-doping in Li0.33La0.56TiO3: a promising approach to boost ionic conductivity in solid electrolytes for high-performance all-solid-state lithium-ion batteries*	doi.org/10.1039/D4RA08811E	4,6	1
BAN:02/2	RSC Adv	Abu Taher, M. Atikur Rahman, Rana Mia, Nasir Uddin, Mustavi Islam, M. N. I. Khan, M. Khurshed Alam and Mohammad A. Alim	*Quantum dot-based non-volatile memory: a comprehensive outlook*	doi.org/10.1039/D4RA08307E	4,6	1
BAN:02/2	Surfaces and Interfaces	J.H. Bhuiyan, M.A. Taher, Md. Sarowar Hossain, Rimi Rashid, M.K. Alam, A. Ahad, T. Ahamed, M.N.I. Khan	*Structure-based magneto-dielectric properties enhanced by Cr doping in Bi0.9La0.075Ce0.025FeO3 perovskite*	doi.org/10.1016/j.surfin.2025.107949	6,3	1
BAN:02/2	Thin Soild Films	S. A. Lucky, M. Sharmin, Harinarayan Das, and J. Podder	*Evolution in morphological features, enhancement of transparency and optoelectronic properties, and band gap broadening in manganese doped nickel oxide thin films fabricated for optoelectronics applications*	10.1016/j.tsf.2025.140651	2	1
BAN:04	Biomedical Signal Processing and Control	Ashiqur Rahman, Muhammad E.H. Chowdhury, Md Sharjis Ibne Wadud, Rusab Sarmun, Adam Mushtak, Sohaib Bassam Zoghoul, Israa Al-Hashimi	*Deep learning-driven segmentation of ischemic stroke lesions using multi-channel MRI*	doi.org/10.1016/j.bspc.2025.107676	4,9 (2024)	1
BAN:04	Informatics in Medicine Unlocked	Md Abu Sayed, Ashiqur Rahman, Sadman Mohammad Nasif, Sudipto Halder, Akram Hossain, Hasan Ahmed, Muhammad Abdul Kadir	*Automated lumbar intervertebral disc identification and herniation detection in MR images using cascade CNN architecture*	doi.org/10.1016/j.imu.2025.101648	N/A	1
BAN:04	Journal of Carcinogenesis	Tanima Roya, Asif Abdullah, Afiya Mubasharah, Ahmed Imtiaz Zamee, Md. Ibrahim Al Imran, Md. Enamul Kabir Talukder, Md. Tofazzal Hosen, Muhammad Abdul Kadir, Muttakee Bin Ali	*Designing potential inhibitors against ret protein tyrosine kinase domain to fight sporadic medullary thyroid carcinoma: a virtual screening and molecular dynamics simulation-based approach*	doi.org/10.64149/J.Carcinog.24.3.519-540	N/A	1
BAN:04	Plos one	Sabrina Sharmin, Mohammad Abu Sayem Karal, Zaid Bin Mahbub, Khondkar Siddique-e Rabbani	*Effect of stretch on conduction in myelinated nerve due to wrist movement: An experimental and analytical study*	doi.org/10.1371/journal.pone.0333925	2,6 (2024)	1

BAN:05	Environmental Science: Advances	Sadit Bihongo Malitha, Dewan Md. Mahmudunnabi, Shreyoshi Mazumder, Khandker Saadat Hossain, Mohammad Nurnabi, Md. Zahangir Alam	*Rapid adsorptive removal of Pb2+ ions from aqueous systems using a magnetic graphene oxide calcium alginate composite: optimisation, isotherms, and kinetics*	doi.org/10.1039/d4va00341a	4,4 (2024)	1
BAN:05	Heliyon	Mizanur Rahaman, Md Jahidul Islam, Khandker Saadat Hossain, Muhammad Rakibul Islam	*Defect functionalized morphological, structural, and optical properties of MnS incorporated MoS2 heterostructure: Experimental and theoretical insight*	doi.org/10.1016/j.heliyon.2025.e42490	3,6 (2024)	1
BAN:05	Journal of Physical Chemistry C	S. Saroar, S. Sultana, Q. S. Hossain, S. S. Nishat, I. H Sabuj, S. A. Jahan, M. N. I. Khan, U. S. Akhtar, M. S. Bashar, D. Islam, M. Z. Sultan, S. Jahan, Khandker Saadat Hossain, and Imtiaz Ahmed	*Ab Initio DFT Perspective on Triclinic Bi2CrO6: Energy Material for Optoelectronic, Thermoelectric, and Photocatalytic Applications*	doi.org/10.1021/acs.jpcc.5c02212	3,2	1
BUF:01	Asian Journal of Atmospheric Environment	Nébon Bado, Eric Korsaga, Boureima Dianda, Mamadou Simina Dramé, Bruno Korgo, Florent Pèlèga Kieno	*Impact of typical days on the optical and microphysical parameters of aerosols in urban zone of Burkina Faso, West Africa*	doi.org/10.1007/s44273-025-00055-2	N/A	no
BUF:01	Asian Journal of Physical and Chemical Sciences	David Namoano, Wilfried Rimnogdo Ouédraogo, Christian Djidjoho Akowanou, Ousmane Ouédraogo, Sara Bagre; Serge Wendsida Igo	*Evaluation of the Thermal Performance of a Locally Designed and Manufactured Optimized Roasting Oven*	doi.org/10.9734/ajopacs/2025/v13i4260	N/A	no
BUF:01	International Journal of Geosciences	Idrissa Sourabié, Abidina Diabaté, Emmanuel Wambi Sawadogo, Bruno Korgo, Christian Zoundi, Allain Doua Gnabahou, Denis Ouedraogo, Frédéric Ouattara	*Study of Ionospheric Anomalies at the Koudougou Station during the Moderate Geomagnetic Activity of Co-Rotation during the Solar Cycle 24*	doi.org/10.4236/ijg.2025.161002	N/A	0
BUF:01	International Journal of Physical Sciences	Patrice Wendlassida Compaore, Guy Serge Tchouadep, Adama Ouedraogo, Dioari Ulrich Combari, Issa Zerbo, Martial Zoungrana	*Investigating the effect of a base transceiver station (BTS) on the power production of a PV module*	doi.org/10.5897/IJPS2024.5090	N/A	0
BUF:01	International Journal of Physical Sciences	Latifatou Ouoba, Ramatou Sare, Mamoudou Saria, Idrissa Sourabie, Vinci de Dieu Bokoyo Barandja, Martial Zoungrana, Issa Zerbo	*Modeling the impact of different wavelengths of sunlight on the performance of a silicon photovoltaic (PV) cell*	doi.org/10.5897/IJPS2024.5086	N/A	0
BUF:01	Journal of Energy and Power Engineering	Karim Toussakoe, Alidou Maiga, Adjigkiga Banouga, Emmanuel Ouédraogo, Nébon Bado, Bouto Kossi Imbga, Salifou Ouédraogo, Abdoulaye Compaore, Adélaide Lareba Ouédraogo, Florent Pèèga Kieno, Sie Kam	*Modeling and Simulation of the Thermal Behavior of Nubian Vault Walls*	10.17265/1934-8975/2025.03.003	N/A	0
BUF:01	Materials Research Express (Mater. Res. Express)	Boukaré Ouédraogo, Inoussa Tougri, Hassime Guengané, Kalifa Palm, Dieudonné Joseph Bathiébo	*Geomechanical study of the Bi-stabilization of clay with sugarcane molasses and coconut fiber for sustainable construction*	doi.org/10.1088/2053-1591/ada1aa	2,2	1
BUF:01	Physical Science International Journal	Nébon Bado, Mogmenga Ladifata, Yaguibou Wêpari Charles, Toussakoé Karim, Florent Pèlèga Kieno	*Seasonal Analysis of Aerosol Frequency and Assessment of the Radiative Impact of a Dust Episode in Burkina Faso, West Africa*	doi.org/10.9734/psij/2025/v29i3883	N/A	no
BUF:01	Results in Optics	Adama Ouedraogo, Pègdwendé Yves Ouedraogo, Bruno Korgo, Ousmane Aly Yabyouré Ouedraogo, Thierry Sikoudouin Maurice Ky, Dieudonné Joseph Bathiebo, Sie Kam	*Analyses of the dust influence on individual efficiencies of the silicon PV module in Sudano-Sahelian conditions*	doi.org/10.1016/j.rio.2025.100906	3	1

BUF:01	Smart Grid and Renewable Energy	Ladifata Mogmenga, Saidou Soré, Thierry Sikoudouin Maurice Ky, Wendpagnagde Serge Ferdinand Soubeiga, Emmanuel Ouedraogo, Boureima Dianda, Goumwêndkouni Gilbert Nana, Bouchaib Hartiti, Philippe Thevenin, Sié Kam, Dieudonné Joseph Bathiebo	*Design, Construction, and Testing of a Fresnel Reflector Solar Cooker*	doi.org/10.4236/sgre.2025.1612013	N/A	0
BUF:01	Smart Grid and Renewable Energy	Ramatou Konate, Bernard Zouma, Bruno Korgo, Aboubacar Savadogo, Cyrile Constant Moyenga, Issa Zerbo	*Impact of the Doping Rate of Different Zone of the Bifacial PV Cell on the Electrical Parameters*	10.4236/sgre.2025.1610011	N/A	0
BUF:01	Solar Compass	Adama Ouedraogo, Rodrigue Noaga Sawadogo, Boureima Dianda, Mahamadi Savadogo, Boubacar Soro, Thierry Sikoudouin Maurice Ky, Dieudonné Joseph Bathiebo, Sié Kam	*Resistivity of crystalline silicon photovoltaic cell to the electromagnetic field effects*	doi.org/10.1016/j.solcom.2025.100122	N/A	no
BUF:01	Solar Energy Advances	Kanré Bamogo, Thierry Sikoudouin Maurice Ky, Lareba Adélaïde Ouedraogo, Salifou Ouédraogo, Sié Kam, Dieudonné Joseph Bathiebo	*Conception, realization and testing of a novel solar collector*	doi.org/10.1016/j.seja.2025.100107	N/A	1
ETH:01	AIP Advances	Sintayehu Yigzaw, Assaye Gedifew, Nika Bekri, Bizuneh Gebremichael, Amare Benor	*Effects of ozone plasma on the electronic properties of PEDOT:PSS*	10.1063/5.0278845	1,4	1
ETH:01	Journal of Polymer Science	Solomon Ashagre, Abiodun K. Ogundele, Jude N. Ike, Ncedo Jili, Giuseppe Pellicane, Ke Zhou, Wei Ma, Genene Tessema Molla	*Controlling doping concentration of metal nanoparticles for enhanced performance in NFA-based organic solar cell*	doi.org/10.1002/pol.20250009	3,6	1
ETH:01	Materials research express	K. Wabeto, K.N. Nigussa, L.D. Deja	*DFT + U study of structural, electronic, optical and magnetic properties of LiFePO4 Cathode materials for lithium ion battery*	doi.org/10.1088/2053-1591/ada5bf	2,2	1
ETH:01/ ETH:03	Materials Research Express	S. Yigizaw, N. Bekri, A. Gedifew, S. Alayau, A. Benor	*Effect of visible light on the electrical conductivity of conductive grade PEDOT:PSS*	10.1088/2053-1591/adf60c	2,2 (2024)	1
ETH:02	Bulletin of Volcanology	Catherine A. Mériaux, Edward Ntim Gasu, Guillaume Nyagatare. Vicky Ruganzu, Philbert Ntivuguruzwa, Mwumvaneza Mutagoma, Atalay Ayele, Julyan H. E. Cartwright, Valérie Cayol, Laurent Charlet, Claudia Corradino, Antonio Costa, François Darchambeau, Timothy Davis, Arnau Folch, Benjamin Gilbert16, Alexandra Tiaré Gourlan, Andrew J. Hogg, Derek Keir, Silvia Massaro, Tamsin A. Mather, Clive Oppenheimer, Carolina Pagli, Virginie Pinel, Eleonora Rivalta, Alison Rust, Roberto Sulpizio, Latifa Sarra Kazi Tani, Andrew W. Woods, Davide Zanchettin	*From magma to macrophage: the grand challenges of volcanic environments*	doi.org/10.1007/s00445-026-01936-2	3,2	1
ETH:02	Bulletin of Volcanology	Elias Lewi, Juliet Biggs, Atalay Ayele, Tim Wright, Carolina Pagli, Derek Keir, Yechale Ali, Genet Assefa, Hua Wang, Alessandro La Rosa, Lin Way, Filagot Mengistu, Susan Loughlin, Raphaël,	*Scientific response to the 2024–2025 dyke intrusions in the Fentale-Dofen Region, Ethiopia: geophysical monitoring, surface manifestations, and hazard mapping*	doi.org/10.1007/s00445-025-01852-x	3,2	1

		Grandin, Tesfaye Temtime, Yelebe Birhanu, Jeffrey Freymueller, Weiyu Zheng				
ETH:02	Frontiers in Earth Sciences	A. La Rosa, C. Pagli, D. Keir, A. Ayele, H. Wang, E. Rivalta, E. Lewi	*Segmented dike intrusion linked to multi level magma storage during and before the 2025 eruption at Erta Ale (East Africa)*	doi.org/10.3389/feart.2025.1719687	2	no
ETH:02	Frontiers in Earth Sciences	Sisay Alemayehu, Atalay Ayele and Derek Kei	*The first observation of seismicity beneath the north-western Ethiopian plateau and its seismotectonic implications*	doi.org/10.3389/feart.2025.1643092	2	no
ETH:02	Journal of Geophysical Research: Solid Earth	Tesfahiwet Yemane, Thomas Samuel Hudson, John Michael Kendall, Jonathan Blundy, Amdemichael Zafu Tadesse, James O. S. Hammond, Atalay Ayele, Ghebrebrhan Ogubazghi and Sacha Lapins	*Interconnectivity of magmatic and hydrothermal systems of Aluto volcano in the main Ethiopian rift inferred from seismicity*	doi.org/10.1029/2024JB031053	4,1	2
ETH:02	Nature	R. Kounoudis, I. D. Bastow, C. J. Ebinger, S. Goes, P. Zhou, M. Musila, C. S. Ogden & A. Ayele	*The importance of past rifting in large igneous province development*	doi.org/10.1038/s41586-025-09668-7	48,5	2
ETH:02	Nature Geoscience	Emma J. Watts, Rhiannon Rees, Philip Jonathan, Derek Keir, Rex N. Taylor, Melanie Siegburg, Emma L. Chambers, Carolina Pagli, Matthew J. Cooper, Agnes Michalik, Andrew Milton, Thea K. Hincks, Ermias F. Gebru, Atalay Ayele, Bekele Abebe & Thomas M. Gernon	*Mantle upwelling at Afar triple junction shaped by overriding plate dynamics*	doi.org/10.1038/s41561-025-01717-0		2
ETH:03	ACS Omega	Gashu M, Aragaw BA, Tefera M, Abebe A.	*Bilayered film modified glassy carbon electrode for the simultaneous determination of paracetamol and chloroquine in pharmaceutical and biological samples*	10.1021/acsomega.4c08563	4,3	1
ETH:03	Biosensors and Bioelectronics	Metto M, Tesfaye A, Atlabachew M, Munshea A, Abebe A.	*Sensitive and selective electrochemical biosensor based on Manganese (II) complex for simultaneous determination of adenine and guanine from clinical samples and DNA extract samples.*	10.1016/j.biosx.2025.100603	10,5	0
ETH:03	Energy Reports	Assye Gedifew, Gizaw Mengistu Tsidu, Amare Benor	*Spatial and temporal variability of crystalline silicon solar cell performance in Ethiopia: A hybrid approach*	doi.org/10.1016/j.egyr.2025.03.003	5,1	1
ETH:03	Frontiers in Energy Research	A. Gedifew, and A. Benor	*Evaluating the impact of tilt angles and tracking mechanisms on photovoltaic modules in Ethiopia*	10.3389/fenrg.2024.1519725	2,4 (2024)	1
ETH:03	International Journal of Electrochemical Science	A. Shitahun, M. Atlabachew, B. Asefa Aragaw, A. Benor, M. Metto, A. Abebe	*Synthesis, characterization, and application of a novel electrochemical sensor based on poly [Mn(Chr)3]Cl2/PGE for the determination of ciprofloxacin in pharmaceuticals and urine samples*	doi.org/10.1016/j.ijoes.2025.100937	2,4 (2024)	1
ETH:03	Journal of Applied Electrochemistry	Zihon M, Kassa A, Tigineh GT, Chanie G, Tesfaye D, Gebrezgiabher M, Metto M, Alem MB, Abebe A, Thomas M	*Manganese(II) resorcinolate complex: synthesis, characterizations, electrochemical behavior, and antibacterial activities*	10.1007/s10800-024-02194-w	3	1
ETH:03	Journal of Renewable and Sustainable Energy	A. Gedifew, A. Tebabal, A. Benor	*Estimating solar radiation by using machine learning for improved photovoltaic system design*	10.1063/5.0291084	1,9 (2024)	1
ETH:03	Measurement	S. Alayou, M. Mengesha, G. Tizazu	*Application of machine learning models for predicting zinc oxide nanoparticle size*	10.1016/j.measurement.2025.117785	5,6 (2024)	0
ETH:03	Sensing and Bio-Sensing Research	D. Birhanu, A. Tesfaye, A. Kassa, G. T. Tigineh, A. Benor, and Atakilt Abebe	*Selective and simultaneous electrochemical detection of amoxicillin and paracetamol in pharmaceuticals and serum using a mixed-ligand poly(Co(II)-phenanthroline, diresorcinate) modified electrode*	10.1016/j.sbsr.2025.100746	4,9 (2024)	1

ETH:03	Sensing and Bio-Sensing Research	A. S. Ayicheh, M. Atlabachew, B. A. Aragaw, A. Benor, A. Kassa, A. Abebe	*Synthesis, characterization, and application of poly [Cu (Chr)$_2$Cl] Cl/PGE based electrochemical sensor for the determination of Norfloxacin in pharmaceuticals and Milk samples*	doi.org/10.1016/j.sbsr.2025.100904	4,9 (2024)	1
ETH:03	Solar RRL	Y.A. Temitmie, M. Azhar, M.I. Haider, Y. Yalcinkaya, E.R. Schütz, T. Mayer, A. Benor, and L. Schmidt-Mende	*Gas Quenching-Mediated Crystallization for Optoelectronic-Grade Pb–Sn Perovskite Films*	10.1002/solr.202500713	4,7	1
KEN 01/2	Batteries-Basel	Kwakernaak, M. C., Kiriinya, L. K., Legerstee, W. J., Berghmans, W. M. J., Hofman, C. G. T., & Kelder, E. M.	*Magnesium Alginate as an Electrolyte for Magnesium Batteries*	doi.org/10.3390/batteries11010016	4,8	1
KEN 01/2	Journal of Infrastructure Preservation and Resilience	Kairu, W. M., Mumenya, S. W., Njoroge, K. D., & Kaniu, I. M	*Application of schmidt hammer and ultrasonic pulse velocity for structural integrity assessment in water dams*	doi.org/10.1186/s43065-025-00123-5	N/A	1
KEN 01/2	Journal of Radioanalytical and Nuclear Chemistry	Kairu, W. M., Outayad, R., Mumenya, S. W., Njoroge, K., & Rajagopal, P.	*Edge detection for dimensional characterization in AI-enhanced gamma tomography of reinforced concrete*	doi.org/10.1007/s10967-025-10392-9	1,6	1
KEN 01/2	NDT&E international	Kairu, W. M., Mumenya, S. W., Njoroge, K. D., & Rajagopal, P.	*Enhanced structural evaluation of reinforced concrete using first generation gamma computed tomography and super-resolution imaging*	doi.org/10.1016/j.ndteint.2025.103387	4,5	1
KEN:01/2	Journal of Radioanalytical and Nuclear Chemistry	Outayad, R., Oulahou, Y., Elbardouni, T., Kairu, W. M., Jainija, A., Saadaoui, A., & Ezzahri, A.	*Assessment of pilot unit configurations using neutron backscattering and OpenMC simulation*	doi.org/10.1007/s10967-025-10421-7	1,6	1
KEN:01/2	Nuclear Engineering and Technology	Elijah Pkemoi, Elijah Mwangi, Michael Mangala	*Assessment of natural radioactivity and radiological risks in soil from artisanal gold mining sites in West Pokot, Kenya,*	doi.org/10.1016/j.net.2025.103563	2,6	1
LAO:01	KKU Science Journal	Saikrajang, P., Kaewtuptim, P., Vangnopor, P., Singsoupho, S., Xayavong, V., & Sompaserth, S.	*Assessment of radioactive substance in soil at Dien Bien Phu Fault Area, Xayaburi and Luang Prabang Provinces, The Lao People's Democratic Republic.*	doi.org/10.14456/kkuscij.2025.1	N/A	No
LAO:01	Souphanouvong University Journal Multidisciplinary Research & Development	K Chanthala, S Bounyavong, S Singsoupho, S Sompaserth, K Khanthavy, K Sanlasy, & L Lathdavong	*Chemical and physical properties analysis of carbonate rocks from Vang Vieng, Lao PDR*	doi.org/10.69692/SUJMRD11Special168	N/A	No
MAL:01	Energy for Sustainable Development	Iván Segura-Rodríguez, Ramchandra Bhandari, Souleymane Sanogo	*Repurpose of abandoned mini-grids in rural areas: Analysis of potential strategies*	doi.org/10.1016/j.esd.2025.101762	4,9	1
MAL:01	Journal de physique de la SOAPHYS	Moussa Ibrahim MAIGA, Souleymane SANOGO, Elijah Adesanya ADEFISAN, Imoleayo GBODE	*Assessment of high-resolution regional climate models for West Africa within the Framework of CORDEX*	dx.doi.org/10.46411/jpsoaphys.2025.C25.07	N/A	no
MAL:01	Quarterly Journal of the Royal Meteorological Society	Souleymane Sanogo, Marlon Maranan, Beth J. Woodhams, Peter Knippertz	*Dynamics and model representation of two contrasting extreme precipitation events in the Sahel*	doi.org/10.1002/qj.70084	2,9	2
MSSEESA	Journal of Advances in Science, Engineering and Technology	D. Ng'anga, M. Mageto, H. Golicha, F. Gaitho	*The effect of sunflower oil and water on thermal storage parameters of a flat plate solar water heating collector*	10.59653/aset.v2i1.53	N/A	no
MSSEESA	Journal of Synchrotron Radiation	M. Shatsala, S. Wanyonyi, C. Awino, M. Mageto, H. Golicha	*Comparative study of crystallization kinetics and phase segregation of triple cation and methylammonium lead iodide perovskites on moisture probing using synchrotron X-ray based radiation*	10.1107/S1600577524010695	3	1
MSSEESA	MRS Advances	G.I. Murila, M.J. Mageto, H.B. Wafula, F.M. Gaitho, B.K. Mutuma	*Tailoring structural phases and photocatalytic activity of vanadium-doped TiO_2 nanoparticles prepared by modified sol–gel technique*	doi.org/10.1557/s43580-025-01426-1x	0,9	1
MSSEESA	Tanzania Journal of Science	D.O. Ng'anga, M. Mageto, H. Golicha, F.M. Gaitho	*A Review on thermal energy storage media and technology for flat plate solar collectors: Experimental and modeling perspectives*	10.4314/tjs.v51i1.7	N/A	no

MSSEESA/ TAN:01/2	Journal of Materials Science: Materials in Electronics	JJ Tibaijuka, NR Mlyuka, ME Samiji	*Influence of deposition power and thickness on the microstructure and optical properties of DC-sputtered AlxOy for selective solar absorber applications*	doi.org/10.1007/s10854-024-14108-9	2,8	1
MSSEESA/ TAN:01/2	Journal of Materials Science: Materials in Electronics	H. F. Haji M. E. Samiji, and N. R. Mlyuka	*W/Mg co-doped VO_2 thin films with improved transition temperature, optical, and structural properties*	doi.org/10.1007/s10854-025-15832-6	2,8	1
MSSEESA/ TAN:01/2	Scientific African	Nickson Ezra Mmary, Nuru Ramadhani Mlyuka, Margaret Emmanuel Samiji	*Emission and transition properties of DC sputtered ITO/VO /MgO multilayered films for radiative cooling application: Influence of MgO deposition temperature*	doi.org/10.1016/j.sciaf.2025.e03023	3,3	1
MSSEESA/ TAN:01/2	Tanzania Journal of Engineering and Technology	Hezekiah B Sawa, Margaret E Samiji, Nuru R Mlyuka	*Influence of Substrate Temperature on the Properties of Reactive DC Magnetron Co-Sputtered Ag-doped TiO2 Thin Films*	doi.org/10.52339/tjet.v44i1.987	N/A	1
MYA:01	Sagaing University of Education Research Journal	Aye Khaing Soe, Min Min Thein, Nway Htet Htet Aung, Lin Lin Ei	*Effect of Morphology on Tungsten Trioxide (WO_3) Nanoflakes with Different Nitric Acid Concentrations for Water Splitting*		N/A	no
MYA:01	Solar RRL	Soe Ko Ko Aung, Hanmandlu Chintam, Priyabrata Sadhukhan, Bowen Yang, Gerrit Boschloo	*Improved Efficiency of Carbon Based Perovskite Solar Cells by Using Alternative Solvent for Doping-Free P3HT*	doi.org/10.1002/solr.202500108	4,7	1
MYA:02	University of Yangon Research Journal 2025	Hnin Wut Yi, Nang Moon Laung and Ye Chan	*Fabrication of Porous Laser-Induced Graphene Electrode for Flexible Supercapacitors*		N/A	no
MYA:02	University of Yangon Research Journal 2025	Nang Moon Laung, Hnin Wut Yi and Ye Chan,	*A Machine Learning Approach to Predicting Sheet Resistance in Laser-induced Graphene"*		N/A	no
MYA:02	University of Yangon Research Journal 2025	Zin Thu Hlaing, Yin Maung Maung, Saw Lin Oo	*Advanced Interfacial Engineering of PEDOT:PSS Films through Hydroquinone Powder Doping for Organic Photovoltaic Devices*		N/A	no
MYA:02	University of Yangon Research Journal 2025	Shine Ko Ko, Ngu Wah Hlaing, Hnin Yu Hlaing, Saw Lin Oo, Yin Maung Maung	*Design and Construction of Microbial Desalination Cells for Water Purification and Energy Generation*		N/A	no
MYA:02	University of Yangon Research Journal 2025	Aye Thuzar Oo, Thet Thet Swe, Saw Lin Oo, Myat Myat Htun	*Effect of Grinding Time on Phase Formation of Akermanite Powders*		N/A	no
MYA:02	University of Yangon Research Journal 2025	Myat Nu Yin, Chan Nyein Aung, Saw Lin Oo	*Structural Modification of Ni-Al Co-Doped Zinc Oxide Nanoparticles*		N/A	no
MYA:02	University of Yangon Research Journal 2025	Swe Zin Thant, May Thinkyan Myint, Dr Saw Lin Oo, Ohn Mar Swe	*Structural Studies of Fe3O4 doped g-C3N4 for Advanced membrane*		N/A	no
NEP:01	Bibechana	Simkhada, R., Gibbs, D. R., Dhakal, S., Oli, D., Ghimire, R. R., Mulmi, D. D., & Pradhan Joshi, L.	*Fabrication of Cu: ZnO thin film sensor for ethanol vapor detection*	doi.org/10.3126/bibechana.v22i1.70639	N/A	no
NEP:01	BIBECHANA	Guna Nidhi Poudel, Pitamber Shrestha, Narayan Prasad Rijal, Shriram Sharma, Leela Pradhan Joshi, Rajendra Parajuli	*First principles investigation of graphitic carbon nitride (GCN) monolayer embedded with transition metals (Ni, Pd, and Pt) as a NO sensor*	doi.org/10.3126/bibechana.v22i3.71498	N/A	no
NEP:01	Bulletin of the American Meteorological Society	Michael J Peterson, Rachel Albrecht, Sven-Erik Enno, Ronald L Holle, Timothy Lang, Timothy Logan, Walter A Lyons, Joan Montanya, Shriram Sharma, Yoav Yair, Jessica Losego, Randall S Cerveny	*A New WMO-Certified Single Megaflash Lightning Record Distance: 829 km (515 mi) Occurring on 22 October 2017*	doi.org/10.1175/BAMS-D-25-0037.1	5,9	2

NEP:01	Earth Systems and Environment	Manoranjan Mishra, Rajkumar Guria, Alok Taori, Shriram Sharma, Anirban Guha, FX Anjar Tri Laksono, Debdeep Bhattacharyya, Richarde Marques da Silva, Gabriel de Oliveira, Celso Augusto Guimarães Santos	*Lightning in South Asia: Patterns, Impacts, and Regional Vulnerabilities*	link.springer.com/article/10.1007/s41748-025-00680-5	5	no
NEP:01	Heliyon	Hari Krishna Neupane, Dipak Oli, Om Shree Rijal, Ravi Kiran Neupane, Pitamber Shrestha, Shriram Sharma, Leela Pradhan Joshi, Rajendra Parajuli	*Exploring the structural, dynamical, mechanical, electronic, magnetic, and optical properties of Ta_2AlN, Ti_2AlN & Ti_2GaN MAX phase compounds: First-principles study*	doi.org/10.1016/j.heliyon.2025.e42962	3,6	1
NEP:01	Himalayan Physics	Kaushal Pyakurel, Dipak Oli, Ravi Kiran Neupane, Sandip Dangi, Pitamber Shrestha, Shriram Sharma, Leela Pradhan Joshi	*Synthesis and electrochemical performance of activated carbon from lapsi (choerospondias axillaris) seed biomass for supercapacitor application*	doi.org/10.3126/hp.v12i1.66158	N/A	
NEP:01	Journal Atmospheric and Solar Terrestrial Physics	P. Karki, S R. Sharma, R. Biswasharma, S.D. Pawar, V. Gopalkrishnan, M. Gyawali, K. Paudyal	*Spatio-Temporal variation of Lightning Activity over Nepal's Complex Terrain: Links to Altitude and Meteorological Factors*	doi.org/10.1016/j.jastp.2025.106615	N/A	1
NEP:01	Journal of Advanced College of Engineering and Management	Barun Ghimire, Khem Narayan Poudyal, Shriram Sharma, Navaraj Karki	*Enhancing Surge Protection Scheme in Distribution Networks of Nepal for Lightning Overvoltage Analysis at Goldhunga Feeder (using EMTP-RV)*	nepjol.info/index.php/JACEM/article/view/84547	N/A	no
NEP:01	Journal of Physics D: Applied Physics	OS Rijal, HK Neupane, D Oli, RK Neupane, P Shrestha, S Sharma, LP Joshi, R Parajuli	*A First-Principles Investigation of the Structural, Mechanical, Dynamic, Electronic, Magnetic and Optical Properties of Ti2AC (A= Cd, S) MAX Phase Compounds*	10.1088/1361-6463/ada808	3,2	1
NEP:01	Physica B: Condensed Matter	Dipak Oli, Hari Krishna Neupane, Ravi Kiran Neupane, Om Shree Rijal, Pitamber Shrestha, Shriram Sharma, Leela Pradhan Joshi, Rajendra Parajuli	*Comprehensive study of structural, mechanical, dynamical, electronic, magnetic, and optical properties of Ti_3GeC_2 and Ti_3SiC_2 compounds via DFT approach*	doi.org/10.1016/j.physb.2025.417009	2,8	1
NEP:01	Physica Scripta	Hari Krishna Neupane, Om Shree Rijal, Ravi Kiran Neupane, Ganesh Paudel, Pitamber Shrestha, Shriram Sharma, Leela Pradhan Joshi and Rajendra Parajuli	*Structural, dynamical, thermomechanical, electronic, magnetic, and optical properties of M_2AC (M = Ta, Sc; A = Al, Cd) MAX phase compound Via DFT approach*	doi.org/10.1088/1402-4896/adffc6	2,6	1
NEP:01	Results in Surfaces and Interfaces	D Oli, OS Rijal, RK Neupane, P Shrestha, S Sharma, LP Joshi, R Parajuli	*Study of adsorption behavior of HCN and H2S molecules over undoped and Al-doped zinc oxide monolayer: A DFT approach*	doi.org/10.1016/j.rsurfi.2025.100439	4,4	1
NEP:01	Surface Science	Om Shree Rijal, Hari Krishna Neupane, Pitamber Shrestha, Shriram Sharma, Leela Pradhan Joshi, Rajendra Parajuli	*First-principles study on the adsorption behavior of ZnO and Mn-doped ZnO with CO and NH_3 gases*	doi.org/10.1016/j.susc.2025.122810	1,8	1
NEP:01/ BAN:02/2	Advances in Natural Sciences: Nanoscience and Nanotechnology	Nepal Sadip, Rijal Omshree, Paudel Ganesh, Aryal Prakash, Joshi Kumari Surya, Razibul Hassan, S. Emaranul Hoque, Agni Dhakal, Sheikh Manjura Hoque and Dinesh Kumar Chaudhary	*Tuning the optical, structural, and morphological properties of ZnO nanoparticles using Elaeocarpus Ganitrus Seed Extract for the Fabrication of Room Temperature Gas Sensor*	10.1088/2043-6262/ae318a	2,1	1
RWA:01	International Journal of Climatology	Rwema, M., Safari, B., Laine, M., Sylla, M.B. and Roininen, L.	*Trends and variability of temperatures in the Eastern Province of Rwanda.*	doi.org/10.1002/joc.8793	2,8	1
RWA:01	International Journal of Geometric Methods in Modern Physics	Munyeshyaka, A., Dhankar, P.K. and Ntahompagaze, J.	*Perturbations with bulk viscosity in modified chaplygin gas cosmology*	doi.org/10.1142/S0219887825500732	2,2	1

RWA:01	Journal of Atmospheric and Solar-Terrestrial Physics	A.C. Umuhire, N. Gopalswamy, and J. Uwamahoro	*An assessment of potentially space weather causing CMEs through analysis of associated interplanetary type II solar radio bursts and solar energetic particle events*	doi.org/10.1016/j.jastp.2025.106579	1,9	1
RWA:01	Journal of Atmospheric and Solar-Terrestrial Physics	Uwamahoro, J.C., Habarulema, J.B., Buresova, D., Giday, N.M., Habyarimana, V., Aksonova, K., Ntahompagaze, J., Ndacyayisenga, T. and Umuhire, A.C.	*Simultaneous evaluation of solar activity proxies during geomagnetic storms using principal component analysis: Case study of the African low and mid-latitude regions*	doi.org/10.1016/j.jastp.2025.106477	1,9	1
RWA:01	New Astronomy	Munyeshyaka, A., Dhankar, P.K. and Ntahompagaze, J	*Matter power spectrum in a power-law f (G) gravity*	doi.org/10.1016/j.newast.2025.102423	2,1	1
RWA:01	Physics of Plasmas	R. Rubia, L. L. Yadav, S. V. Singh, S. Devanandhan, M. B. Dhanya	*Dust-acoustic nonlinear periodic waves in a two-ion dusty plasma with dust charge variation: Application to Saturn's magnetosphere.*	doi.org/10.1063/5.0269669	2,2	1
RWA:01	Rwanda Journal of Engineering, Science, Technology and Environment	Ntahompagaze, J., Twagirayezu, F., Ayirwanda, A., Munyeshyaka, A., Mukeshimana, S., Uwimbabazi, L.F.R. and Dushimirimana, J.	*On 1+ 3 covariant perturbation with chaplygin-stiff fluid system in modified Gauss-Bonnet gravity*	doi.org/10.4314/rjeste.v7i1.1	N/A	no
RWA:01	Theoretical and Applied Climatology	Rwema, M., Sylla, M.B., Safari, B., Roininen, L. and Laine, M.	*Trend analysis and change point detection in precipitation time series over the Eastern Province of Rwanda during 1981–2021.*	link.springer.com/article/10.1007/s00704-024-05317-7	2,7	1
RWA:01	Theoretical and Applied Climatology	Sebaziga, N.J., Safari, B., Ngaina, J.N., Ntwali, D.	*Observed and future projections of seasonal extreme temperature indices in Rwanda*	link.springer.com/article/10.1007/s00704-025-05921-1	2,7	1
RWA:01	Theoretical and Applied Climatology	Sebaziga, N.J., Safari, B., Ngaina, J.N., Ntwali, D.	*Observed trends and variability of seasonal extreme rainfall indices and projected changes in Rwanda*	link.springer.com/article/10.1007/s00704-025-05474-3	2,7	1
UGA:01/ MSSEESA	Energy 360	Nyeinga, K., Chaciga, J., Achire, T., & Okello, D.	*Solar Photovoltaic cooker: Technical analysis of a system suitable for institutional cooking*	doi.org/10.1016/j.energ.2025.100047	N/A	no
UGA:01/ MSSEESA	Energy Storage and Applications	Okello, D., Chaciga, J., Nydal, O. J., Nyeinga, K.	*Experimental Thermal Performance of Air-Based and Oil-Based Energy Storage Systems*	doi.org/10.3390/esa2040015	N/A	no
UGA:01/ MSSEESA	Solar Compass	Jimmy Chaciga, Denis Okello, Karidewa Nyeinga, Ole J. Nydal	*Experimental analysis on a solar photovoltaic indoor cooker integrated with an energy storage system: A positive step towards clean cooking transition for Sub-Saharan Africa*	doi.org/10.1016/j.solcom.2025.100109	N/A	no
UGA:02	Advances in Space Research	G. Cele, G. Andima, V. Habyarimana, E. Jurua, O.P Abedigamba	*Assessment of the performance of international reference ionosphere models 2016 and 2020 in predicting TEC in the low-latitude ionosphere over Africa and South America*	doi.org/10.1016/j.asr.2025.07.032	2,8	1
UGA:02	Advances in Space Research	D. Ayebare, G. Andima, P. Mungufeni, J.C. Uwamahoro, E. Jurua	*Characterization of equatorial elrctojet and its magnetic signatures deduced from Swarm observations*	doi.org/10.1016/j.asr.2025.07.031	2,8	1
ZAM:01/ MSSEESA	Clean Energy Technologies	K Kabunda, R Rajan, P Jain, R Manyala	*Evaluation of factors influencing the operational performance of solar-powered street lighting in selected areas*	doi.org/10.54963/cet.v1i1.1477	no	no

2.5.4 Conference proceedings

There were no conference proceedings reported by the ISP groups and networks in 2025.

2.5.5 Scientific books and book chapters

Scientific books and book chapters reported by supported groups and networks.
IPICS = Chemistry, IPPS = Physics, IPMS = Mathematics.

ISP programme	Group/ Network	Author(s)	Book title	Editor(s)	*Chapter title*	DOI/Link
IPMS	BURK:01	Kpizim, E., Issaka, LM., Kasinathan, R., Meoz, K., Diop, M.A.	Modeling of Discrete and Continuous Systems	Kharrat, M., Touafek, N., Krichen, M.	*Stochastic integrodifferential equations with deviating argument driven by poisson jumps: Optimal controls*	doi.org/10.1007/978-981-97-8715-9_4
IPMS	BURK:01	Sore, S., Ndiaye, B.M., Simporé, Y	Nonlinear Analysis and Computational Techniques	Kalita, H., Becerra, T.P., Behera, K.K.	*Nonlinear Analysis and Computational Techniques*	doi.org/10.1007/978-981-96-6038-4_9
IPMS	CoRE-Math - UoN	Stephen Mboya, Sergei Silvestrov, Abdennour Kitouni, Elvice Ongong'a, Jared Ongaro	Algebra Without Borders (Book Chapter), Springer Nature	Melanija Mitrović, Mahouton Norbert Hounkonnou	*Hom-Lie Structure of Generalized sl(2)-Type*	link.springer.com/chapter/10.1007/978-3-031-86477-3_11
IPPS	BAN:02/2	A.K.M. Moshiul Alam, Md. Serajum Manir, M.R. Islam, Md. Razzak, Md. Al Mamun, Quazi T.H. Shubhra	Applications of Composite Materials in Engineering	Madhu Puttegowda, Yashas Gowda T.G., Binoj J.S., Sanjay Mavinkere Rangappa, Suchart Siengchin	*Evolution and recent advancements of composite materials in biomaterials application*	doi.org/10.1016/B978-0-443-13989-5.00011-5
IPPS	BAN:02/2	Farah Mahjabin, Md Abdullah Al Asif and S. Manjura Hoque	Nanomaterial-Plant Interactions, Nanomaterials for Enhanced Plant-Based Food Production	Huseyin Tombuloglu, Guzin Tombuloglu, Khalid Rehman Hakeem, Faheem Shehzad Baloch, Mohammad Azam Ansari	*Nanoparticles for plant–soil health management: effective solutions to multiple problems*	sciencedirect.com/science/article/pii/B9780443236884000075
IPICS	NAPRECA	Omayma A. Eldahshan	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*African Natural Products with Anti-malarial Activity*	doi.org/10.1007/978-981-96-8590-5_7
IPICS	NAPRECA	AbouZid, Sameh	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*Rose-Scented Geranium, an Important African Plant for the Perfume and Cosmetic Industries*	doi.org/10.1007/978-981-96-8590-5_2
IPICS	NAPRECA	Dekebo, Aman	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*Research Progress on the Ethno-botanical, Biological, and Phytochemical Studies of Medicinal Plants of Ethiopian Flora—Part 1: A Six-Decade (1960–2020) Review*	doi.org/10.1007/978-981-96-8590-5_1

IPICS	NAPRECA	Dekebo, Aman	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*In Vitro and In Silico Studies of Bioactive Compounds from Selected Ethiopian Plants*	doi.org/10.1007/978-981-96-8590-5_6
IPICS	NAPRECA	Esezah K. Kakudidi	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*Secondary Metabolites Used in Pest Control*	doi.org/10.1007/978-981-96-8590-5_4
IPICS	NAPRECA	Ivan Gumula	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*Fruits and Vegetables Used in Treating Respiratory and Other Troubles in Africa: Ethnopharmacology and Phytochemistry*	doi.org/10.1007/978-981-96-8590-5_3
IPICS	NAPRECA	Namukobe Jane	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*A Review on Antimicrobial Compounds from Selected African Medicinal Plants*	doi.org/10.1007/978-981-96-8590-5_9
IPICS	NAPRECA	Omayma A. Eldahshan	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*African Natural Products with Antileishmanial Activity*	doi.org/10.1007/978-981-96-8590-5_8
IPICS	NAPRECA	Robert Byamukama	Bioactive Secondary Metabolites from Medicinal Plants of Africa	Dekebo, Aman	*African Endangered Plants: Their Phytochemistry, Ethnomedicine, and Conservation Strategies*	doi.org/10.1007/978-981-96-8590-5_5

2.5.6 Popular publications and technical reports

There were no popular publications and technical reports reported by the ISP groups and networks in 2025.

2.6 Conference contributions

2.6.1 International conference contributions

Table 11. Number of poster and oral contributions to international scientific meetings in the listed countries 2025, by scientists in ISP supported groups and networks.

Country	Region	Chemistry		Mathematics		Physics		Total		Grand total
		Oral	Poster	Oral	Poster	Oral	Poster	Oral	Poster	
Benin	Africa	1				8		9	0	9
Burkina Faso	Africa	1						1	0	1
Cameroon	Africa	4	1				2	4	3	7
Ethiopia	Africa			1				1	0	1
Ghana	Africa					1	1	1	1	2
Ivory Coast	Africa	1						1	0	1
Kenya	Africa	5				2		7	0	7
Mali	Africa	1						1	0	1
Namibia	Africa					1		1	0	1
Nigeria	Africa	1						1	0	1
Rwanda	Africa	5	1			2		7	1	8
Senegal	Africa	2						2	0	2
South Africa	Africa	1	1					1	1	2
Tanzania	Africa	4				2		6	0	6
Uganda	Africa	1						1	0	1
Zambia	Africa			5				5	0	5
Zimbabwe	Africa	4						4	0	4
Total	***Africa***	***31***	***3***	***6***	***0***	***16***	***3***	***53***	***6***	**59**
Bangladesh	Asia	5	3			24	8	29	11	40
China	Asia					1		1	0	1
India	Asia					2		2	0	2
Malaysia	Asia		4			1		1	4	5
Nepal	Asia					1	3	1	3	4
Singapore	Asia						1	1	0	1
Sri Lanka	Asia	1						1	0	1
Taiwan	Asia					1		1	0	1
Thailand	Asia		7					0	7	7
Vietnam	Asia					2	2	2	2	4
Total	***Asia***	***6***	***14***	***0***	***0***	***32***	***12***	***39***	***27***	***66***
Austria	Europe			6				6	0	6
Germany	Europe					1		1	0	1
Sweden	Europe	1						1	0	1
United Kingdom	Europe			1				1	0	1
Total	***Europe***	***1***	***0***	***7***	***0***	***1***	***0***	***9***	***0***	***9***
USA	North America					3		3	0	3
Total	***North America***	***0***	***0***	***0***	***0***	***3***	***0***	***3***	**0**	**3**
Argentina	Latin America	1						1	0	1
Costa Rica	Latin America	1						1	0	1
Total	***Latin America***	***2***	***0***	***0***	***0***	***0***	***0***	***2***	***0***	**2**
Australia	Oceania					2		***2***	***0***	**2**
Total	***Oceania***	***0***	***0***	***0***	***0***	***2***	***0***	***2***	***0***	**2**
All countries		40	17	13	0	54	15	108	33	141

Chemistry (IPICS), mathematics (IPMS) and physics (IPPS) contributions to international conferences listed country-wise.

ISP program	Group / Network	Country	Organiser	Author(s)	*Title of the presentation*	Oral or Poster	Name of event	Start date	End date if more than 1 day
IPICS	BOL:01	Argentina	Sociedad Argentina de Biología Evolutiva, Sociedad Chilena de Evolución, Asociación Colombiana de Biología Evolutiva, Red Boliviana de Biología Evolutiva, Red Mexicana de Biología Evolutiva, Sociedade Brasileira de Biologia Evolutiva, Facultad de Ciencias Naturales e Instituto Miguel Lillo, Universidad Nacional de Tucumán	Carlos F. Pinto, Camila Juanez Delgadillo, Ilich Figueroa, Deborah Mayta	*Chemical responses induced by vibrational herbivory signals in Solanum Lycopersicum (Solanales: Solanaceae) and their effect on the attraction of the Parasitoid Eucremastus Sp. (Hymenoptera: Eulophidae)*	Oral	2 Congreso Latinoamericano de Evolución	2025-07-22	2025-07-25
IPPS	BAN:04	Australia	IUPESM, IFBME, IOMP	Muhammad Abdul Kadir, Frijia Mortuza, Hridoy Chandra Barman, Chitra Roy, Md. Abu Sayed and Md. Ibrahim Al Imran	*Reconstruction algorithm for improving resolution in bioelectrical impedance based pigeon hole imaging*	Oral	IUPESM World Congress on Medical Physics and Biomedical Engineering	2025-09-29	2025-10-04
IPPS	BAN:04	Australia	IUPESM, IFBME, IOMP	Md. Abu Sayed, Md. Alimul Islam, Ashiqur Rahman, Nahian Shabab, and Muhammad Abdul Kadir	*A deep learning pipeline for predicting length of stay and patient discharge outcomes in critical care units*	Oral	IUPESM World Congress on Medical Physics and Biomedical Engineering	2025-09-29	2025-10-04
IPMS	EAALG	Austria	Technical University of Graz	David Ssevviiri	*Versatility of locally reduced modules*	Oral	Conference on Rings and Polynomials	2025-07-14	2025-07-19

IPMS	EAALG	Austria	Technical University of Graz	Annet Kyomuhangi	*Generalised Reduced Modules*	Oral	Conference on Rings and Polynomials	2025-07-14	2025-07-19
IPMS	EAALG	Austria	Technical University of Graz	Brian Makonzi	*Computing the Artin component using reconstruction algebras of type A*	Oral	Conference on Rings and Polynomials	2025-07-14	2025-07-19
IPMS	EAALG	Austria	Technical University of Graz	Caroline Namanya	*Pure braid group presentations via longest elements*	Oral	Conference on Rings and Polynomials	2025-07-14	2025-07-19
IPMS	EAALG	Austria	Technical University of Graz	Philly Ivan Kimuli	*Modules whose endomorphism rings are reduced*	Oral	Conference on Rings and Polynomials	2025-07-14	2025-07-19
IPMS	EAALG	Austria	Technical University of Graz	Sarah Nakato	*Primes and absolutely or non-absolutely irreducible elements in atomic domains*	Oral	Conference on Rings and Polynomials	2025-07-14	2025-07-19
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	Tamanna Tabassum, Mohammad Kamal Hossain, Rabia Khatun Rita, Mumtahina Hasnat Surovy, Sheikh Manjura Hoque	*Effect of Holmium (Ho) doping on the structural, dielectric and magnetic properties of Nickel Ferrites (NiFe2O4) Grown by Hydrothermal method*	Oral	10th Conference of Bangladesh Crystallographic Association	2025-12-11	2025-12-12
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	Md. Ataul Haque, Rimi Rashid, Md. Rasel Shikdar and Muhammad Samir Ullah	*Impact of dy substitution on La/Ba Perovskite manganites for magnetocaloric applications*	Poster	10th Conference of Bangladesh Crystallographic Association	2025-12-11	2025-12-12
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	M. Sornali, N. Deb, I. M. Syed, S. M. Hoque	*Investigation on the structural, magnetic & electrical& optical properties of Gd doped Mn Ferrite Nanoparticles prepared by Hydrothermal method*	Oral	10th Conference of Bangladesh Crystallographic Association	2025-12-11	2025-12-12
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	S. Karimunnesa, Kazi Hanium Maria, Rimi Rashid, Sheikh Manjura Hoque	*Spray/pyrolyzed Cr/Doped CoFe2O4 thin films: a promising material for NH3 gas sensing applications*	Poster	10th Conference of Bangladesh Crystallographic Association	2025-12-11	2025-12-12
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	A.T. Sabah, Sheikh Manjura Hoque, Kazi Hanium Maria, Mohammad Khurshed Alam, Mohammad Shahriar Bashar, I.N. Esha	*Structure/driven magnetic and electrical modulation in Ho–Eu Co/Doped Ni–Zn–Cu Ferrites*	Oral	10th Conference of Bangladesh Crystallographic Association	2025-12-11	2025-12-12
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	Sheikh Manjura Hoque	*Why do we need new contrast agent for MRI/MRA Imaging?*	Oral - Keynote	10th Conference of Bangladesh Crystallographic Association	2025-12-11	2025-12-12

IPPS	BAN:02/2	Bangladesh	Bangladesh Medical Physics Association	Md. Al Mamun	*Dysprosium/doped Lithium Strontium Borate as a Thermolum-inescent Dosimetry Material*	Oral	12th International Conference on Physics in Medicine	2025-10-16	2025-10-17
IPICS	BAN:05	Bangladesh	Department of Chemistry, Jagannath University	Mamun Ar Rashid, Rausan Zamir and Nazmul Islam	*Toxic elemental impurities in energy stimulating plant-based therapeutics: A study adopting ICP-OES*	Poster	2nd ICRAC-2025	2025-01-31	2025-02-01
IPICS	BAN:05	Bangladesh	Department of Chemistry, Jagannath University	Nazmul Islam, Rausan Zamir and Omar Faruque	*Over-the-counter plant-based therapeutics: Impact of information on safe consumption*	Poster	2nd ICRAC-2025	2025-01-31	2025-02-01
IPICS	BAN:05	Bangladesh	Department of Chemistry, Jagannath University	Rausan Zamir, Nazmul Islam, Laila Arjuman Banu, Nurul Islam, Hasan Ahmed, Omar Faruque, C M. Zakaria	*Safety issue of herbal drugs in Bangladesh*	Oral - Invited lecture	2nd ICRAC-2025	2025-01-31	2025-02-01
IPICS	BAN:05	Bangladesh	ICRAST	Md. Jaki Ulla	*Adulteration of herbal antidiabetic remedies with APIs: prevalence and concerns*	Oral	2nd International Conference On Recent Advances in Science and Technology (ICRAST 2025)	2025-11-14	2025-11-15
IPICS	BAN:05	Bangladesh	ICRAST	Ariful Islam	*Comprehensive pharmacological safety assessment of energy-stimulating herbal medicines in Bangladesh: A multi-approach contamination and toxicity analysis*	Oral	2nd International Conference On Recent Advances in Science and Technology (ICRAST 2025)	2025-11-14	2025-11-15
IPICS	BAN:05	Bangladesh	ICRAST	Md. Sajjad Hossain	*Safety assesment of some gastrointestinal dieases-treating herbal medicines in bangladesh: toxic metals, preservatives, and microbial contamination*	Poster	2nd International Conference On Recent Advances in Science and Technology (ICRAST 2025)	2025-11-14	2025-11-15
IPICS	BAN:05	Bangladesh	ICRAST	Mamun-Ar Rashid,	*Safety assessment and health risk of some energy stimulating herbal drugs formulated in Bangladesh*	Oral	2nd International Conference on Recent Advances in Science and Technology (ICRAST 2025)	2025-11-14	2025-11-15
IPICS	BAN:05	Bangladesh	IUPAC	Rausan Zamir	*Evaluating the safety of herbal medicines: Current challenges and regulatory perspectives*	Oral	53rd International Union of Pure & Applied Chemistry General Assembly (IUPAC 2025) and World Chemistry Congress (50WCC)	2025-07-12	2025-07-19

IPPS	BAN:04	Bangladesh	IEEE Communications Society (ComSoc) Bangladesh Chapter	Md. Abu Sayed, Md. Alimul Islam, Hasan Ahmed, Md. Imran Hossain, Muhammad Abdul Kadir	*Secure remote patient monitoring in smart wards using blockchain and encryption techniques: A Functional Prototype*	Oral	6th IEEE International Conference on Telecommunications and Photonics	2025-12-18	2025-12-19
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	R. I. Tonmoy, I. N. Esha, Sheikh Manjura Hoque, Shirin Akter Jahan, Kazi Hanium Maria	*Amendment of Ni0.40Zn0.45Cu0. 15Fe2O4 ferrite traits by sub-stitution of dy: Structural, magnetic, and electric interpretations*	Poster	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Surya Kumari Joshi, Sheikh Manjura Hoque, Dinesh Kumar Chaudhary, Rabindra Prased Dhaal, Al/Mamun, Rameshwar	*Development of biolubricant from castor oil and its characterization in physio/chemical insight*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Rabeya Chowdhury Alina, Kazi Hanium Maria, Arup Kumar, Rimi Rashid, Md. Razibul Hasan, Sheikh Manjura Hoque	*Development of dextran–coated Fe3O4 nanoparticles for targeted hyperthermia in cancer cells*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Dinesh Kumar Chaudhary, Leela Pradan Joshy, Suriya Kumari Joshi Sheikh Manjura Hoque	*Fe and Al doping effect on the gas sensing efficacy of ZnO/based ethanol sensor*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	M. Kaisar Hamid, Shirin Akhter Jahan, Umme Sharmeen Akhter, Sheikh Manjura Hoque, Kazi Hanium Maria	*Investigation of structural, morphological properties of mo/doped vanadium disulfide nanoparticles at various doping concentration*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Md. Ataul Haque, Rimi Rashid, Md. Rasel Shikder, and Muhammad Samir Ullah	*Magnetocaloric Properties of La1/x Dyx]0.65Ba0.35MnO3*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	M M Billah, S M Hoque, S M Rahman	*Microplastics pollution in urban surface water bodies and characterization using Atr/ Ftir, Xrd*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Om Sheree Rijal, S. E. Hoque, Leela Ptadhan Joshi, Sheikh Manjura Hoque, Dinesh Kumar Chaudhary,	*Optical, structural, morphylogical and gas sensing properties of ZnO nanoparticles synthesized using Rudrakshya extract*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11

IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Khadija Khatun, Harinarayan Das, Nipa Debnath	*Studies on multi/shape Fe3O4 super/paramagnetic nanoparticles synthesized by solvothermal method for biomedical applications*	Poster	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	A. H. Zulkarnine, S.M. Turza Farhan, Pinak Chakraborty, M. R. Hasan, Rimi Rashid, A. A. Momin	*Study of structural, morphological, magnetic and transport properties of Zr substituted Ba0.5Li0.5Gd0. 1Sr0.3ZrxTi1/xO3 ceramics*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Sheikh Manjura Hoque	*Surface engineering of nano ensembles for drug loading/release*	Oral - Invited	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Rahimanaznin Zim, Nilufa Anjum, Sumiya Alam Chowdhury, Shahida Akhter, Dinesh Kumar Chaudhary, Sheikh Ehasanul Hoque, Sheikh Manjura Hoque	*Synthesis and multifunctional characterization of Mn/Zn ferrite thin films for environmental sensing*	Poster	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:02/2	Bangladesh	Bangladesh Crysttallographic Association	Sadip Nepal, Om Shree Rijal, Prakash Aryal, Suriya kumara Joshi, Rajibul Hasan, Sheikh Emranul Hoque, Leela Pradhan Jodhi, Sheikh Manjura Hoque, Dinesh Kumar Chaudhary	*Synthesis of ZnO nanoparticles using neem extract for gas sensor application*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:05	Bangladesh	Bangladesh Crystallographic Association	Sabina Hussain	*Exploring the boundless potential of transition meta; dichalogenides (TMDCs): Challenges and opportunities in a developing world context*	Oral	9th Conference of Bangladesh Crystallographic Association	2025-01-10	2025-01-11
IPPS	BAN:04	Bangladesh	Brac University	Khondkar Siddique/e Rabbani	*Focused Impedance Method – a Bangladeshi innovation with international acclaim / having the potential to form biosensors in the areas of biology, healthcare, food monitoring*	Oral	International Biotechnology Conference	2025-06-20	2025-06-21
IPPS	BAN:04	Bangladesh	Department of Physics, Shahjalal	Khondkar Siddique/e Rabbani	*Bioelectrical frontiers in medicine: Diagnostic and therapeutic—explored in Bangladesh*	Oral	International Conference on Advances in Physics (ICAP 2025)	2025-12-17	2025-12-18

			University of Science and Technology (SUST)						
IPPS	BAN:04	Bangladesh	Bangladesh Medical Physics Association (BMPA) and Department of Biomedical Physics and Technology, DU	Md. Hasanuzzaman Ananda, Md Sharjis Ibn Wadud	*Computational analysis of carotid artery tortuosity with different blood rheological model*	Poster	International Conference on Physics in Medicine (ICPM/2025)	2025-10-16	2025-10-17
IPPS	BAN:04	Bangladesh	Bangladesh Medical Physics Association (BMPA) and Department of Biomedical Physics and Technology, DU	Md. Abul Hossain Akon, Maharshi Chakma, Safia Aktar Dipa, Hridoy Chandra Barman, Md. Ibrahim Al Imran	*Deep learning/based classification of skin diseases using convolutional neural networks*	Poster	International Conference on Physics in Medicine (ICPM/2025)	2025-10-16	2025-10-17
IPPS	BAN:04	Bangladesh	Bangladesh Medical Physics Association (BMPA) and Department of Biomedical Physics and Technology, DU	Sabrina Sharmin, Mohammad Abu Sayem Karal, Zaid Bin Mahbub, Khondkar Siddique/e Rabbani	*Effect of stretch on conduction in myelinated nerve due to wrist movement/An experimental and analytical study*	Oral	International Conference on Physics in Medicine (ICPM/2025)	2025-10-16	2025-10-17
IPPS	BAN:04	Bangladesh	Bangladesh Medical Physics Association (BMPA) and Department of Biomedical Physics and Technology, DU	Md. Abu Sayed, Ayesha Tun Nashrah, Md. Nahid Hossain, Muhammad Abdul Kadir	*Enhancing lung nodule detection and classification in PET/CT images with a tumor description/guided deep learning approach*	Oral	International Conference on Physics in Medicine (ICPM/2025)	2025-10-16	2025-10-17
IPPS	BAN:04	Bangladesh	Bangladesh Medical Physics Association (BMPA) and Department of Biomedical Physics and Technology, DU	Suman Dewanjee, Muttakee Bin Ali, Hridoy Chandra Barman, Safia Aktar Dipa, Hasan Ahmed, Md. Ibrahim Al Imran	*Fabrication of a wound healing chitosan/based sugarcane fiber hydrogel from biowaste with significant antibacterial activity*	Oral	International Conference on Physics in Medicine (ICPM/2025)	2025-10-16	2025-10-17
IPPS	BAN:04	Bangladesh	Bangladesh Medical Physics Association (BMPA) and Department of	Shirin Akter, Hossen Mohammad Jamil, K. M. Mahabub Morshed, Rajada Khatun, Ashrafun Nahar Monika, Mohammad Monjur	*Spectrometric and dosimetric Characterization of 241Am/Be and 252Cf neutron sources using a nested neutron spectrometer and neutron survey meter*	Oral	International Conference on Physics in Medicine (ICPM/2025)	2025-10-16	2025-10-17

			Biomedical Physics and Technology, DU	Ahasan, Md. Shakilur Rahman and Muhammad Abdul Kadir					
IPPS	BAN:02/2	Bangladesh	Bangladesh Crystallographic Association	Tahmina Rashid Smrity, Farhana Binta Rahman, Aninda Nafis Ahmed, Shad Inquiad Mim, Shamsun Alam, Harinarayan das	*Temperature/dependent microstructural and optical characteristics of microwave/ synthesized ZnO nanorods*	Poster	Symposium on Innovation in Materials Research Connecting Industry and Academia, Materials	2025-12-11	2025-12-12
IPPS	BAN:02/2	Bangladesh	Materials Research Centre, BUET	Sheikh Manjura Hoque	*Magnetic resonance imaging/ angiography studies in/vivo on albino wister rat head by TOF 3D pulse sequence using spinel type nano ferrites as the contrast agent*	Oral - Keynote	Symposium on Innovation in Materials Research Connecting Industry and Academia, Materials Symposium 2025	2025-02-22	2025-02-22
IPPS	BUF:01	Benin	SOAPHYS	Abdoul Nassourou Cissé, Bruno Korgo, Nébon bado, Rebeca Belemsigri, Sié Kam	*Climatologie des aérosols en Afrique de l'Ouest à l'aide du capteur modis et du modèle de réanalyse cams*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPPS	BUF:01	Benin	SOAPHYS	Kabore Alassane, Korgo Bruno, Ouedraogo Lareba Adelaide	*Developpement d'un système de management d'énergie pour une mini)centrale solaire photovoltaique avec stockage batterie/H2 au Burkina Faso*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPPS	BUF:01	Benin	SOAPHYS	Rebeca Belemsigri, Bruno Korgo	*Empreinte carbone d'une chaussée souple au Burkina Faso: approche par l'analyse du cycle de vie*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPPS	BUF:01	Benin	SOAPHYS	Ouedraogo D. Quentin, Korgo Bruno, Ouedraogo Lareba Adelaide	*Etude du potentiel élolien en Afrique de l'Ouest*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPPS	BUF:01	Benin	SOAPHYS	Ouedraogo Salifou, Ouedraogo Boukare, Ky S. Thierry	*Etude expérimentales sur l'écoulement de l'air en convection naturelle dans un prototype de cheminée tour solaire*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPPS	BUF:01	Benin	SOAPHYS	Ramatou Konaté, Bernard Zouma, Bruno Korgo, Aboubacar Savadogo, Cyrille Constant Moyenga, Issa Zerbo	*Impact of the doping rate of different zones of the bifacial PV cell on the eectrical parameters*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPPS	BUF:01	Benin	SOAPHYS	Mahamadi Savadogo, Kpéli Esso-Ehanam Tchédré, Idrissa	*Modelling a water based concentrated photovoltaic therma*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04

				Sourabié, Abdul Aziz Zongo, Abdoulaye Sawadogo, Issa Zerbo, Martial Zoungrana	*(CPVT)hybrid collectir: Analysis of the influence of mass flow rate on temperature and photovoltaic performance*				
IPPS	BUF:01	Benin	SOAPHYS	Ouedraogo Lareba Adelaide, Kam Sié, Ravoninjatovo Achille Olivier, Bathiebo Dieudonné Joseph	*Technical and economic pre)feasibility study for a micro-hydro plant and solar photovoltaic system for the ecotourist village of Mandraka*	Oral	7th Congress of the West African Physics Society (SOAPHYS)	2025-09-01	2025-09-04
IPICS	RABiotech	Benin	Universite d'Abomey-Calavi	Salou Adam Abdoul-Rahim, Diao Mamounata, Issa Adam Mahamadou Bello, Bekoune Some Vincent, Ouaro Désiré, Sawadogo Sandaogo, Nikiema Rocksane Octavia, Mamoudou H. Dicko	*Caractéristique minérale de l'huile brute de 12 accessions de soja cultivé au Niger*	Oral	Colloque Des Sciences, Cultures Et Technologies De L'Universite d'Abomey-Calavi	2025-09-22	2025-09-26
IPICS	RABiotech	Burkina Faso	UCAO_UUB	Wouléyon TIENE, Samson GUENNE, Hemayoro SAMA, Ghislain Tégawendé KOBENDE, Mamoudou Hama DICKO	*Evaluation de l'impact de la durée de conservation sur la qualité des miels du centre apicole de Koudougou (Burkina-Faso)*	Oral	Colloque International Anniversaire des 20 ans de création de l'UCAO-UUB	2025-11-11	2025-11-13
IPICS	ANEC	Cameroon	Research Unit of Noxious Chemistry and Environmental Engineering, University of Dschang, Alexander von Humboldt Foundation	J. Madjadoum, Eric Talla N., Astrée L. Djuffo Y., Victor K. Tchieda, C. N. Pecheu, Christoph Janiak, Ignas K. Tonle	*Amperometric sensor based on a composite material $[H_4PW_{17}V(IV)O_{62}]^{9-}$@MOF-808: Application to the electroanalysis of tramadol*	Oral	1st Conference on innovative materials and applications in energy, health and environment	2025-08-28	2025-08-30
IPICS	ANEC	Cameroon	Research Unit of Noxious Chemistry and Environmental Engineering, University of Dschang, Alexander von Humboldt Foundation	Wabo Gildas C, Somba Alex V, Deffo Gullit, Fotsop Ghislain C., Gabou Fongang S., Tchieda Victor, Tchatchouang T. Landry, Njanja Evangeline	*Development of an amperometric sensor based on the zinc oxide nanocomposites printed on the surface of raw clay and phenylalanine for the electroanalysis of acetaminophen in aqueous solution*	Poster	1st Conference on innovative materials and applications in energy, health and environment	2025-08-28	2025-08-30
IPICS	ANEC	Cameroon	Research Unit of Noxious Chemistry and Environmental	Astree L. Djuffo Y., Eric D. Talla N., Dylan M. Noubi, Chancellin	*Electrochemical detection of adrenaline based on a cysteine-*	Oral	1st Conference on innovative materials and applications in energy, health and environment	2025-08-28	2025-08-30

			Engineering, University of Dschang, Alexander von Humboldt Foundation	N. Pecheu, Victor K. Tchieda, Christoph Janiak, Ignas K. Tonle	*grafted MOF-808 modified glassy carbon electrode*				
IPICS	ANEC	Cameroon	Research Unit of Noxious Chemistry and Environmental Engineering, University of Dschang, Alexander von Humboldt Foundation	Victor K. Tchieda, Chancellin N. Pecheu, Christoph Janiak, Ignas K. Tonle	*Electrochemical detection of cadmium and lead on glassy electrode modified by Metal Organic Frameworks MIL-125(Ti)-NH2*	Oral	1st Conference on innovative materials and applications in energy, health and environment	2025-08-28	2025-08-30
IPICS	ANEC	Cameroon	Research Unit of Noxious Chemistry and Environmental Engineering, University of Dschang, Alexander von Humboldt Foundation	Chancellin N. Pecheu, Sherman L. Z. Jiokeng, Victor K. Tchieda, Till Strothmann, Cyrille G. Fotsop, Brenda F. Kenyim, Ignas K. Tonle, Christoph Janiak	*Post synthetic modification of MOF-808 using silver nanoparticle: Characterization and application for the electrochemical determination of epinephrine*	Oral	1st Conference on innovative materials and applications in energy, health and environment	2025-08-28	2025-08-30
IPPS	AFSIN	Cameroon	ETIIAC	R Nguimdo, A Tiedeu	*Automated analysis of ECG using shufflenetv2 architecture*	Poster	ETIIAC (École Thématique Internationale de l'Intelligence Artificielle au Cameroun)	2025-12-02	2025-12-04
IPPS	AFSIN	Cameroon	ETIIAC	A. Mbassi, A Tiedeu	*Diagnosis of covid19 using AI*	Poster	ETIIAC (École Thématique Internationale de l'Intelligence Artificielle au Cameroun)	2025-12-02	2025-12-04
IPPS	ETH:02	China	CEA (China Earthquake Administration)	Atalay Ayele	*Seven months seismic activity (September 2024 to March 2025) of the Fentale Dofen magmatic segment in Afar: challenges in DRM practices*	Oral	International Symposium on Earthquake Forecasting, commemoratingthe 50th anniversary of the 1975 Haicheng M7.3 Earthquake & Coordinators' Meeting on Belt and Road Seismic Risk Reduction	2025-07-09	2025-07-12
IPICS	BOL:01	Costa Rica	Centro de Investi-gaciones Apícolas Tropicales, Refugio Lapa Verde, Universidad Técnica Nacional, Instituto	Marcia Adler, Mariela Ajhuacho-Villalobos, Gina Zambrana Camacho, Luis Flores Prado, Santiago Benitez-Vieyra, Omar N. Urquizo, Kathy Collao-Alvarado and Carlos Pinto	*Flora clave y composición polínica en colmenas de Meliponini en el bosque Tucumano-Boliviano: implicancias ecológicas y productivas*	Oral	XIV Congreso Mesoamericano de Abejas Nativas 2025	2025-12-03	2025-12-06

			Nacional de Aprendizaje, Abejas Nativas Costa Rica						
IPMS	CoRE-Math MAK	Ethiopia	Addis Ababa University	John Mango Magero	*A gentle walk-through research collaboration and development in the African partners*	Oral	Celebration of 75 Years of Mathematical Legacy	2025-12-27	2025-12-30
IPPS	MAL:01	Germany	Institute for Natural Resources Technology and Management (ITT/TH-Köln)	Souleymane SANOGO & Issiaka TRAORE	*Clean alternative solutions to the inefficient cooking/fuel used in Malian kitchens*	Oral	C/COOK Workshop	2025-05-05	2025-05-09
IPPS	AFSIN	Ghana	American Physical Society (APS)	Huzortey, A A	*Laser-induced fluorescence spectroscopy assessment of dissolved organic matter and chlorophyll in mosquito breeding habitats*	Oral	APS Global Physics Summit 2025 of the American Physical Society	2025-03-16	2025-03-21
IPPS	AFSIN	Ghana	American Physical Society (APS)	Rabbi Boateng, A. Andrew Huzortey, Y. Adolphe Gbogbo A. S. Doria Yamoa, Jérémie T. Zoueu, Mikkel Brydegaard, Benjamin Anderson, Hampus Månefjord	*Remote mapping of algae on walls with a 3D printed hyperspectral fluorescence lidar*	Poster	APS Global Physics Summit 2025 of the American Physical Society	2025-03-16	2025-03-21
IPPS	NEP:01	India	Department of Physics, Panjab University, Chandigarh, India	Dinesh Kumar Chaudhary, Rajesh Shrestha, Pitamber Shrestha, Sabita Sharma, Shankar Prasad Shrestha, Sheikh Manjura Hoque, Leela Pradhan Joshi	*Impact of Fe-codoping on the ethanol sensing efficancy of Al-doped ZnO –based gas sensor*	Oral	2nd International Conference on Advances in Condensed and Nano Materials (ICACNM – 2025)	2025-10-27	2025-10-30
IPPS	NEP:01	India	Department of Physics, Panjab University, Chandigarh, India	Samir Thapaliya, Ram Sharma, Pitamber Shrestha, Bishnu Neupane, Dinesh Kumar Chaudhary	*Optical, Electrical and Structural properties of undoped and Li-doped ZnO films*	Oral	3rd International Conference on Advances in Condensed and Nano Materials (ICACNM – 2025)	2025-10-27	2025-10-30
IPICS	RABiotech	Ivory Coast	UNIVERSITE Nangui ABROGOUA	SALOU ADAM Abdoul-Rahim, DIAO Mamounata, ISSA ADAM Mahamadou Bello, BEKOUNE SOME Vincent, OUARO Désiré, SAWADOGO Sandaogo,	*Etude des paramètres physicochimiques de l'huile de 3 variétés améliorées de soja cultivé au Niger*	Oral	SYMPOSIUM DES VALORIALES DE LA NUTRITION DE L'UNIVERSITE Nangui ABROGOUA	2025-11-19	2025-11-20

				NIKIEMA Rocksane Octavia, Mamoudou H. DICKO					
IPPS	MSSEESA	Kenya	Kabarak Univ/MSSEESA	Silas Abok, Celine Omondi, Francis M. Gaitho and Maxwell J. Mageto	*Advanced Synthesis and Multi-modal Characterization of Methylammonium Lead Iodide Perovskite Thin Film For High-Efficiency Solar Cell Applications*	Oral	15th Kabarak University International Conference on Pure and Applied Sciences	2025-07-10	2025-07-11
IPPS	MSSEESA	Kenya	Kabarak Univ/MSSEESA	Sharon Chemtai, Sellah Kebenei, Mwamburi Mghendi, Margaret Samiji, Christopher Maghanga	*Synergistic Effect of Photocatalysis and Photo-Fenton Processes in Sol-Gel Fabricated CO-SnO_2Thin Films for Water Treatment*	Oral	15th Kabarak University International Conference on Pure and Applied Sciences	2025-07-10	2025-07-11
IPICS	ANCAP	Kenya	ANCAP	Nicholas Jacob Mwenda	*Assessment of Select Carcinogenic Heavy Metals in commonly consumed Foods in Nyambene, Meru County Kenya*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Kenya	ANCAP	Vincent Odongo Madadi	*Insights of Trends of Old and New POPs in Atmospheric Environment in Africa under the Global Monitoring Plan*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Kenya	ANCAP	Vincent Odongo Madadi	*Opportunities and challenges with evolving list of persistent organic pollutants under the Stockholm Convention*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Kenya	ANCAP	MWIRIGI ISAAC	*Phytoremediation studies of pesticides in polluted soil using selected plant species in Kenya*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Kenya	ANCAP	Vincent Mailu Munywoki	*The Air Around Kitengela Obsolete Pesticide Site*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANEC	Malaysia	Institut Kimia Malaysia (IKM) and IUPAC	Modou Fall, Ismaïla Diedhiou, Momath Lô, Noureddine Raouafi	*Polymer-modified electrodes for the electroanalysis of trace metal ions and nitrites in water and food samples*	Poster	50th IUPAC World Chemistry Congress	2025-07-14	2025-07-19
IPPS	BAN:04	Malaysia	Voice for Global Bangladeshis VfGB	Khondkar Siddique/e Rabbani	*Equating Lives through Technology – a lifelong mission with potential of success / from a challenging environment in Bangladesh*	Oral	Conference of Voice for Global Bangladeshis (VfGB)	2025-12-01	2025-12-03

IPICS	CAB-CCS	Malaysia	IUPAC	SocheataKorng	*Artisanal Gold mining in Cambodia*	Poster	IUPAC 53 General Assembly	2025-07-12	2025-07-16
IPICS	CAB-CCS	Malaysia	IUPAC	Chanthirit Son	*Chemical Experiment can improve students learning satisfaction*	Poster	IUPAC 53 General Assembly	2025-07-12	2025-07-16
IPICS	CAB-CCS	Malaysia	IUPAC	Sopharen Houn	*Development of a paper-based microfluidic device for Colorimetric detection lead ion*	Poster	IUPAC 53 General Assembly	2025-07-12	2025-07-16
IPICS	RABiotech	Mali	Université de Ségou	Kayaba Kaboré; Crépin Dibala Ibingou; Adjaratou Souratié; Sandrine Tienbnoma Ouédraogo; Désiré Ouaro; Hemayoro Sama; Mamounata Diao, Mamoudou Hama Dicko	*Caractérisation des propriétés physico-chimiques des fruits de Solanum aethiopicum (L.) subsp Kumba cultivées au Burkina Faso*	Oral	5ième édition de l'Instant de l'Enseignant Chercheur de l'Université de Ségou.	2025-05-10	2025-05-10
IPPS	ETH:02	Namibia	The Geological Survey of Namibia and the Ministry of Mines and Energy (MME).	Atalay Ayele	*Challenges of Disaster Risk Management (DRM) in EARS (East African Rift System): the ongoing Fentale-Dofen volcano seismic activity as a case study*	Oral	African Seismological Comission (AfSc) assemply	2025-02-24	2025-02-28
IPICS	UGA:01	Namibia	Royal Academy of England	Nantaba F, Farad Sagala	*Nanoparticles from rice husks as a biopesticide*	Oral	Harmonizing Innovation: Collaborative synthesis of nanoparticles derived from agricultural waste for various industrial applications	2025-02-10	2025-02-11
IPPS	NEP:01	Nepal	Nepal Materials Science Society	Sandip K Dangi, Sarita Regmi, Dinesh K Chaudhary, Pitamber Shrestha, Leela Pradhan Joshi	*Electrochemical & Optical Characterization of SnO2 films*	Poster	2nd International Conference on Advanced Functional Materials (ICAFM 2025 Kathmandu)	2025-03-27	2025-03-29
IPPS	NEP:01	Nepal	Nepal Materials Science Society	Sarita Regmi, Sandip K Dangi, Dinesh K Chaudhary, Pitamber Shrestha, Leela Pradhan Joshi	*Optical and Electrical Character-ization of Cobalt Oxide film*	Poster	2nd International Conference on Advanced Functional Materials (ICAFM 2025 Kathmandu)	2025-03-27	2025-03-29
IPPS	NEP:01	Nepal	Nepal Materials Science Society	Bimala Subedi, Gambhir Khan Thakuri, Pitamber Shrestha, Leela Pradhan Joshi	*Optical and Electrical properties of Homojuction and Hetrojunction thin film deposition of ZnO/FTO & CuO/ZnO/FTO by spray pyrolysis*	Poster	2nd International Conference on Advanced Functional Materials (ICAFM 2025 Kathmandu)	2025-03-27	2025-03-29
IPPS	NEP:01	Nepal	Nepal Materials Science Society	Leela Pradhan Joshi, Rishi Ghimire, Joha Joshi	*Optimization of UV photo-response in ZnO nanostructure film by balancing light absorption, carrier*	Oral	2nd International Conference on Advanced Functional Materials (ICAFM 2025 Kathmandu)	2025-03-27	2025-03-29

					collection efficiency, and field effect mobility				
IPICS	ANCAP	Nigeria	ANCAP	Esther Nguumbur Iornumbe	*Synthesis, Characterization and Nematicidal Properties of Triphenyltin (IV) Derivatives Of Butanedioic Acid and Hexandioic Acid*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP/RWA:01	Rwanda	ANCAP	Valens Habimana	*Chemically modified banana fibers for nutrient recovery from slaughterhouse wastewater*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	RWA:01	Rwanda	ANCAP	Vital Ufitinema, Gratien Habarurema, Janvier Mukiza, Theoneste Muhizi	*New generation separation materials for environmental applications – Interactions between ligands and ions/ molecules*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP/RWA:01	Rwanda	China Africa Water Association (CAWA), under the auspices of UNESCO	Valens Habimana	*Slaughterhouse wastewater management practices and future resource recovery potential in Rwanda*	Oral	9th China Africa Water Association (CAWA) Conference	2025-07-21	2025-07-26
IPICS	ANCAP/RWA:01	Rwanda	University of Rwanda-College of Science and Technology in collaboration with Lund University	Valens Habimana	*Waste-to-resource approaches for clean water production and resource recovery from industrial wastewater*	Oral	Collaborative workshop: Centre for Advanced Studies in Water & Environment	2025-11-26	
IPPS	ETH:02	Rwanda	International Centre for Theoretical Physics – East African Institute for Fundamental Research (ICTP-EAIFR)	Atalay Ayele	*Active rifting in the East African Rift and challenges in disaster risk management*	Oral	Conference on Volcanic Processes: a Variety of Length and Time Scales	2025-08-31	2025-09-06
IPPS	ETH:02	Rwanda	International Centre for Theoretical Physics – East African Institute for Fundamental Research (ICTP-EAIFR)	Sisay Alemayehu	*The first observation of seismicity beneath the northwestern Ethiopian plateau and its seismotectonic*	Oral	Conference on Volcanic Processes: a Variety of Length and Time Scales	2025-08-31	2025-09-06
IPICS	ANCAP/RWA:01	Rwanda	The Geological Society of America (GSA) Connects	Emmnauel Ngendahayo	*Hydrogeochemical characterization and quality assessment of ground-water in the water-stressed*	Oral	Geological Society of America (GSA) Connects 2025	2025-10-19	2025-10-22

					drought-prone southeastern region of Rwanda				
IPICS	ANCAP/RWA:01	Rwanda	Swedish Chemical Society	Jean Bosco Nkuranga, Erdelyi Mate, Daniel	*Development of new cathode materials for organic batteries*	Poster	Swedish Chemical Society	2025-06-15	
IPICS	ANEC	Senegal	West African Chemistry Company	Bibata OUEDRAOGO	*Development of a carbon paste electrode for the analysis of paracetamol in pharmaceutical formulations*	Oral	25th Annual Scientific Conference of the West African Society of Chemistry (SOACHIM)	2025-08-19	2025-08-22
IPICS	ANEC	Senegal	West African Chemistry Company	Amidou TALL	*Synthesis of carbon-based nanomaterials from biomass: characterization and application for the detection of Pb(II) ions in aqueous media*	Oral	25th Annual Scientific Conference of the West African Society of Chemistry (SOACHIM)	2025-08-19	2025-08-22
IPPS	MSSEESA/TAN:01/2	Singapore	WRO international	Eva T. Shana, Hezekiah B. Sawa, Gilya Sungi	*WRO 2025 Tz: Agro Guards*	Poster	World Robot Olympiad (WRO) international finals 2025	2025-11-25	2025-11-25
IPICS	ZIM:02	South Africa	SETAC World in conjunction with SETAC Africa	J.B. Change, N. Basopo, T. Machingura.	*An assessment of two selected veterinary antibiotics commonly found in veterinary waste and their toxicity on the Freshwater snail Helisoma duryi*	Poster	SETAC (Society of Environmental Toxicology and Chemistry) 9th World Congress/ SETAC Africa 12th Biennial Meeting.	2025-09-29	2025-10-03
IPICS	ZIM:02	South Africa	SETAC World in conjunction with SETAC Africa	R.V Mapindu, S.T. Ngwenya, S. Mnkandla, D. Ndebele, N. Basopo.	*Evaluating the ecotoxicological effects of pharmaceutical and personal care product pollutants on aquatic ecosystems in Bulawayo, Zimbabwe*	Oral	SETAC (Society of Environmental Toxicology and Chemistry) 9th World Congress/ SETAC Africa 12th Biennial Meeting.	2025-09-29	2025-10-03
IPICS	ANRAP	Sri Lanka	Colombo	Begum Rokeya	*Local use and scientific evidence of natural herbs for type 2 diabetes management*	Oral	International Conference of Sustainable Devlopment of Marine bio-resources	2025-08-02	2025-08-06
IPICS	ANEC/ETH:01	Sweden	Addis Ababa	Shimelis Admassie	*Electoactive Carbons from Invasive Plants in Ethiopia*	Oral	KAW III Zinc Ion Battery Meeting	2025-04-28	2025-04-29
IPPS	BAN:04	Taiwan	Medical Device Innovation Center, National Cheng Kung University, Taiwan	Muhammad Abdul Kadir, Arpita Roy, Md Munna Jomaddar, Md Milton Hossen, Hridoy Chandra Barman, and Md Abu Sayed	*Multimodal Sensing with TinyML integration for early detection of diabetic peripheral neuropathy: towards affordable and scalable healthcare*	Oral	Future Healthcare and Economic Development (FHED/2025)	2025-11-17	2025-11-21
IPICS	ANCAP	Tanzania	ANCAP	Kessy F. Kilulya	*From Feed to Flesh: Aflatoxin Contamination in Poultry Systems*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30

					and Age-Dependent Exposure in Chickens				
IPICS	ANCAP	Tanzania	ANCAP	Isack Maganga	*Occurrence and levels of lead and cadmium in fish from Lake Rukwa, Tanzania: Potential fish and public health risks*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Tanzania	ANCAP	Aziza Hassan	*Spatial and Seasonal Distribution of Cyanobacterium moorea*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Tanzania	ANCAP	Rufus Sha'Ato	*Spectrographic determination of hazardous and non – hazardous trace metals/metalloids in respirable dust emanating from artisanal quarrying operations in Jos South, Plateau State, Central Nigeria*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPPS	MSSEESA/ TAN:01/2	Tanzania	Tanzania Atomic Energy Commisiion (TAEC)	Nuru R. Mlyuka, Hezekiah B. Sawa, Justine J. Tibaijuka, Gilya Sungi, Eva T. Shana, Mtelela K. Mtelela, Nickson E. Mmary, Hashimu R. Nsanze, etc.	*Raising Enjoyment and Aspirations in Physics (REAP) Among Selected Secondary School Students in Selected Tanzanian Schools*	Oral	1st Annual Conference and Exhibitions on Applications of Nuclear Science and Technology	2025-11-27	2025-11-27
IPPS	MSSEESA/ TAN:01/2	Tanzania	ICTC, ELEVATE and the African Union Development Agency-NEPAD (AUDA-NEPAD)	Eva T. Shana	*Achievement of robotics bootcamp in Tanzania for 2025*	Oral	8th Tanzania Annual ICT Conference (TAIC) Conference	2025-09-20	2025-09-20
IPICS	LAO:04	Thailand	Suranaree University of Technology	Thansamai Detphakhoun, Phengxay Deevanhxay, Kesiny Phomkeona, Vanseng Chounlamany	*Quantification of catechin and caffeine in lao tea products by using HPLC*	Poster	9th SUT International Colloquium: Agricultural Technology for BCG Economy Development	2025-11-13	2025-11-14
IPICS	ANRAP	Thailand	IDF	Fatima Anjum Faruquee	*Antidiabetic effect and the role of GLUT4 and IR gene expression of Clinacanthus nutans leaves on n-STZ induced T2DM rats*	Poster	International Diabetic Federation (IDF) Congress	2025-04-07	2025-04-10
IPICS	ANRAP	Thailand	IDF	Md Ranzu Ahmed	*Chemical analysis of the biologically active crude extract from Glinus oppositifolius on streptozocin induced T2DM rats*	Poster	International Diabetic Federation (IDF) Congress	2025-04-07	2025-04-10

IPICS	ANRAP	Thailand	IDF	Begum Rokeya	*Evaluation of antidiabetic and GLUT4 gene expression of Rhus chinensis and Cinnamomum tamala on n-STZ induced T2DM rats*	Poster	International Diabetic Federation (IDF) Congress	2025-04-07	2025-04-10
IPICS	ANRAP	Thailand	IDF	Raihana Jahan	*Impact of risk factors associated with adverse outcomes of GDM subjects of Bangladesh*	Poster	International Diabetic Federation (IDF) Congress	2025-04-07	2025-04-10
IPICS	ANRAP	Thailand	IDF	Md Mahedi Hassan Tusher	*Molecular elucidation of anti-dyslipidemia effects of Punica granatum and Beta vulgaris on T2DM rats with dyslipidemia*	Poster	International Diabetic Federation (IDF) Congress	2025-04-07	2025-04-10
IPICS	ANRAP	Thailand	IDF	Md Shahinul Haque Khan	*Phytochemical and Antioxidant Activity and Ascorbic Acid Equivalent Antioxidant Capacity of Bangladeshi Medicinal Plants*	Poster	International Diabetic Federation (IDF) Congress	2025-04-07	2025-04-10
IPICS	UGA:02	Uganda	Global Alliance on Health and Pollution	Emmanuel Tebandeke	*Health and Pollution Action Plan for Uganda*	Oral	Environmental Pollution Programme Conference (EPP) on Health and Pollution in Uganda	2025-10-06	2025-10-10
IPMS	EAALG	United Kingdom	International Centre for Mathematical Sciences	David Ssevviiri	*Introduction to Local Cohomology*	Oral	Algebra and Geometry from Africa Workshop	2025-05-05	2025-05-16
IPPS	RWA:01	USA	Arizona State University	Manasse Mbonye	*Self-Regulating Cosmology (SRC) Signature Features and JWST Observations*	Oral	33rd Texas Symposium on Relativistic Astrophysics	2025-12-08	2025-12-12
IPPS	AFSIN	USA	American Physical Society (APS)	Milohum Mikesokpo DZAGLI, Eyakifama Hazou, Tchilabalo Essossimna Patchali	*Radiological assessment and statistical analysis of natural radionuclides associated with phosphate ore activities in the southern region of Tog*	Oral	APS Global Physics Summit	2026-03-15	2026-03-20
IPPS	AFSIN	USA	SPIE	Abah Arielle D Koffi, Andreas Heinrich, Jeremie T Zoueu	*Nanoimprint lithography for replicating focused ion beam structures: evaluation of structural fidelity*	Oral	SPIE Optical Engineering + Applications, Applied Optical Metrology VI	2025-08-03	2025-08-08
IPPS	MYA:02	Vietnam	CASEAN 9 Committee	Saw Lin Oo	*Portable, low-cost sensor for early stage gastric cancer detection*	Poster	9th CASEAN	2025-09-30	2025-10-03

IPPS	MYA:02	Vietnam	CASEAN 9 Committee	Saw Lin Oo	*Real-time, label-free monitoring of single-cell progression*	Poster	9th CASEAN	2025-09-28	2025-10-01
IPPS	MYA:02	Vietnam	CASEAN 9 Committee	Ye Chan	*Water quality index forecasting using machine learning regression with feature optimization*	Oral	9th CASEAN	2025-09-28	2025-10-01
IPPS	MYA:02	Vietnam	9th ICAEP Committee	Ye Chan	*ML/guided optimization of metal oxide/decorated laser/induced graphene for energy storage*	Oral	9th ICAEP	2025-09-30	2025-10-03
IPMS	CoRE-Math UNZA	Zambia	Mulungushi University	Kelvin Muzundu	*Inheritance properties of positive cones induced by subalgebras and quotients of ordered banach algebras*	Oral	Annual Conference of the Southern Africa Mathematical Sciences Association (SAMSA)	2025-11-25	2025-11-28
IPMS	CoRE-Math UNZA	Zambia	Mulungushi University	David Mwale	*Commutatively ordered banach algebras*	Oral	Annual Conference of the Southern Africa Mathematical Sciences Association (SAMSA)	2025-11-25	2025-11-28
IPMS	CoRE-Math UNZA	Zambia	Mulungushi University	Mainza Mbokoma	*An improvement on the large deviations for longest runs in Markov chains*	Oral	Annual Conference of the Southern Africa Mathematical Sciences Association (SAMSA)	2025-11-25	2025-11-28
IPMS	CoRE-Math UNZA	Zambia	Mulungushi University	Jesse Linchela	*Fredholm Theory in Ordered Banach Algebras*	Oral	Annual Conference of the Southern Africa Mathematical Sciences Association (SAMSA)	2025-11-25	2025-11-28
IPMS	CoRE-Math UNZA	Zambia	Mulungushi University	John Pamba	*On fixed point results of Suzuki-type contractions on controlled metric spaces with applications*	Oral	Annual Conference of the Southern Africa Mathematical Sciences Association (SAMSA)	2025-11-25	2025-11-28
IPICS	ANCAP	Zimbabwe	ANCAP	Rudo Zhou	*Bioprospecting tobacco phytocompounds as sustainable pesticidal agents: A strategy for value addition and environmental mitigation*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Zimbabwe	ANCAP	Amos Misi	*Integrated Assessment of Physicochemical Instability, Pharmaceutical Persistence, Microbial Contamination, and Antimicrobial Resistance Across Urban Water Systems in Zimbabwe*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30
IPICS	ANCAP	Zimbabwe	ANCAP	Nyoni Stephen	*Recovery of lead from lead laden cupels generated in precious metal*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30

					extraction: An enhanced hybrid approach towards long term environmental pollution control				
IPICS	ANCAP	Zimbabwe	ANCAP	Pamhidzai Dzomba	*Tobacco phytocompounds: neophytadiene, α-amyrin, β-amyrin, and taraxasterol as potential fall army worm bioinsecticide alternatives to emamectin benzoate, Chlorpyrifos, Cypermethrin, and Acetamiprid*	Oral	18th ANCAP Symposium	2025-12-29	2025-12-30

2.6.2 Regional conference contributions

Table 12. Number of poster and oral contributions to regional scientific meetings in the listed countries, by scientists in ISP supported groups and networks.

Country	Region	Chemistry		Mathematics		Physics		Total		Grand total
		Oral	Poster	Oral	Poster	Oral	Poster	Oral	Poster	
Benin	Africa					2		2		2
Mali	Africa	1						1		1
Niger	Africa	1						1		1
Rwanda	Africa					1	1	1	1	2
Senegal	Africa	2	1					3	1	4
South Africa	Africa							0		0
Uganda	Africa	1						1		1
Total	***Africa***	***5***	***1***	***0***	***0***	***3***	***1***	***8***	***2***	***10***
Bangladesh	Asia	7						7		7
Myanmar	Asia					2		2		2
Pakistan	Asia	8						8		8
Total	***Asia***	***15***	***0***	***0***	***0***	***2***	***0***	***17***	***0***	***17***
All countries		20	1	0	0	5	1	25	2	27

Chemistry (IPICS), physics (IPPS) and mathematics (IPMS) contributions to regional conferences. Listed country-wise.

ISP program	Group / Network	Country	Organiser	Author(s)	Title of the presentation	Oral or Poster	Name of event	Start date	End date if more than 1 day
IPICS	ANFEC	Bangladesh	Jagannath University	Mohammad Shoeb	*Food Safety: Challenge, Opportunity and Global Best Practices*	Oral	2nd International Conference on Recent Advances in Chemistry (ICRAC-2024)	2025-01-31	2025-02-01
IPICS	ANFEC	Bangladesh	World Health Organization	Mohammad Shoeb	*Implementation of Trans Fat Regulation in Bangladesh*	Oral	Stakeholder Consultation Workshop	2025-09-30	
IPICS	ANFEC	Bangladesh	Bangladesh Agricultural University	Mohammad Shoeb	*Large Scale Food Fortification in Bangladesh*	Oral	Learning and Sharing Workshop on Large Scale Food Fortification in Bangladesh	2025-07-11	
IPICS	ANFEC	Bangladesh	University of Barishal	Mohammad Shoeb	*Microplastic Pollution and associated Impacts on Marine Life, Human health and Environment*	Oral	Capacity Building Training on Microplastic	2025-11-03	
IPICS	ANFEC	Bangladesh	Sylhet Agricultural University	Mohammad Shoeb	*Reducing AMR and enteric methane emissions from Livestock & Aquaculture in Asia & the Pacific*	Oral	Antimicrobial resistance and its impact on human health and environment	2025-11-06	
IPICS	ANFEC	Bangladesh	Bangladesh Food Safety Authority	Mohammad Shoeb	*Risk Identification and Prevention Strategies based on Risk based Chemical Contaminants in Food*	Oral	Annual Seminar	2025-07-03	
IPICS	ANFEC	Bangladesh	NITUB	Mohammad Shoeb	*Food Safety: Challenge, Opportunity and Global Best Practices*	Oral	2nd International Conference on Recent Advances in Chemistry (ICRAC-2024)	2025-11-10	
IPPS	MAL:01	Benin	West African Physical Society	Siaka Kodio, Souleymane Sanogo, Boureima S Traore, Issiaka Traore	*Analyse des options d'expansion et d'intensification des sites d'irrigation localisés à Bamako et environnant*	Oral	7th Congress West African Physical Society	2025-09-01	2025-09-04
IPPS	MAL:01	Benin	West African Physical Society	Issa Bagayogo, Souleymane Sanogo, Amoro Coulibaly	*L'Évaluation du potentiel solaire photovoltaïque des bâtis pour l'électrification des zones rurales hors du réseau national au Mali*	Oral	7th Congress West African Physical Society	2025-09-01	2025-09-04
IPICS	RABiotech	Mali	Université de Ségou	BEKUONE SOME Ana-Kpan Dome Vincent, DIAO Mamounata, ISSA ADAM Mahamadou Bello,	*Effets bénéfiques de la consommation des agrumes sur la santé: une revue Systématique*	Oral	5ème Édition de l'Instant de l'Enseignant-Chercheur (IEC-2025) couplée à l'Exposition/Exhibition,	2025-05-10	2025-05-10

				NIKIEMA Rocksane Octavia Kiswendsida, Hemayoro SAMA, KONKOBO Anderson, RAMDE Alassane, SALOU ADAM Abdoul-Rahim, BARRY Poussian Raymond, DAKUYO Roger, SANOU Abdou-Dramane, DICKO H. Mamoudou			Réseautage sur l'Irrigation Solaire à Ségou (ERIS-Ségou)		
IPPS	MYA:01	Myanmar	Ministry of Education, Depart of Higher Education	Myat Kay Khaing & Nyein Wint Lwin	*Applying Variation Principle To 3d Quantum Harmonic Oscillator System*	Oral	Regional Conference on 24th Myanmar Academy of Arts and Science 2025	2025-03-09	2025-03-11
IPPS	MYA:01	Myanmar	Ministry of Education, Depart of Higher Education	Yin Myo Khaing	*Preparation of SnO2 Thin Films By Chemical Bath Deposition Technique*	Oral	Regional Conference on 24th Myanmar Academy of Arts and Science 2025	2025-03-09	2025-03-11
IPICS	RABiotech	Niger	Université Abou-Moumouni	BEKUONE SOME Ana-kpan Dome Vincent, DIAO Mamounata, SALOU Abdoul Rahim, SAMA Hemayoro, GOUBGOU Mahamadé, BARRY Poussian Raymond, DAKUYO Roger, SANOU Abdoudramane, RAMDE Alassane, ISSA ADAM Mahamadou, DICKO H. Mamoudou	*Propriétés Nutritionnelles et Nutraceutiques des agrumes: une revue systématique*	Oral	2èmes Journées Scientifiques Internationales, en Nutrition et Sciences des Aliments de la Faculté des Sciences et Techniques	2025-02-20	2025-02-22
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Rausan Zamir	*Safety Challenges of Herbal Medicines in Bangladesh: Contamination, Adulteration, and Toxicity*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-18	2025-11-19

IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Md. Ranzu Ahmed	*Antidiabetic Potential and Isolation of Bioactive Compounds from Four Traditional Medicinal Plants*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-18	2025-11-19
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Mst. Fakid Sharmin Sristy	*Chemical and Biological Investigations on Some Edible Culinary Spices: Cuminum cyminum (Cumin), Nigella sativa (Black cumin), Trigonella foenum graecum (Fenugreek) (Online)*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-18	2025-11-19
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Begum Rokeya	*Medicinal plants in the treatment of diabetes and its complications: local use and scientific evidence*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-18	2025-11-19
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Mir Tahfiqur Rahman	*No data*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-18	2025-11-19
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Tanvir Mahtab Rifat	*Antioxidant and Antidiabetic Effects of Clinacanthus nutans leaves in n-STZ Induced type-2 Diabetic rats: Role of GLUT4 and Insulin receptor gene expression (Online)*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-19	2025-11-19
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Rozina Parul	*Isolation, Characterization, and Computational Evaluation of Bioactive Compounds from Syzygium formosum Leaves with Antidiabetic Potential*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-19	2025-11-19
IPICS	ANRAP	Pakistan	ANRAP & OIC - COMSTECH	Md Asrafuzzaman	*Anti-liver-cancer Effect and Molecular Mechanisms of Flower Extract from Camellia nitidissima C.W Chi based on Network Pharmacology and in vitro Cell Culture Validation*	Oral	8th ANRAP-COMSTECH Regional Seminar	2025-11-18	2025-11-19
IPPS	ETH:01	Rwanda	ICTP-EAIFR center in collaboration with Rwanda university	Mulugeta Bekele	*Machine learning nonequilibrium phase transition*	Oral	Advanced School and Workshop: StatPhys	2025-07-05	2025-07-10
IPPS	ETH:01	Rwanda	ICTP-EAIFR center in collaboration with Rwanda university	Dagne Wordofa	*Nonequilibrium phase transitions in ferromagnetic interactions*	Poster	Advanced School and Workshop: StatPhys	2025-07-05	2025-07-10
IPICS	ANEC	Senegal	West African Society of Chemistry (SOACHIM)	Momath Lo, Arvid Kumar Bakta, Sébastien Vivegnis, Zineb Mekhalif, Mohamed M. Chehimi	*Interfacial chemistry of diazonium salts for the electrosynthesis of hollow polypyrrole microspheres on a flexible ITO electrode for parathion sensors*	Poster	25th Annual Scientific Conference of the West African Society of Chemistry (SOACHIM)	2025-08-19	2025-08-22
IPICS	ANEC	Senegal	West African Society of Chemistry (SOACHIM)	Déthié Faye, Momath Lo, Dame Sèye, Modou Gningue Diop, Abdoulaye Koné	*Silver nanoparticles supported by carbon nanotubes functionalized with 1,2,3-benzenetricarboxylic acid: spectroscopic analysis and electrochemical capacity*	Oral	25th Annual Scientific Conference of the West African Society of Chemistry (SOACHIM)	2025-08-19	2025-08-22

IPICS	ANEC	Senegal	West African Society of Chemistry (SOACHIM)	Modou Gningue Diop, Mamadou Gueye, Momath Lo, Pape Mor Cissé, Makhtar Guene	*Synthesis and characterization of Zn0.3Mg0.7Fe2O4@PPy nanocomposite for the treatment of fluoride in tap water from the Arachidier Basin (Senegal)*	Oral	25th Annual Scientific Conference of the West African Society of Chemistry (SOACHIM)	2025-08-19	2025-08-22
IPICS	ZIM:01	Uganda		Jane R Chirwa, Fortunate Katambarare, Taryn Tshuma, Victoria Muperi, Kudzai Katsande, Stanley Mukanganyama	*Harnessing green-synthesized metal nanoparticles from medicinal plants and endophytes for novel antibacterial applications against multidrug-resistant pathogens*	Oral	21st NAPRECA Symposium	2025-11-01	2025-11-01

2.6.3 National conference contributions

Table 13. Number of poster and oral contributions to national/local scientific meeting in 2025, by scientists in ISP supported groups and networks.

Country	Region	Chemistry		Mathematics		Physics		Total		Grand total
		Oral	Poster	Oral	Poster	Oral	Poster	Oral	Poster	
Burkina Faso	Africa	5	1					5	1	6
Ivory Coast	Africa			0	0	10		10	0	10
Kenya	Africa	0	0	0	0	5		5	0	5
Senegal	Africa	6	2					6	2	8
Tanzania	Africa	3	0	0	0	1	1	4	1	5
Zimbabwe	Africa	6	0	0	0		0	6	0	6
Total	***Africa***	***20***	***3***	***0***	***0***	***16***	***1***	**36**	***4***	***40***
Bangladesh	Asia	3	0			15	8	18	8	26
Cambodia	Asia	1	0					1	0	1
Laos	Asia	16	0					16	0	16
Myanmar	Asia		0			1		1	0	1
Nepal	Asia		0				1	0	1	1
Total	***Asia***	***20***	***0***	***0***	***0***	***16***	***9***	***36***	***9***	***45***
Bolivia	Latin America	*1*	*0*					1	0	1
Total	***Latin America***	***1***	***0***	***0***	***0***	***0***	***0***	***1***	***0***	***1***
All countries		41	3	0	0	32	10	73	13	86

Chemistry and physics contributions to national conferences. There were no mathematics contributions. Listed country-wise.

ISP program	Group / Network	Country	Organiser	Author(s)	*Title of the presentation*	Oral/ Poster	Name of event	Start date	End date if more than 1 day
IPPS	BAN:04	Bangladesh	Department of Physics, Jashore Univeristy of Science and Technology	Khondkar Siddique/e Rabbani	*How physics allowed me to contribute to society / a life long journey*	Oral	1st National Conference on Physics for the Future: Exploring Matter, Energy, Life, and Cosmos	2025-06-29	2025-06-29
IPICS	ANRAP	Bangladesh	Mawlana Bhashani science and Technology University, Tangail	Fatima Anjum Faruquee	*Exploration of antidiabetic properties of methanolic extract of elaeocarpus angustifolius bark on n-stz-induced type-2 diabetic model rats*	Oral	3rd International Conference on Advancement of Life Sciences	2025-01-11	2025-01-12
IPICS	ANRAP	Bangladesh	Mawlana Bhashani science and Technology University, Tangail	Tanvir Mahtab Rifat	*Evaluation of phytochemicars, antioxidant, ano antidiabetic properties of vigna unguiculata ssp aqueous extract on n-STZ-induced type-2 diabetic model rats*	Oral	3th International Conference on Advancement of Life Sciences	2025-01-11	2025-01-12
IPPS	BAN:02/2	Bangladesh	Electrical Engineering Division, Institution of Engineers, Bangladesh	Dilruba Farzana, Nazifa Tasnim, Rimi Rashid, Nazifa Anzum Nabila	*From hazards to circular economy: engineer's views and perceived roles in w/waste management in Bangladesh*	Oral	6th Annual Paper Meet	2025-12-13	2025-12-14
IPPS	BAN:04	Bangladesh	Department of Physics, University of Barishal, Bangladesh	Hridoy Chandra Barmana, Md. Tofazzal Hosen Milona, and Muhammad Abdul Kadir	*Effects of pulsed electromagnetic field on hemodynamic changes measured by functional near/infrared spectroscop*	Oral	Biophysical Society Networking Symposium, Bridging the Theoretical and Experimental Biophysicists in Bangladesh	2025-04-17	2025-04-17
IPPS	BAN:04	Bangladesh	Department of Physics, University of Barishal, Bangladesh	Muhammad Abdul Kadir	*Temperature induced changes in electrical impedance spectrum of biological tissues*	Oral	Biophysical Society Networking Symposium, Bridging the Theoretical and Experimental Biophysicists in Bangladesh	2025-04-17	2025-04-17
IPPS	BAN:04	Bangladesh	Shahjalal University of Science and Technology	Khondkar Siddique/e Rabbani	*Academia/Industry collaboration: causes of our failures and suggestions to go forward*	Oral	Dr. Sadruddin Ahmed Chowdhury Memorial Lecture	2025-07-23	2025-07-23

IPPS	BAN:05	Bangladesh	Bangladesh Physical Society	Mehjabin Afroz Neha, K. Saadat Hossain and Muhammad Samir Ullah	*Effect of Pb substitution on the structural, microstructural, electrical transport and optical properties of (La1/x, Pbx) 0.8Ba0. 2 MnO3 perovskite manganite for high frequency application and magnetic refrigeration*	Poster	National Conference on Physics / 2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Nilufa Anjum, Rahimana Nazmin Zim, Sumaiya Alam Chowdhury, Shahida Akhter, Dinesh Kumar Chaudhary, Sheikh Manjura Hoque	*A comparative comprehensive study on the multifunctional properties of nickel/doped zinc ferrite thin films*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	A.K.M. Mizanur Rahman, Shahadal Hossain, Md Al/Mamun	*A comparative study of thermoluminescence behaviour of tailor/made synthesized materials radiation dosimetry*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Masud Faruque, Mohammad Rifat/Ul Islam, Md Kamru-zzaman, Shah Azharul Islam, Shahadat Hossain, A.K.M. Mizanur Rahman, Md Al/Mamun	*An exploration of the evolution of structural and thermo-luminescent characteristics in Lif crystals modified with Ti for radiation dosimetry*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Md. Helaluzzaman, Md. Abdullah/ Al Mamun, M.M. Haque, M.K.R. Khan, M.S.I. Sarkar	*Effect of anneling temperature of structural, morphological and magnetic properties of Co/Nb Substituted Sr/gel Method*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Fatema Tuz Zohora Toma, Kazi Amjad Hossain, Tania Faruque, Md. Sharifur Rahman, Syed Ahmed,	*High/Crystallinity CdS nanostructure: potential applications in photovoltaics and optoelectronics*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07

				Harinarayan Das, Mohammad Nazrul Islam Khan					
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Md. Abdullah/Al/Mamun, M. Riju Khandaker, M. K. R. Hasan, M. M. Haque, Md. Samiul Sarkar	*Influence of annealing temperature on structural, optical and magnetic properties of M/type Sr0.95Ho0.05Fe12O19 hexaferrite nanoparticles prepared by traditional sol/gel route*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	K. M. Romman, Tanvir Ahmed, Zulfiqar, Hasan Khan, Pulak Das Gupta, Shuptojoy Barua, Harinarayan Das, M. Wahadozamen	*Investigating the Effects of Core Structure and Surface Defects on the Nonlinear Optical Properties of Highly Fluroscent Carbon Quatum DotsUsing the Z/Scan Technique*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Md. Hasibul Hasan, Md. Mukhlasur Rahman Biswas, G.M. Sahfiur Rahman and Muhammad Abdullah Al Mamun	*Mechanical analysis of hybridization effect for chemically treated maize husk fiber/glass fiber hybrid composities*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Md. Al/Amin, M. Hedayet Ullah, Md. Khorshed Alam, Mohammad Jellur Rahman, M. N. I. Khan	*Mechanical and thermal characteristics of polypropylene/banan midrib fiber nanocomposites reinforced with reduced graphene oxide*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Shahadat Hossain, Fahim, Sabab Siddique, Kristy Gourab Sinha, Safkat Islam Safin, Md. Al Mamun, A. K. M. Mizanur Rahman	*Rare Earth Doped Phosphor: New Materials for Passive Radiation Dosimetry*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Rokeya Bhuiyan. Meherin Afroz, A. R. M. Tareq, A. K. A. Ullah,	*Responses Toward Structural, Optical, and Magnetic Properties*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07

				Ronia Sultana, Fahim Ehsan, Harinarayan Das, Rimi Rashid, Tania Faruque, A. Hossain, Sabuj Chowdhury	*of Fe Doped ZnO by Co/precipitation Method*				
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Ikhtiar Hossain, S.S. Rashid, M.M. Islam, R. Rashid, M.R. Hasan, H.M. Waliullah, M. Rana and M.N.I. Khan	*Studies and Characterization of CoFe2O4 Nano Composite Synthesize by Sol / Gel Auto Comsustion Method in Different Sintering Temperature*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Rehana Akter Ruma, Kohili Akter, Harinarayan Das, Mohammad Nazrul Islam Khan, Rimi Rashid, Tahmina Akter, Khadija Khatun, Nipa Debnath	*Study of Structural, Morphological and Magnetic Properties MgFe2O4/ZnO Nanocomposites prepared Honey Assisted Sol/gel Method for Biomedical Applications*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	Mohammad Rifat/IL Islam, Masud Faruque, Md. Kamruzzaman, Shah Azharul Islam, AKM Mizanur Rahman, Md. Al/Mamum	*Synthesis and Investigation of Structural Thermoluminescent properties of Mn/doped LiF for Radiation Dosimetry Application*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	S. S. Rashid, M. M. Islam, I. Hossain, H. M. Waliullah, M. Rana, K. Sayema, M. R. Hasan, R. Rashid, M. N. I. Khan	*Synthesis and characterization of nickel ferrite nanoparticles sintered in different temperatures by Sol/Gel auto combustion method*	Poster	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:02/2	Bangladesh	Bangladesh Physical Society	S. A. Chowdhury, N. Anjum, R. Zim, S. Akhter, Dinesh Kumar Chaudhury, Sheikh Manjura Hoque	*Synthesis and Industrial Utilization of Magnesium Doped Zinc Oxide Thin Films*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07
IPPS	BAN:04	Bangladesh	Bangladesh Physical Society	Khondkar Siddique/e Rabbani	*The wandering mind of Physics*	Oral	National Conference on Physics/2025	2025-02-06	2025-02-07

IPICS	ANRAP	Bangladesh	BIRDEM	Begum Rokeya	*Role of nutraceuticals and natural medicine in promoting health and preventing disease: a scientific exploration*	Oral	NUTRITION SUMMIT	2025-01-31	2025-02-01
IPICS	BOL:01	Bolivia	Red Boliviana de Maztozoologia, FaunAgua, Sociedad Boliviana de Entomología, Centro de Biodiversidad y genética UMSS, Unidad de Limnología y recursos acuaticos	Carlos Pinto	*Evolución cognitiva en plantas: una aproximación desde la interacción insecto – planta*	Oral - Key Speaker	Reunión Conjunta De Zoologóa Bolivia 2025	2025-07-29	2026-08-01
IPICS	RABiotech	Burkina Faso	INERA	Kayaba Kaboré; Crépin Ibingou Dibala; Roger Dakuyo; Mah Alima Esther Traore; Adjaratou Souratié; Tienbnoma Sandrine Ouédraogo; Aïnattou Ouédraogo; Désiré Ouaro; Jean Axel Tegwendé Kaboré; Hemayoro Sama; Mamounata Diao, M H DICKO	*Evaluation des profiles en sels minéraux et acides aminés des fruits de quelques variétés de de Solanum aethiopicum (L.) subsp Kumba de de trois zones géographiques du Burkina Faso*	Poster	1ère édition des Journées Scientifiques de l'Institut de l'Environnement et de Recherches Agricoles (INERA)	2025-12-03	2025-12-05
IPICS	RABiotech	Burkina Faso	INERA	BEKUONE SOME Ana-kpan Dome Vincent, DIAO Mamounata, RAMDE Alassane, ISSA ADAM Mahamadou Bello, SALOU ADAM Abdoul-Rahim, OUARO Désiré, NIKIEMA Rocksane Octavia Kiswendsida, SAMA	*Caractérisation morphologique et physico-chimique de huit variétés/cultivars d'agrumes (Citrus spp.) cultivés au Burkina Faso.*	Oral	1ère Journées Scientifiques de l'Institut de l'Environnement et de Recherche Agricole	2025-12-03	2025-12-05

				Hemayoro, DICKO Hama Mamoudou.					
IPICS	ANEC	Burkina Faso	Laboratory of Science and Technology (LaST) of Thomas Sankara University	IBRANGO Wendwaoga	*Development of an electro-chemical method for quality control of food products in Burkina Faso: The case of maize*	Oral	1st Scientific Symposium of LaST	2025-12-18	2025-12-19
IPICS	RABiotech	Burkina Faso	Institut International des Sciences et Technologies (IISTech)	Jean Axel T. Kabore, Ella W. R. Compaore, Inoussa Ky, Ousmane Ouedraogo, Fulbert Nikiema, Elie Kabre, MH Dicko	*Formulation d'aliments hypercaloriques à partir des matières premières locales par la méthodologie des plans d experience.*	Oral	2eme Colloque international des Maladies Émergentes et Re-emergentes et Crise humanitaire en milieu tropical	2025-01-16	2025-01-17
IPICS	BUF:01	Burkina Faso	University Ledea Bernard Ouedraogo	No data	*Optimization of the extraction of phenolic compounds from Cassia Nigricans leaves*	Oral	2nd Seminar of the Physics and Chemistry Department of University Ledea Bernard Ouedraogo	2025-11-07	2025-11-08
IPICS	RABiotech	Burkina Faso	Université Daniel Ouezzin Coulibaly	Kayaba Kaboré; Crépin Dibala Ibingou; Mah Alima Esther Traoré; Roger Dakuyo; Adjaratou Souratié; Tienbnoma Sandrine Ouédraogo; Aïnattou Ouédraogo; Ouaro désiré; Jean Axel T. Kaboré; Hemayoro Sama; Mamounata Diao, M H Dicko	*Evaluation et comparaison des potentialités nutritionnelles des fruits de quelques variétés de de Solanum aethiopicum (L.) subsp Kumba de trois zones géographiques du Burkina Faso*	Oral	3ème édition des Journées Scientifiques de l'Université Daniel Ouezzin Coulibaly (UDOC)	2025-11-27	2025-11-29
IPICS	CAB-CCS	Cambodia	CCSIS 2025	Sopharen Houn	*Development of a paper-based microfluidic device for Colorimetric detection lead ion*	Oral	Cambodian Chemical Society International Symposium (CCSIS 2025)	2025-12-05	2025-12-08
IPPS	AFSIN	Ivory Coast	L2IS	Deroh Koffi Moïse Kouamé	*Athermal fiber-optic sensor based on the nonlinear brillouin scattering effect*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13

IPPS	AFSIN	Ivory Coast	L2IS	Kouakou Kouakou Constant	*Discrimination of healthy and bacterial-vascular-disease-infected cassava plants using fluorescence spectroscopy*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	N'guessan Abadê Ange-Boris	*Evaluation of treatment-induced mechanical changes in infected red blood cells using optical tweezers*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Yébouet Epse Kouamé A.M. Florence	*High-resolution imaging using diffractive tomographic microscopy*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Loukou Kouassi Yassou Henri Joël	*Impact of sugar on the elastic properties of red blood cells: a characterization study using optical tweezers*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Amany Kouamé Evariste Vianney	*Implementation of a Novel Approach Based on SLIPI and Neural Networks for the Study of Dense Solution Properties*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Degni Banah Florent	*Machine Learning and VIS–NIR Spectroscopy for the Evaluation of Plant Biophysical Parameters*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Yamoa Assoumou Saint-Doria	*Predicting Anopheles Proliferation: An Integrated Model Based on Multi-Source Data*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Wognin Essé Léon	*The Role of Multivariate and Multidimensional Statistics in the Classification of Chromatic and Spectroscopic Profiles of Essential Oils*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13
IPPS	AFSIN	Ivory Coast	L2IS	Diabré Inoussa	*Use of Multispectral Drones and Spectrometers for Early Detection of Cassava Diseases: The Case of African Cassava Mosaic*	Oral	6th Edition of Scientific day of Laboratoire d'Instrumention Image et Spectroscopie (L2IS)	2025-09-13	2025-09-13

IPPS	AFSIN	Kenya	Faculty of Science & Technology, University of Nairobi	Gitene Tiberius Nyanga'u, Ian Kaniu, Lydia Roos and Olivier Martineau	*Development of a Cost-Effective Muon Detection System Using Plastic Scintillators and Silicon Photomultipliers*	Oral	8th Annual Conference and Innovation Week of the Faculty of Science and Technology (FSTRIW2025)	2025-11-22	2025-11-24
IPPS	AFSIN	Kenya	Faculty of Science & Technology, University of Nairobi	Lydia Roos, Ian Kaniu, Jeremiah Kebwaro, James Mugambi, Livingstone Ochilo	*Emerging Environmental Studies Using Particle Physics and Nuclear Physics Technologies in Kenya*	Oral	8th Annual Conference and Innovation Week of the Faculty of Science and Technology (FSTRIW2025)	2025-11-22	2025-11-24
IPPS	AFSIN	Kenya	Faculty of Science & Technology, University of Nairobi	Dickson L Omucheni, Charles Ndung'u, Kenneth A Kaduki, and Wolfgang R Mukabana	*Label-free and Non-destructive Identification of Field-caught Anopheles gambiae and Anopheles arabiensis Using Raman Spectroscopy and Machine Learning with Data Augmentation*	Oral	8th Annual Conference and Innovation Week of the Faculty of Science and Technology (FSTRIW2025)	2025-11-22	2025-11-24
IPPS	AFSIN	Kenya	Faculty of Science & Technology, University of Nairobi	Brian O. Mairura, John I Githaiga, Ruth W. Ndungu	*Machine Learning - Driven Label-Free Detection of Prostate Cancer Progression Using Raman Microspectroscopy and Generative Data Augmentation*	Oral	8th Annual Conference and Innovation Week of the Faculty of Science and Technology (FSTRIW2025)	2025-11-22	2025-11-24
IPPS	AFSIN	Kenya	Faculty of Science & Technology, University of Nairobi	John I Githaiga, Hudson A. Kalambuka, Kenneth A. Kaduki, Wallace B. Dimbuson, Jessie N. Githanga	*Non-Invasive Leukemia Detection Using Sparse Learning on Salivary Raman Spectra*	Oral	8th Annual Conference and Innovation Week of the Faculty of Science and Technology (FSTRIW2025)	2025-11-22	2025-11-24
IPICS	LAO:04	Laos	Faculty of Natural Sciences, NUOL	Bouathanom Noynaly, Phengxay Deevanhxay, Kesiny Phomkeona, Kingsading Thongkhamvongdeth, Bounleuane Douangdeuane	*Quantification of Gymnemic acid I in Gymnema sylvestre by HPLC*	Oral	2nd Seminar on Natural Product Chemistry Research	2025-01-17	
IPICS	LAO:04	Laos	Faculty of Natural Sciences, NUOL	Kingsadingthongkham Vongdeth, Xolo Keoxamlouang,	*Tannin Extraction from Leaves of Some Plants*	Oral	2nd Seminar on Natural Product Chemistry Research	2025-01-17	

				Anoukone Bounmyxai, Boudda Sengthongsa					
IPICS	LAO:04	Laos	Faculty of Natural Sciences, NUOL	Phengxay Deevanhxay, Kesiny Phomkeona	*Introduction of project on Analysis of Bioactive Compounds in Natural Products*	Oral	2nd Seminar on Natural Product Chemistry Research	2025-01-17	
IPICS	LAO:04	Laos	Faculty of Natural Sciences, NUOL	Thansamai Dethphakhoun, Phengxay Deevanhxay, Kesiny Phomkeona, Vanseng Chounlamany	*Quantification of Catechin, Caffeine by Using HPLC Technique and Antioxidant Content*	Oral	2nd Seminar on Natural Product Chemistry Research	2025-01-17	
IPICS	LAO:04	Laos	Faculty of Natural Sciences, NUOL	Xiengkhane Sangmany, Phengxay Deevanhxay, Kesiny Phomkeona, Ongthao Saovangmor, Kingsadingthongkham Vongdeth	*In vitro inhibition of alpha-amylase and alpha-glucosidase of some Lao medicinal plants*	Oral	2nd Seminar on Natural Product Chemistry Research	2025-01-17	
IPICS	LAO:04	Laos	National University of Laos	Phong Pharphiphavanh, Phengxay Deevanhxay, Kingsadingthongkham Vongdet, Kesiny Phomkeona	*Phytochemical and alpha Glucosidase Inhibitory of Five Medicinal Plants in Houaphanh Province*	Oral	Annual National Research Conference 2025: Science, Technology, and Innovation for Sustainable and Green Development	2025-11-06	2025-11-07
IPICS	LAO:04	Laos	National University of Laos	Soulisay Xayachak, Phengxay Deevanhxay, Kesiny Phomkeona, John Ward	*Preliminary Analysis of Green Hydrogen Production from Electricity in a Tourist City: A Case Study of Vang Vieng District, Vientiane Province.*	Oral	Annual National Research Conference 2025: Science, Technology, and Innovation for Sustainable and Green Development	2025-11-06	2025-11-07
IPICS	LAO:04	Laos	National University of Laos	Phengxay Deevanhxay, Lengyang Seryang, Kesiny Phomkeona, Kingsadingthongkham Vongdeth and Bouasavanh Souvanhthong	*Quantification of total phenolic content, total flavonoid content and antioxidant activity of some Zingiberaceae in Laos*	Oral	Annual National Research Conference 2025: Science, Technology, and Innovation for Sustainable and Green Development	2025-11-06	2025-11-07

IPICS	LAO:04	Laos	National University of Laos	Khao Bounvilaysone, Phengxay Deevanhxay and Kesiny Phomkeona	*Regional Potential and Cost Analysis of Green Hydrogen Production from Surplus Hydropower in Lao PDR.*	Oral	Annual National Research Conference 2025: Science, Technology, and Innovation for Sustainable and Green Development	2025-11-06	2025-11-07
IPICS	ANFEC	Laos	National University of Laos	Vilarvan Yangkaihue, Santi Kongmany, Vanseng Chounlamany	*Investigating Toxic (Cd, As, Pb, Hg) and Essential (Cu) Elements in Plished Rice from Some Lao Markets: A public Health Perspectives*	Oral	Annual National Research Conference 2025: Science, Technology, and Innovation for Sustainable and Green Development	2025-11-06	2025-11-07
IPICS	LAO:01	Laos	NUOL	Khamla Thammavong, Kesiny Phomkeona, Phengxay Deevanhxay, Aphisith Chandavongs and Sengsavanh Khanthavong	*Assessment of Wastewater Quality in Drainage Canals in Vientiane Capital Municipality*	Oral	Research Dissemination Seminar on Analysis of Chemical Contaminants in Environment in Lao PDR	2025-11-05	2026-11-06
IPICS	LAO:01	Laos	Souphanouvong University	Kesiny Phomkeona, Apisith Chandavong, Phengxay Deevanhxay, Vanseng Chounlamay	*Distribution and Concentration of Heavy Metals and Selected Pesticide Residues in a Banana Plantation in Sangthong District, Vientiane, Laos*	Oral	Research Dissemination Seminar on Analysis of Chemical Contaminants in Environment in Lao PDR	2025-11-05	2026-11-06
IPICS	LAO:01	Laos	LAO01 (Chemistry Department)	Sopha Keoingpeng, Phovilay Moxom, Southsada Zulinthone	*Heavy Metal Assessment in Groundwater of Naxaithong District, Vientiane Capital*	Oral	Research Dissemination Seminar on Analysis of Chemical Contaminants in Environment in Lao PDR	2026-02-04	2026-02-04
IPICS	LAO:01/LAO:04	Laos	LAO01 (Chemistry Department)	Southsada Zulinthone, Phengxay Deevanhxay, Kesiny Phomkeona, and Aphisid Chandavongs	*Monitoring of Physical and Chemical Quality of Municipal Wastewater in Vientiane Capital*	Oral	Research Dissemination Seminar on Analysis of Chemical Contaminants in Environment in Lao PDR	2026-02-04	2026-02-04
IPICS	LAO:01	Laos	LAO01 (Chemistry Department)	Phoutthaharn Inthilath, Vanseng chounlamany, Kesiny Phomkeona,	*The Quality of Drainage Water in Vientiane and the Statistical Assessment of Water Quality*	Oral	Research Dissemination Seminar on Analysis of Chemical Contaminants in Environment in Lao PDR	2026-02-04	2026-02-04

IPICS	LAO:04	Laos	Science and Technology Development Fund, Ministry of Education and Sport	Phengxay Deevanhxay	*Publication of Research Results in International journal*	Oral	Training on Research management	2025-02-26	2025-02-27
IPPS	MYA:02	Myanmar	West Yangon University	*Nang Moon Laung*	*Optimized AQI Prediction through Feature Reduction and Machine Learning Models*	Oral	2nd Conference on Applied Social and Natural Science	2025-08-14	2025-08-15
IPPS	NEP:01	Nepal	Nepal Materials Science Society	Gambhir Khan Thakuri, Bilmala Subedi, Pitamber Shrestha, Leela Pradhan Joshi	*Electrochemical performance of activated carbon derived from waste of Alnus Nepalenis for Supercapacitor Applications*	Poster	2nd International Conference on Advanced Functional Materials (ICAFM 2025 KATHMANDU)	2025-03-27	2025-03-29
IPICS	BUF:01	Senegal	West African Chemical Society	No data	*Optimization of anthraquinone extraction from Cassia Nigricans leaves*	Oral	25th Annual Scientific Conference of the West African Society of Chemistry (SOACHIM)	2025-08-19	2025-08-22
IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Déthié FAYE, Momath LO, Meng Qi TANG, Vijay VAIYAPURI, Archana JAYARAM, Navaneethan MANI, Mohamed JOUINI, Mohamed M. CHEHIMI	*Biochar based on sugarcane bagasse modified with silver nanoparticles: a new electrode material for the electrochemical detection of mercury ions in aqueous media*	Oral	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18
IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Mamadou DIENG, Arona NGOM	*Generation of germyl radicals by electrochemical reduction of complexes between monochlorogermane and an aromatic nitrogenous base*	Poster	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18
IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Ismaila DIEDHIOU, Saliou Baïlo DIALLO, Modou FALL, Noureddine RAOUAFI	*Laser-induced graphene electrode: design, optimization, and application to the detection of heavy metals in water*	Oral	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18
IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Saliou Balo DIALLO, Ismaila DIEDHIOU, Hajer Toundi GUERMAZI, Modou FALL	*Preparation and use of titanium-doped ZnO nanoparticles as photocatalysts: study of optical and structural properties for photodegradation of dyes*	Oral	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18

IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Modou Gningue Diop, Mamadou Gueye, Momath Lo, Dethié Faye, Pape Mor Cissé, Makhtar Guene	*Removal of fluoride from Senegalese water using the adsorption method*	Oral	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18
IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Arona Ngom, Mamadou Dieng, Moustapha Diaw, Momath Lo, Mohamed Lamine Sall	*Synthesis, DFT modeling, and electrochemical properties by cyclic voltammetry of the 2,2'-bipyridine-dichlorodiphenylsilane complex*	Oral	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18
IPICS	ANEC	Senegal	Senegalese Committee for Chemistry	Momath Lo, Cheikh Ahmadou Bamba Diop, Navaneethan Mani, Mohamed Jouini, Diariatou Gningue-Sall, Mohamed M. Chehimi	*Thermochemical conversion of Senegalese millet bran into functional hydrochar/biochar for environmental applications*	Poster	7th Annual Chemistry Days of Senegal (JACS 2025)	2025-12-17	2025-12-18
IPICS	ANCAP	Tanzania		Aviri Mmochi	*ECARESA project Overview and project outputs*	Oral	ECARESA- NORAD project dissemination workshop: Safeguarding Aquatic Health - Integrated Approaches to Aquaculture and Environmental Pollution	2025-12-22	2025-12-23
IPICS	ANCAP	Tanzania	ECARESA project	Eliezer Mwakalapa	*Occurrence and levels of persistent organic pollutants (POPs) in farmed and wild marine fish from Tanzania. A pilot studies*	Oral	ECARESA- NORAD project dissemination workshop: Safeguarding Aquatic Health - Integrated Approaches to Aquaculture and Environmental Pollution	2025-12-23	2025-12-24
IPICS	ANCAP	Tanzania	ECARESA project	Aziza Hassan	*Spatial and Seasonal Distribution of Cyanobacterium Moorea producens in Coastal Waters of Tanzania*	Oral	ECARESA- NORAD project dissemination workshop: Safeguarding Aquatic Health - Integrated Approaches to Aquaculture and Environmental Pollution	2025-12-24	2025-12-25

IPPS	MSSEESA/ TAN:01/2/ RWA:02	Tanzania	Ministry of Education Science and Technology of Tanzania	Eva T. Shana, Hezekiah B. Sawa, Gilya Sungi,	*Need for Preparation of National Robotics Raodmap in Education*	Oral	Robotics Concortium meeting	2025-04-25	2025-04-25
IPPS	MSSEESA/ TAN:01/2	Tanzania	Embassy	Eva T. Shana,	*Robotics bootcamp in Tanzania*	Poster	Women Robotics Day	2025-12-02	
IPICS	ZIM:01	Zimbabwe	Biochemistry and Molecular Biology Society of Zimbabwe	Anderson Ngirande, Edwin K. Madala, Collen Masimirembwa, Stanley Mukanganyama	*Antibacterial Activities of Secondary Metabolites Produced by Endophytic Fungi from the Inflorescence of Erythrina abyssinica and Formulation of an Antibacterial Topical Cream*	Oral	BMBSZ SYMPOSIUM 2025: Sustainable Biochemistry: Molecular Solutions for Health, Agriculture and the Environment	2025-11-07	2025-11-07
IPICS	ZIM:01	Zimbabwe	Biochemistry and Molecular Biology Society of Zimbabwe	Kudzai Muketwa, Edwin K. Madala Admire Dube, Melisa Chikukwa, Collen Masimirembwa, Stanley Mukanganyama	*Antibacterial and antibiofilm activities of secondary metabolites from endophytic fungi of Piliostigma thonningi*	Oral	BMBSZ SYMPOSIUM 2025: Sustainable Biochemistry: Molecular Solutions for Health, Agriculture and the Environment	2025-11-07	2025-11-07
IPICS	ZIM:01	Zimbabwe	Biochemistry and Molecular Biology Society of Zimbabwe	Stanley Mukanganyama	*Integrating Biochemical Pharmacology into Sustainable Preclinical Drug Development: ADME and DMPK as Molecular Gateways to Safe and Effective Therapeutics.*	Oral	BMBSZ SYMPOSIUM 2025: Sustainable Biochemistry: Molecular Solutions for Health, Agriculture and the Environment	2025-11-07	2025-11-07
IPICS	ZIM:01	Zimbabwe	Biochemistry and Molecular Biology Society of Zimbabwe	Nokuthaba M Siyafa, Edwin K. Madala, Admire Dube, Melisa Chikukwa, Collen Masimirembwa and Stanley Mukanganyama	*Investigating the antifungal effects of extracts and nanoparticles from selected medicinal plants against cryptococcus spp and formulation of a nano-based antifungal topical cream*	Oral	BMBSZ SYMPOSIUM 2025: Sustainable Biochemistry: Molecular Solutions for Health, Agriculture and the Environment	2025-11-07	2025-11-07
IPICS	ZIM:01	Zimbabwe	Biochemistry and Molecular Biology Society of Zimbabwe	Brighton T. Meki, Edwin K. Madala, Admire Dube, Melisa Chikukwa, Collen Masimirembwa,	*Investigating the antimycobacterial effects of extracts from selected combretum species combined with silver nanoparticles against*	Oral	BMBSZ SYMPOSIUM 2025: Sustainable Biochemistry: Molecular Solutions for Health, Agriculture and the Environment	2025-11-07	2025-11-07

				Stanley Mukanganyama	*Mycobacterium smegmatis mc2 155 and Mycobacterium abscessus*				
IPICS	ANCAP	Zimbabwe	Buckwheat Farmers Association	Prof Dzomba	*Dangers and safe use of Herbicides*	Oral	Buckwheat Farmers Workshop	2025-11-08	

2.7 Arranged scientific meetings

Department seminars are not included in the statistics below.

Table 14. Countries where meetings were arranged, with research groups or scientific networks as organisers or co-organizers. Number of meetings (No) is indicated, as well as total number of participants (Part) reported.

Region	Country	Chemistry		Mathematics		Physics		Total	
		No	Part	No	Part	No	Part	No	Part
Africa	Algeria					1	2	1	2
Africa	Benin	2	500					2	500
Africa	Burkina Faso	1	250					1	250
Africa	Cameroon	2	580			1	50	3	630
Africa	Egypt	2	110					2	110
Africa	Ethiopia	1	30	2	260			3	290
Africa	Kenya					3	45	3	45
Africa	Mali					1	30	1	30
Africa	Rwanda	0	0			1	40	1	40
Africa	Senegal	1	120					1	120
Africa	Sudan	2	100					2	100
Africa	Tanzania	2	50	2	310			4	360
Africa	Uganda	2	120	2	80			4	200
Africa	Zimbabwe	4	107					4	107
Africa	***Total***	***19***	***1967***	***6***	***650***	***7***	***167***	***32***	***2 784***
Asia	Bangladesh	6	202			8	655	14	857
Asia	Cambodia	2	280					2	280
Asia	Laos	4	80					4	80
	Nepal					3	270	3	270
Asia	Pakistan	1	200					1	200
Asia	***Total***	***13***	***762***	***0***	***0***	***11***	***925***	***24***	***1687***
All countries		32	2 729	6	650	18	1092	56	4 471

Arranged scientific meetings are listed country-wise.

ISP program	Group/ Network	Country	Name of event	Venue, City	Start date	Stop date (if other than start date)	Number of participants
IPPS	KEN:01/2	Algeria	Instrumentation for Neutron Activation Analysis	Nuclear Research Centre of Birine, Birine	2025-05-05	2025-05-30	2
IPPS	BAN:02/2	Bangladesh	9th Conference of Bangladesh Crystallographic Association	University of Dakha	2025-01-10	2025-01-11	100
IPICS	ANFEC	Bangladesh	Accelerating Equity in Science to Ensure Safe and Nutritious Food	Dhaka	2025-02-27		60
IPICS	ANFEC	Bangladesh	Ideal Diet and Safe Food	University of Dhaka, Dhaka	2025-04-30		20
IPPS	BAN:04	Bangladesh	International Conference on Physics in Medicine (ICPM-2025)	University of Dhaka and Bangladesh Atomic Energy Center, Dhaka	2025-10-16	2025-10-17	150
IPPS	BAN:02/2	Bangladesh	National Conference on Physics-2025	University of Rajshahi, Rajshahi	2025-02-06	2025-02-07	200
IPPS	BAN:04	Bangladesh	Seminar: Monitoring of fluid accumulation in lungs by electrical impedance spectroscopy	University of Dhaka, Dhaka	2025-09-23		30
IPPS	BAN:04	Bangladesh	Seminar: Optimizing FDG Production and Synthesis using Cyclone 18/9 MeV IBA Cyclotron for improved image quality	University of Dhaka, Dhaka	2025-05-21		30
IPPS	BAN:04	Bangladesh	Seminar: Production of C-11 and Synthesis with Cyclone 18/9 MeV IBA Cyclotron	University of Dhaka, Dhaka	2025-02-26		30
IPPS	BAN:02/2	Bangladesh	Symposium on Innovation in Materials Research Connecting Industry and Academia, Materials Symposium 2025	Academic Council Building, Bangladesh Engineering University	2025-02-22		100
IPPS	BAN:04	Bangladesh	Workshop: Writing Your Thesis	University of Dhaka, Dhaka	2025-07-26		15
IPICS	NITUB	Bangladesh	87th Training Programme of NITUB: On the use, maintenance and trouble-shooting of Common Laboratory Equipment (CLE)	Bangladesh Agricultural University, Mymensingh	2025-05-03	2025-05-08	18

IPICS	NITUB	Bangladesh	88th training programme of NITUB: On the use, maintenance and trouble-shooting of Gas Chromatography-Mass Spectrometry (GC-MS/MS)	Bangladesh Council of Scientific and Industrial Research (BCSIR), Dhaka	2025-08-23	2025-08-28	20
IPICS	NITUB	Bangladesh	Lecture series on Recent advancement of instrumental techniques: 1st Lecture, “Recent Advancements in Instrumental Techniques for Monitoring Environmental Air Quality” by Professor Abdus Salam, Dean, Faculty of Science, University of Dhaka.	University of Dhaka	2025-01-24		36
IPICS	NITUB	Bangladesh	Lecture series on Recent advancement of instrumental techniques: 2nd lecture,“LC–Tandem Mass Spectrometry: Applications and Problem Solving,”by Dr. (Mrs.) Tamanna Rob, Senior Software Verification Lead, SCIEX, Canada	University of Dhaka, Dhaka	2025-11-15		48
IPICS	RABiotech	Benin	Nutritional Situation in Africa in regard of Current Food System Challenges: What will be the horizon by 2030?	Cotonou	2025-06-12	2025-06-14	250
IPICS	RABiotech	Benin	Regional symposium dedicated to the One Health approach, focusing on the health, food and nutrition of children and women of reproductive age	Cotonou	2025-10-20	2025-10-22	250
IPICS	RABiotech	Burkina Faso	Enjeux des environnements alimentaires pour une Sécurité Alimentaire et Nutritionnelle durable	Ouagadougou	2025-07-29	2025-07-30	250
IPICS	CAB-CCS	Cambodia	16th National Symposium on "Chemistry and Life"	Pakistan Technical & Educational Council (PTEC), Islamabad	2025-10-16		87
IPICS	CAB-CCS	Cambodia	Cambodian Chemical Society International Symposium (CCSIS 2025)	Hotel Cambodiana, Phnom Penh	2025-12-05	2025-12-08	193
IPICS	ANEC	Cameroon	1st Conference on innovative materials and applications in energy, health and environment	University of Dschang, Dschang	2025-08-28	2025-08-30	130
IPICS	ANEC	Cameroon	Cameroon Chemistry Festival	University of Dschang, Dschang	2025-02-12	1260262025	450
IPPS	AFSIN	Cameroon	ETIIAC (École Thématique Internationale de l’Intelligence Artificielle au Cameroun)	ENSPY, Yaounde	2025-12-02	2025-12-04	50
IPICS	NAPRECA	Egypt	NAPRECA Webinar Series: Automatic verification and quantification by 1H NMR using ChemisTwin	Online	2025-12-17		10
IPICS	NAPRECA	Egypt	Natural Products in African countries: industry perspectives on regulation and commercialization	Online	2025-05-21		100

IPMS	ETH:01	Ethiopia	Celebrating the Legacy of Department of Mathematics at Addis Ababa University	Addis Ababa University, Ethiopia	2025-11-25	2025-11-28	200
IPMS	ETH:01	Ethiopia	EthioItaly Colloquium on Applied Mathematics (ETICAM-2)	Addis Ababa University, Ethiopia	2025-12-27	2025-12-30	60
IPICS	NAPRECA	Ethiopia	NAPRECA Webinar Series: Phytochemical analysis and anti-proliferative activity of resin of Commiphora Africana by Prof Aman Dekebo	Online	2025-03-19		30
IPPS	MSSEESA	Kenya	15th Kabarak University International Conference on Pure and Applied Sciences	Nakuru	2025-07-10	2025-07-11	30
IPPS	KEN:01/2	Kenya	Air Quality Training	Falcon Heigts, Nanyuki	2025-08-18	2025-08-22	10
IPPS	KEN:01/2	Kenya	Proposal Writing for Climate Finance	WRI Offices, Nairobi	2025-12-09	2025-12-10	5
IPICS	LAO:01	Laos	Research Dissemination Seminar on Analysis of Chemical Contaminants in Environment in Lao PDR	Lao Plaza Hotel, Vientiane	2025-02-04		40
IPICS	LAO:01	Laos	Seminar on Application of Multidimensional Gas Chromatography Food Autheticity Assessment and Environmental Mornitoring	NUOL, Vientiane	2025-10-06		16
IPICS	LAO:01	Laos	Training Workshop on Sample Preparation and Application of SPME, SBSE, and SPE Technique	NUOL, Vientiane	2025-03-11	2025-03-13	14
IPICS	LAO:01	Laos	Training Workshop on the Application of HPLC for Organic Compound Analysis	NUOL, Vientiane	2025-09-23		10
IPPS	MAL:01	Mali	Closing Workshop of CCOOK Mali project (cleaning cooking in Mali)	Bamako	2025-09-10	2025-09-14	30
IPPS	NEP:01	Nepal	Exploration on Materials for Optical Devices and Lightning Aplications; Computational and Experimental Approach	Taudaha, Kirtipur, Kathmandu	2025-11-26		70
IPPS	NEP:01	Nepal	Preparation and Characterization of Metal Oxide Semiconductor for Field effect Transistor	Amrit Campus, TU, Kathmandu	2025-08-31		100
IPPS	NEP:01	Nepal	Two-day interaction program on Quantum Mechanics and its' associated fields	Amrit Campus, TU, Kathmandu	2025-02-07	2025-02-08	100
IPICS	ANRAP	Pakistan	8th ANRAP-COMSTECH Regional Seminar	COMSETCH Auditorium, Islamabad	2025-11-18	2025-11-20	200
IPPS	RWA:01	Rwanda	Skills development using a Global Robotic Telescope Network for uplifting the East African Astronomical Research Community	University of Rwanda, Kigali	2025-12-04	2025-12-05	40

IPICS	ANEC	Senegal	7th Annual Chemistry Days of Senegal (JACS 2025)	Amadou Mahtar MBOW University, Dakar	2025-12-17	2025-12-18	120
IPICS	NAPRECA	Sudan	NAPRECA Webinar Series: Safety at the forefront: Pharmacovigiliance for African gerbal therapies by Prof Sami A Khalid	Online	2025-08-28		50
IPICS	NAPRECA	Sudan	NAPRECA-PSE Webinar: Natural Products role in Neglected Tropical Diseases by Prof. Dr. Sami A. Khalid & Mrs. Shereen O. E. Abd Algaffar at University of Science & Technology - Omdurman Sudan), and New Chromatographic Techniques in the Isolation and Separation of Natural Products by Prof. Dr. Jean-Hugues Renault (University of Reims, France) and MSc Łukasz Kulinowski (Medical University of Lublin, Poland)	Online	2025-03-25		50
IPICS	ANCAP	Tanzania	17th ANCAP Symposium	Online	2025-12-21	2025-12-22	35
IPICS	ANCAP	Tanzania	ECARESA- NORAD project dissemination workshop theme: Safeguarding Aquatic Health: Integrated Approaches to Aquaculture and Environmental Pollution	UDSM, Dar es Salaam	2025-12-22	2025-12-23	15
IPMS	CoRE-Math UDSM	Tanzania	Girls Science Camp	Dar es Saalam	2025-11-25	2025-11-28	50
IPMS	CoRE-Math UDSM	Tanzania	Mathematical Association of Tanzania - MAT	Singida	2025-11-25	2025-11-28	260
IPICS	NAPRECA	Uganda	21st biennial NAPRECA international symposium in 2025	Makerere University, Kampala	2025-11-01	2025-11-03	100
IPMS	CoRE-Math MAK	Uganda	CIMPA School on Effective Algebra and the LMFBD at Makerere	Makerere University, Kampala	2025-11-25	2025-11-28	50
IPMS	CoRE-Math MAK	Uganda	CoRE-MATH Workshop on Health Data Analysis	Makerere University, Kampala	2025-11-25	2025-11-28	30
IPICS	NAPRECA	Uganda	NAPRECA Webinar Series: Antimycobacterial activity and sub acute toxity profile of Entada abyssinica and Albizia coriaria by Dr Obakiro Samuel	Online	2025-01-15		20
IPICS	ZIM:01	Zimbabwe	BMBSZ SYMPOSIUM 2025: Sustainable Biochemistry: Molecular Solutions for Health, Agriculture and the Environment	Wadzanai Training centre, Harare	2025-11-07		30

IPICS	NAPRECA	Zimbabwe	NAPRECA Webinar Series: Unlocking pharmalogical and therapeutic properties of antidiabetic ethnobotanicals bu Dr Stpehen Nyoni and Mrs Moreblessing Dube	Online	2025-04-16		30
IPICS	ANCAP	Zimbabwe	Symposium	Forestry Commision, Harare	2025-05-16	2025-05-17	32
IPICS	ZIM:02	Zimbabwe	Workshop on the Applications of Atomic Absorption Spectrophotometry and Mercury Analysis	NUST, Bulawayo	2025-10-07	2025-10-08	15

2.8 Expenditures

In 2025, the ISP research groups and scientific network partners were allocated in total about 6,07 MSEK (10,8 MSEK in 2024) and were allowed to bring forward from 2024 about 1,7 MSEK (790 KSEK in 2024), all in all having about 7,8 MSEK (11,6 MSEK in 2024) available for spending *(Tables 15 and 16)*.

Table 15. Research groups' (RG) financial performance 2024 (BBF/BCF = balance brought /carried forward).

Region	Country	ISP Code	Start	BBF from 2023	Allocation	Loc. Use	ISP Paym.	Tot. Exp.	BCF to 2025
Africa	Burkina Faso	IPICS BUF:01	2008	-1 516	100 000,00	28 352	0	28 352	70 000
Africa	Burkina Faso	IPICS BUF:02	2008	10 803	100 000,00	98 751	0	98 751	0
Africa	Ethiopia	IPICS ETH:01	2002	79 006	100 000,00	0	9049	9 049	169 900
Africa	Ethiopia	IPICS ETH:02	2012	269 682	100 000,00	48 250	244 122	294 214	77 300
Africa	Ethiopia	IPICS ETH:05	2023	-4 554	100 000,00	0	0	0	95 400
Africa	Rwanda	IPICS RWA:01	2014	118 833	50 000,00	7 998	144 877	152 875	15 600
Africa	Tanzania	IPICS TAN:02	2004	~~0~~	~~0~~	~~0~~	~~0~~	-	-
Africa	Uganda	IPICS UGA:01	2015	-291	50 000	40 503	10 074	50 577	-900
Africa	Uganda	IPICS UGA:02	2016	5 138	100 000	35 728	63 862	99 590	5 500
Africa	Zambia	IPICS ZAM:01	2011	~~0~~	~~0~~	~~0~~	~~0~~	-	-
Africa	Zambia	IPICS ZAM:02	2008	89 645	0	0	0	0	89 645
Africa	Zimbabwe	IPICS ZIM:01	2006	-53	100 000	70 970	17 608	88 578	11 300
Africa	Zimbabwe	IPICS ZIM:02	1999	1 332	100 000	95 760	0	95 760	5 500
Africa	Zimbabwe	IPICS ZIM:03	2020	~~0~~	~~0~~	~~0~~	~~0~~	-	-
Africa	***Total***	***IPICS RG, Total***		**568 025**	**900 000**	**426 311**	**489 592**	**917 746**	**539 245**
Africa	Ethiopia	IPMS AAU	2005	55 584	75 000	65 779	83 548	149 328	0
Africa	***Total***	***IPMS RG, Total***		**55 584**	**75 000**	**65 779**	**83 548**	**149 328**	**0**
Africa	Burkina Faso	IPPS BUF:01	2013	45 800	60 000	0	0	0	105 800
Africa	Ethiopia	IPPS ETH:01	1990	47 300	50 000	57 967	59 182	117 149	-19 849
Africa	Ethiopia	IPPS ETH:02	2005	30 600	50 000	0	42 544	42 544	38 000
Africa	Ethiopia	IPPS ETH:03	2021	13 400	50 000	14 252	0	14 252	49 000
Africa	Kenya	IPPS KEN:01/2	1991	-1 567	50 000	48 713	0	48 713	0
Africa	Kenya	IPPS KEN:02	1998	-19 282	0	0	0	0	-19 282
Africa	Kenya	IPPS KEN:03	1998	0	0	0	0	0	0
Africa	Kenya	IPPS KEN:04	2005	40 900	0	0	0	0	40 900
Africa	Kenya	IPPS KEN:05	2010	0	0	0	0	0	
Africa	Mali	IPPS MAL:01	2011	1 300	60 000	0	59 807	59 807	1 400
Africa	Rwanda	IPPS RWA:01	2014	1 700	60 000	0	35 950	35 950	25 700
Africa	Tanzania	IPPS TAN:01/2	1989	-11 880	60 000	31 911	17 124	49 035	0
Africa	Uganda	IPPS UGA:01/2	1989	0	60 000	60 555	0	60 555	0
Africa	Uganda	IPPS UGA:02	2013	1 000	60 000	0	61 296	61 296	0
Africa	Zambia	IPPS ZAM:01	1988	-368	60 000	59 105	0	59 105	0
Africa	Zimbabwe	IPPS ZIM:01	2013	-7 693	50 000	0	0	0	0
Africa	***Total***	***IPPS RG, Total***		**141 290**	**670 000**	**272 503**	**275 903**	**548 406**	**221 669**
Asia	Bangladesh	IPICS BAN:04	2003	~~0~~	~~0~~	~~0~~	~~0~~	-	

Asia	Bangladesh	IPICS BAN:05	2013	4 425	100 000,00	103 357	0	103 357	1 068
Asia	Laos	IPICS LAO:01	2005	-2 186	50 000	0	11 000	11 000	36 800
Asia	Laos	IPICS LAO:04	2020	-2 282	50 000,00	0	0	0	47 700
Asia	***Total***	***IPICS RG; Total***		**-43**	**200 000**	**103 357**	**11 000**	**114 357**	**85 568**
Asia	Bangladesh	IPPS BAN:02/2	2018	1 000	50 000	49 404	0	49 404	1 500
Asia	Bangladesh	IPPS BAN:04	2011	3 800	120 000	90 190	18 613	108 803	14 900
Asia	Bangladesh	IPPS BAN:05	2014	1 600	60 000	0	0	0	61 600
Asia	Laos	IPPS LAO:01	2005	-1 447	110 000	105 697	0	105 697	2 800
Asia	Myanmar	IPPS MYA:01	2016	67 100	60 000	0	71 234	71 234	55 800
Asia	Myanmar	IPPS MYA:02	2021	55 900	60 000	0	47 282	47 282	68 600
Asia	Nepal	IPPS NEP:01	2021	1 780	60 000	60 439	0	60 439	1 300
Asia	***Total***	***IPPS RG, Total***		**129 733**	**520 000**	**305 730**	**137 129**	**442 859**	**206 500**
Latin Am.	Bolivia	IPICS BOL:01	2018	4137	100 000,00	0	0	0	104 137
Latin Am.		***IPICS RG; Total***		**4137**	**100 000**	**0**	**0**	**0**	**104 137**
	Grand Tot., RG			**898 647**	**2 465 000**	**1 173 681**	**999 014**	**2 172 695**	**1 157 119**

Research groups were granted 41% of the total allocations (52% in 2024) and accounted for the 43% of the total funding (allocations plus balance brought forward from 2024) (53% in 2024). They accounted for 38% of the total expenditures (55% in 2024), 56% of which were transferred for local use (60% in 2024*) (Table 15)*.

Scientific networks had 59% of the total allocations (48% in 2024) and accounted for the 57% of the total funding (47% in 2024). They accounted for 62% of the total expenditures (45% in 2024), 59% of which were transferred for local use (50% in 2024) (Table 16).

It should be noted that funding transferred for local use may not be spent the same year as the transfer is conducted but may be carried forward on a local account. This is accounted for in each partner's yearly financial report to ISP.

The total funding available to the **research groups** amounted to 3,38 MSEK, i.e., the allocation plus the balance brought forward from 2024, reported in Table 15, and they spent 67% of it (87% in 2024).

The total funding available to the **scientific networks** amounted to 4,4 MSEK (Table 16) and they spent 85% of it (81% in 2024).

Considering the financial balance, the research groups were allowed to carry forward to 2025 totally 15% of their ISP funding (see *Table 15*; 9% in 2024), while the scientific networks carried forward 15% (see *Table 16*; 4% in 2024).

Negative balances at the end of the year are always deducted from the next year's awarded allocation.

Table 16. Scientific network's (NW) financial performance 2025 (BBF/BCF = balance brought /carried forward).

Region	ISP Code	Country of coordination	Start	BBF from 2024	Allocation	Local Use	ISP payments	Total Expenditures	BCF to 2026
Africa	IPICS ANCAP	Tanzania	2001	631	100 000,00	99993	0	99 993	600
Africa	IPICS ANEC	Burkina Faso	2013	12 262	100 000,00	0	51517	51 517	0
Africa	IPICS NAPRECA	Uganda	1988	-39 985	100 000,00	0	14186	14 186	45 800
Africa	IPICS RABiotech	Burkina Faso	2008	-2 225	150 000,00	146795	0	146 795	0
Africa	***IPICS NW, Total***			**-29 317**	**450 000**	**246 788**	**65 694,45**	**312 492**	**46 400**
Africa	IPMS APREA	Kenya	2021	0,00	30 000	14 834	0	14 834	0
Africa	IPMS BURK:01	Burkina Faso	2003	100 000,00	240 000	336 787	0	**336 787**	**0**
Africa	IPMS CoRS	Ethiopia	2021	0,00	30 000	0	0	**0**	**0**
Africa	IPMS EAALG	Uganda	2021	0,00	30 000	28 685	0	**28 685**	**0**
Africa	IPMS EAUMP	Uganda	2002	70 000	860 000	382 252	717 806,00	1 100 058	**0**
Africa	IPMS PDEAPP	Rwanda	2021	0,00	30 000	29 649	0	**29 649**	**0**
Africa	***IPMS NW, Total***			**170 000**	**1 220 000**	**792 206**	**717 806,00**	**1 510 012**	**0**
Africa	IPPS AFSIN	Ivory Coast	2011	249 000	488 000	0	106 189	106 189	630 800
Africa	IPPS EAARN	Uganda	2014	222 500	300 000	335 904	187 346	523 250	-749
Africa	IPPS ESARSWG	Zimbabwe	1997	2 700	70 000	0	0,00	0	72 700
Africa	IPPS MSSEESA	Zambia	2009	1 000	100 000	63 424	35 222	98 646	2 000
Africa	***IPPS NW, Total***			**475 200**	**958 000**	**399 328**	**328 757,00**	**728 085**	**704 751**
Africa	***EANWoBAS***	*Uganda*	*2019*	-1 181	200 000	198 224	0,00	198 224	590
Africa	ISP Total Africa			**614 702**	**2 828 000**	**1 636 547**	**1 112 257**	**2 748 814**	**751 741**
Asia	IPICS ANFEC	Laos	2013	96 890	100 000	140 698	0	140 698	56 100
Asia	IPICS ANRAP	Bangladesh	1994	114 218	150 000	216 232	46 980	263 212	1 000
Asia	IPICS CAB-CCS	Cambodia	2017	-157	100 000	91 904	40 667	132 571	-32 728
Asia	IPICS NITUB	Bangladesh	1995	2 120	100 000	101 294	0	101 294	800
Asia	***IPICS NW; Total***			**213 071**	**450 000**	**550 128**	**87 647,00**	**637 775**	**25 172**
Asia	IPMS SEAMaN	Laos	2015	0	330 000	14 906	359 320,00	374 226	0
Asia	***IPMS NW, Total***			0	330 000	14 906	359 320,00	374 226	0
Asia	***ISP Total Asia***			**213 071**	**780 000**	**565 034**	446 967	**1 012 001**	**25 172**
	Grand Tot., NW			**827 773**	**3 608 000**	**2 201 580**	**1 559 224**	**3 760 814**	**776 913**

Table 17. Ranking of ISP´s partner countries in Transparency International´s Corruption Perception Index[1]. **Low number = less corruption.** 180 is the highest score (South Sudan).

Corruption Perceptions Index 2	Rating 2025 (2024)
Rwanda	57 (57)
Burkina Faso	82 (82)
Tanzania	82 (82)
Zambia	92 (92)
Ethiopia	99 (99)
Nepal	107 (107)
Kenya	121 (121)
Bolivia	133 (133)
Laos	114 (114)
Mali	135 (135)
Uganda	140 (140)
Bangladesh	151 (151)
Zimbabwe	158 (158)
Myanmar	168 (168)

Table 18: List of other funding agenices/institutes etc that have given support to ISP supported groups in 2025, sorted after country. Funds from home universities are not listed here.

ISP Prog	Group/ Network	Country	Funders
IPICS	NAPRECA	Africa	Ministry for Science, Technology and Innovation (STI), Uganda
IPICS	NAPRECA	Africa	Society of Medicinal Plants and Natural Product Research, Germany
IPICS	BAN05	Bangladesh	BioMed Research Lab, Bangladesh
IPPS	BAN02/2	Bangladesh	Ministry of Finance, Bangladesh
IPICS	ANRAP	Bangladesh	Ministry of Science and Technology, Bangladesh
IPICS	BOL01	Bolivia	National Cement Company S.A., FANCESA, Bolivia
IPICS	BOL01	Bolivia	State Grant: Funding provided through the distribution of the Direct Tax on Hydrocarbons (IDH) to support the development of scientific research, Bolivia
IPICS	RABiotech	Burkina Faso	National fellowships, Burkina Faso
IPICS	RABiotech	Burkina Faso	National Research Agency: IDBio Project thanks to UNESCO-CHAIR, France
IPICS	CAB-CCS	Cambodia	Donation, Cambodia
IPICS	ETH01	Ethiopia	Anders Hultmans Stiftelse
IPICS	ETH05	Ethiopia	China Academy of Chinese Medical Sciences
IPICS	ETH02	Ethiopia	Graduate students Grant, Ethiopia
IPPS	KEN01/2	Kenya	IAEA - CRP (International Atomic Energy Agency - Coordinated Research Projects)
IPPS	KEN01/2	Kenya	IAEA triangular project with Algeria
IPMS	CoRE UoN	Kenya	International Mathematical Olympiad
IPPS	KEN01/2	Kenya	VeraSol/CLASP NGO Consultancy (Solar Water Pumping)
IPMS	CoRE UoN	Kenya, Rwanda	Global Talent Fund (funded math nodes in both Kenya and Rwanda)
IPICS	LAO01	Laos	NPO Water, Soil in Asia and Interaction with Asia People

[1] https://www.transparency.org/en/cpi/2024 2026-04-08.

IPICS	LAO04	Laos	Science and Technology Development Fund, Laos
IPICS	LAO01	Laos	Seoul National University, South Korea
IPMS	CoRE UR	Rwanda	Carneige Africa Diaspora Fellowiship (CADFP)
IPMS	CoRE UR	Rwanda	CIMPA (International Centre for Pure and Applied Mathematics)
IPICS	RWA01	Rwanda	Geochemical Society, USA
IPMS	CoRE UR	Rwanda	IMU-CDC (International Mathematical Union - Commission for Developing Countries)
IPMS	CoRE UR	Rwanda	International Centre for Mathematical Sciences (ICMS), University Edinburgh
IPICS	RWA01	Rwanda	National Commission for Science and Technology (RNCST), Rwanda
IPMS	CoRE UR	Rwanda	University of Amsterdam
IPMS	BURK01	Senegal	Université Assane Seck de Ziguinchor (UASZ), Senegal
IPMS	CoRE UDSM	Tanzania	Sida, Sweden
IPMS	CoRE UDSM	Tanzania, Uganda	NORHED II, Norway
IPICS	UGA02	Uganda	Austrian Partnership Programme in Higher Education and Research for Development
IPICS	UGA01	Uganda	Makerere University staff development
IPMS	CoRE MAK	Uganda	NORAD, Norway
IPPS	UGA02	Uganda	Physics without Frontiers (PWF)
IPPS	UGA02	Uganda	Solar-Terrestrail Physics/Predictability of the variable Solar-Terrestrial Coupling (SCOSTEP/PRESTO)
IPMS	CoRE MAK	Uganda	Uppsala University, Sweden
IPICS	RABiotech	West Africa	ARES (Académie de recherche et d'enseignement supérieur), Belgium
IPICS	RABiotech	West Africa	ERASMUS+ (European Union)
IPICS	RABiotech	West Africa	Fonds National pour l'Education et la recherche (FONER), Burkina Faso
IPICS	RABiotech	West Africa	OPER foundation, Canada
IPPS	ZIM01	Zimbabwe	ACEWATER (European Union)

Appendix 3. OTHER ISP COOPERATION

Besides the ISP core programme, reported in the previous section, ISP carries out different assignments by Sida and engages in collaboration with other bodies.

3.1 Sida bilateral research cooperation

3.1.1 Bolivia

In 2025, ISP continued to coordinate the Swedish partners of the Sida-Bolivia bilateral research cooperation. The programme would have run from 1 May 2021 to 31 December 2025 but during 2025 Sida and ISP worked for the extension of the program until 31 December 2027. The cooperation includes two universities in Bolivia: Universidad Mayor de San Andres (UMSA) in La Paz, and Universidad Mayor de San Simón (UMSS) in Cochabamba.

ISP has also assisted the universities in Bolivia (UMSS and UMSA) with international payments due to the difficult situation with foreign currencies in the country.

The programme run by UMSA is titled: *Science, technology and innovation at University Mayor de San Andrés,* includes seven research areas:

1. Food science and technology for the sustainable development of Bolivia
2. Technological and productive development
3. Water and soil
4. Energy, renewable raw materials and mining
5. Health
6. Socioeconomics, education and culture
7. Research management

The programme is articulated in 20 sub-programmes of which only one has no Swedish partners. The following Swedish university are involved in the Sida-UMSA bilateral research cooperation:

- KTH Royal Institute of Technology (KTH)
- Lund University (LU)
- Luleå University of Technology (LTH)
- Swedish University of Agricultural Sciences (SLU)
- University of Gothenburg (GU)
- Umeå University (UmU)
- Uppsala University (UU)

The Sida-UMSS bilateral research cooperation programme is entitled: *strengthening institutional research capacities at Universidad Mayor de San Simon and* has at the moment 10 research areas and 11 subprogrammes (one program from the previous phase of the programme ended in 2024), of which, three do not have Swedish partners.

1. Agriculture, Livestock and Forestry
2. Sustainable management and governance of water and soil
3. Social sciences and humanities
4. Innovation and technology transfer (new and old subprogrammes)
5. Energy
6. Health and life sciences
7. Strengthen SICTI-UMSS management - no Swedish partners
8. Institutional fund for science and technology (FOICyT) - no Swedish partners
9. Research training quality assurance
10. Information communication technologies - no Swedish partners (previous phase)

The Swedish partners in the Sida-UMSS programme are:

- Lund University (LU)
- KTH Royal Institute of Technology (KTH)
- Stockholm University (SU)
- Swedish University of Agricultural Sciences (SLU)
- University of Gothenburg (GU)
- Umeå University (UmU)

3.1.2 Ethiopia

2025 was the last year for the Sida bilateral research programme at Addis Ababa University in Ethiopia. ISP continued the coordination on the Swedish side with participants in Electrical engineering, Biotechnology, Economics and Management. The programme ended 31 December, 2025.

This agreement included five Swedish universities:

- Chalmers University of Technology (CTH)
- Jönköping International Business School (JIBS)
- KTH Royal Institute of Technology (KTH)
- Swedish University of Agricultural Sciences (SLU)
- University of Gothenburg (GU)

3.1.3 Mozambique

ISP has been assigned by Sida to coordinate the bilateral research cooperation on the Swedish side with Eduardo Mondlane University (UEM), Maputo.

The previous agreement period between Sweden and Mozambique for this program was 2011-2015, with an extension up to 31 December 2017.

The programme phase was from 1 November 2017 to 31 December, 2022, with an extension from 1 January 2023 to 30 June 2026.

During this phase the programme has consisted of 21 subprogrammes, grouped in six thematic areas: Population, Health and Well-Being of the Society, Agriculture, Nutrition and Food Security, Natural Resources, Environment and Climate Change, Technology and Innovation, Education, Culture, Good Governance, Ethics and Human Rights, and Key Supporting Elements.

The Swedish institutions involved are:

- Blekinge Institute of Technology (BTH)
- Chalmers University of Technology (CTH)
- Karolinska Institute (KI)
- KTH Royal Institute of Technology (KTH)
- Linköping University (LiU)
- Luleå University of Technology (LTU)
- Lund University (LU)
- Mälardalen University (MDH)
- Örebro University (OrU)
- Stockholm University (SU)

- Swedish University of Agricultural Sciences (SLU)
- Umeå University (UmU)
- University of Borås (HB)
- University of Gothenburg (GU)
- University of Gävle (HiG)
- Uppsala University (UU)

A number of universities in South Africa are also part of this collaboration, namely:

- North West University (NWU)
- Stellenbosch University (SUN)
- University of the Witswatersrand (Wits)
- University of Cape Town (UCT)
- University of Pretoria (UP)
- University of Western Cape (UWC)
- University of the Free State (UFS)
- University of South Africa (UNISA)

3.1.4 Rwanda

ISP has been assigned by Sida to coordinate the bilateral research cooperation with University of Rwanda (UR) on the Swedish side of the programme in the period 1 July 2019 to 30 June 2026.

The programme aims to increase the production and use of scientific knowledge of international quality that contributes to Rwanda's development and is grouped into five thematic areas:

- Environmental Research (3 subprogrammes)
- Natural Science and Mathematics Research (2 subprogrammes)
- Research for Health (3 subprogramme)
- Social Sciences Research (5 subprogrammes)
- Research Support (4 subprogrammes)

The cooperation comprises PhD training, postdoctoral fellowships, Master's training, research and innovation grants, support to research infrastructure like ICT and library and development of capacity for research management, as well as stengthening the research culture at University of Rwanda.

The Swedish institutions that are involved in the programme 2025 are:

- Chalmers University of Technology (CTH)
- Jönköping University (JU)
- Karolinska Institute (KI)
- KTH Royal Institute of Technology (KTH)
- Linköping University (LiU)
- Lund University (LU)
- Örebro University (OrU)
- Stockholm University (SU)
- Swedish University of Agricultural Sciences (SLU)
- Södertörn University (SH)
- Umeå University (UmU)
- University of Borås (HiB)
- University of Gothenburg (GU)
- Uppsala University (UU)

3.1.5 Tanzania

In 2024, Tanzania entered into a new bilateral phase with Sida, covering support to two universities:

- University of Dar es Salaam (UDSM)
- Muhimbili University of Health and Allied Sciences (MUHAS)

The agreement period is from November 2024 to June 2030. Sida entrusted ISP the coordination on the Swedish side. The emphasis for this program phase is on the development of local PhD programs in Tanzania.

The programme consists of 8+5 (UDSM+MUHAS) subprogrammes which covers the broad spectrum of research areas, such as Capacity Building in Mathematics, Food Security, Health Systems, HIV, Malaria and Neglected Tropical Diseases, Molecular Biosciences, Sustainable Water Resources.

The Swedish partners involved in the programme are:

- Karolinska Institute (KI)
- Linköping University (LiU)
- Lund University (LU)
- KTH Royal Institute of Technology (KTH)
- Stockholm University (SU)
- Swedish University of Agricultural Sciences (SLU)
- Umeå University (UmU)
- University of Gothenburg (GU)
- Uppsala University (UU)

3.1.6 Zambia

Sida is preparing a three-year pilot programme at the University of Zambia (UNZA), with a primary focus on climate change, renewable energy, and sustainable mining. The pro-gramme will support postdoctoral researchers, provide equipment, offer supervisor training, and address other related capacity-strengthening needs. No doctoral or Master's students will be included, as the pilot phase is considered too short.

On 24 April 2025, Sida issued a call for *Expressions of Interest* for collaboration with UNZA, with a deadline of 31 May 2025. ISP supported the dissemination of the call. On 28 August 2025, Sida announced that UNZA had selected seven potential partner universities in Sweden, distributed across six sub-programmes. A delegation from UNZA visited Sweden from 6 to 11 October 2025, and ISP organised the visit. Following this visit, UNZA and the selected Swedish universities will prepare Full Proposals by 31 January 2026. The programme is expected to start in the first half of 2026.

ISP has signed a contract with Sida to participate in the planning of the programme. The contract amount is SEK 1.1 million and covers ISP's salary and audit costs, travel costs for the UNZA delegation, indirect costs, and planning grants for Swedish partners. ISP has also been invited to apply to coordinate the programme on the Swedish side.

3.2 Cambodian PhD students

Publications in scientific journals for the Cambodian PhD students in 2025.

Swedish host university	Journal	Author(s)	Title	DOI	WoS, 1 yr IF 2021	Norwegian Register
Umeå University	Biochemistry	Jonna Mattsson, Chanrith Phoeurk, Léon Schierholz, Ameeq Ul Mushtaq, Jhon Alexander Rodriguez Buitrago, Per Rogne, A. Elisabeth Sauer-Eriksson, Magnus Wolf-Watz	*Exploring Helical Fraying Linked to Dynamics and Catalysis in Adenylate Kinase*	10.1021/acs.biochem.5c00306	3	1
Lund University	Asian Economic Papers	Chou, Phanith and Fujikawa, Kiyoshi and Sovann, Chansopheaktra and Khorn, Vantha and Chhinh, Nyda	*Economic Valuation of Forest Carbon Storage and REDD+ Readiness: Insights from Virachey National Park, Cambodia*	doi.org/10.1162/ASEP.a.8	1,1	1
Lund University	Remote sensing	Sovann, Chansopheaktra and Olin, Stefan and Mansourian, Ali and Sakhoeun, Sakada and Prey, Sovann and Kok, Sothea and Tagesson, Torbern	*Importance of Spectral Information, Seasonality, and Topography on Land Cover Classification of Tropical Land Cover Mapping*	doi.org/10.3390/rs17091551	4,1	1
Lund University	Biogeosciences	ovann, C. and Tagesson, T. and Vestin, P. and Sakhoeun, S. and Kim, S. and Kok, S. and Olin, S.	*Land-cover change alters stand structure, species diversity, leaf functional traits, and soil conditions in Cambodian tropical forests*	doi.org/10.5194/bg-22-4649-2025	3,9	0
SLU	Journal of Applied Microbiology	Laingshun Huoy, Leila Nasirzadeh, Kongkea Phan, Siteng Tieng, Susanna Sternberg-Lewerin, Erik Bongcam-Rudloff, Sofia Boqvist	*Antimicrobial resistance and serotype distribution of Salmonella spp. isolated from fresh foods in Cambodia*	doi.org/10.1093/jambio/lxaf137	3,2	1
Umeå University	Journal of Hazardous Materials	Mary Chuong, Kongkea Phan, Knut Irgum, Ulf Skyllberg, Erik Björn	*Occurrence and controlling factors of methylmercury in non-contaminated Cambodian rice paddy soils*	10.1016/j.jhazmat.2025.138560	11,3	2
Uppsala University	Environmental Microbiology Reports	Sophany Phauk, Lorenzo Assentato, Seanghun Meas, Olle Terenius	*Primary and Secondary Symbionts of Cambodian Cicadellidae and the Role of Parasitisation*	doi.org/10.1111/1758-2229.70196	2,7	1
Uppsala University	Microbial Ecology	Sophany Phauk, Lorenzo Assentato, Sopha Sin, Onnorong Uk, Sophorn Hap, Olle Terenius	*Symbiont Diversity of Rice-Associated Leafhoppers (Cicadellidae) in the Tropical Floodplains of the Tonle Sap Lake, Cambodia*	10.1007/s00248-025-02619-9	4	1
Linköping University	Nano-Horizons: Journal of	Sreyemjan Ngok, Magnus Willander, Omer Nur	*Deposition of ZnO/α-F2O3 Nanocomposites on Screen-Printed*	10.25159/3005-2602/20057	N/A	no

	Nanosciences & Nano-technologies		*Electrodes for Electrochemical Arsenic Detection*			
Linköping University	RSC advances	Sreyeman Ngok, Xianjie Liu, Magnus Willander, Omer Nour	*Effect of Au nanoparticles on ZnO nanorods/a-*	10.1039/d5ra05210f	4,6	1

Conference contributions for the Cambodian PhD students in 2025.

Swedish host university	Type of conference	City, Country	Organiser	Author(s)	Title of the presentation	Oral/ Poster	Name of event	Start date	End date
SLU	International conference	Saint Malo, France	I3S Congress-INNOZH	Laingshun Huoy, Kongkea Phan, Leila Nasirzadeh, Siteng Tieng, Erik Bongcam-Rudloff, Susanna Sternberg-Lewerin, Sofia Boqvist	*Molecular Characterization of Antimicrobial Resistance among Salmonella spp. Isolated from Food in Cambodia*	Poster	International Symposium on Salmonella and Salmonellosis	2025-06-23	2025-06-25

Appendix 4. MORE ABOUT ISP

4.1 ISP organisation

ISP Board

The Board is appointed by the Vice Chancellor of Uppsala University in consultation with the Swedish International Development Cooperation Agency (Sida). The Board consists of:

- Uppsala University Vice Chancellor or whoever the Vice Chancellor assigns, also Chairperson
- Uppsala University University Director or another member of the university administrative leadership, as proposed by the Head of ISP
- a member from an international organisation, active in a field relevant to ISP, nominated by the Faculty Board
- three members who are scientists at Uppsala University, of which at least two in fields of science of direct relevance for the programme, nominated by the Faculty Board
- one representative for the developing countries, nominated by the Board of ISP
- one member with considerable experience of work outside the academic sphere, of relevance to the programme, nominated by the Board of ISP
- one representative of the students appointed by the student unions together,
- three deuty members representing different scientific disciplines within ISP, being common deputies for scientific members from Uppsala University and from other institutions of higher education, nominated by the Faculty Board

For 2025, the Board constitutes of:

- Prof Charlotte Platzer Björkman (F), Vice-Rector, Uppsala University
- Prof Kersti Hermansson (F), Department of Chemistry-Ångström, UU (Vice Chairperson)
- Dr Jennifer Blanke (F), Board member, Sanitation and Hygiene Fund (UN)/ Partner, Morphosis
- Prof Lars Österlund (M), Department of Engineering Sciences, Uppsala University
- Prof Giulia di Nunno (F), Department of Mathematics, University of Oslo, Norway
- Dr Eva Söderman (F), Director of Division for International Mobility, Uppsala University
- Prof Ameenah Gurib-Fakim, former President of the Republic of Mauritius, and former member of the Scientific Reference Group to the ISP chemistry programme
- Prof Knut Irgum (M), Department of Chemistry, Umeå University
- Prof Tom Britton, Department of Mathematics, Stockholm University
- Prof Fan Yang Wallentin (F), Department of Statistics, Uppsala University
- Prof Klaus Leifer, representative of the personnel unions, Uppsala University

Deputy Board members, Uppsala University:

- Dr Biplab Sanyal (M), Department of Physics and Astronomy, Uppsala University
- Prof Jonas Bergquist (M), Department of Chemistry, Uppsala University
- Prof David Sumpter (M), Department of Mathematics, Uppsala University

ISP Executive Committee

- Prof Kersti Hermansson (F), Department of Chemistry-Ångström, Chairperson
- Prof Lars Österlund (M), Department of Engineering Sciences, Vice Chairperson
- Dr Eva Söderman (F), Director of Division for international mobility
- Prof Fan Yang Wallentin (F), Department of Statistics
- Dr Bengt Ove Turesson (M), Programme Director of IPMS
- Dr Carla Puglia (F), Programme Director of IPPS
- Assoc Prof Solomon Tesfaldiet (M), Programme Director of IPICS

The ISP Scientific Reference Groups

The International Programme in the Chemical Sciences (IPICS)

- Prof Charlotta Turner (F), Lund University, Lund, Sweden
- Prof Henrik Kylin (M), Linköping University, Linköping, Sweden
- Prof Virna Leaner (F), University of Cape Town, Cape Town, South Africa
- Prof Em James Darkwa (M), Ghana (formerly University of Johannesburg, South Africa)
- Prof Jenny Ruales (F), Escuela Politecnica Nacional, Quito, Ecuador
- Prof Aji Palikunnel Mathew (F), Stockholm University, Sweden

The International Programme in the Mathematical Sciences (IPMS)

- Dr Layla Sorkatti, University of Khartoum, Sudan
- Prof Sophie Dabo, University of Lille, France
- Prof Rikard Bøgvad, Stockholm University, Sweden
- Prof Martin Singull, Linköping University, Sweden

The International Programme in the Physical Sciences (IPPS)

- Prof Ewa Wäckelgård (F), Uppsala University, Uppsala, Sweden
- Prof Magnus Willander (M), Linköping University, Linköping, Sweden
- Prof Malik Maaza (M), iThemba Labs, Cape Town, South Africa.
- Prof John Nkoma (M), University of Dar es Salaam, Tanzania
- Dr Stephan C. Buchert (M), Swedish Institute of Space Physics (IRF), Uppsala, Sweden
- Prof Roland Roberts (M), Uppsala University, Sweden

ISP Staff members

In 2025, ISP had the following **staff members**. (Full time if not otherwise indicated).

Core Programme scientific staff

- Dr Barbara Brena (F), Assistant Programme Director of IPPS and of IPMS (80%)
- Dr Bengt-Ove Turesson (M), Head of ISP, Programme Director of IPMS
- Prof Carla Puglia (F), Programme Director of IPPS, Coordinator of the Sida-Bolvia bilateral research cooperation programme (80%)
- Dr Cecilia Öman (F), Assistant Programme Director of IPICS (60%)
- Dr Solomon Tesfalidet (M), Programme Director of IPICS (50%)

Administrative staff

- Anna Wallin (F), Head of Administration
- Hossein Aminaey (M), Administrator
- Monica Lindström (F), Administrator
- Najat Tahboub (F), Economy Administrator
- Ulrika Kolsmyr (F), Economy Administrator

Other staff

- Dr Olle Terenius (M), Coordinator for Sida bilateral programmes in Ethiopia, Mozambique and Tanzania (65%)
- Ulrica Ouline (F), Project Manager (50% during 2025-08-10—2025-12-31)

4.2 ISP´s objectives

Uppsala University established the International Science Programme (ISP) in 1961. ISP provides long-term support to institutionally based research groups and scientific networks in low and lower-

middle income countries, to attain sustainable research activities and postgraduate training in the basic sciences physics, chemistry and mathematics. In a long-term perspective, the resulting outcomes and acquired skills are expected to favorably impact society.

ISP's vision is that development challenges are efficiently addressed in partner countries through increasing scientific knowledge.

ISP's mission is to strengthen the scientific knowledge, research capacity and postgraduate education in the basic sciences chemistry, mathematics and physics in countries where such capacity is non-existing or weak.

In the Annual report each of the ISP objectives and strategies are reviewed. Below all objectives and strategies are listed and to which section in the report they are linked to. The sections are marked with brackets *[xx]*.

Objectives: In the period 2019-2026 ISP will strive to achieve the following specific objectives:

1) To improve supported partners' ability to
    a) plan, manage, and carry out high-quality scientific research, *[Supported groups and networks]*
    b) train high-quality postgraduates at the Master and PhD levels, *[ISP Success stories, Graduated students]*
    c) disseminate research results at high-quality venues, *[ISP Success storiesPublications, Conference contributions]*
    d) on a longer term, use research results and acquired skills and engage in outreach activities having a favorable impact on society. *[Research findings & SDGs, Use of research results, Outreach]*
2) To improve the gender equality in supported research groups and networks. *[Gender]*
3) To increase supported partners' financial independence of ISP, with the ultimate goal of becoming self-sufficient and sustain on grants awarded in open competition. *[Expenditures: other funding]*
4) To make better use of previously supported partners in the development of new support. *[Challenges]*

General strategies

- To support scientific research groups in partner countries to develop their research activities and postgraduate training. *[Supported groups and networks, Graduated students]*
- To support scientific networks, linking scientists in partner and other countries. *[Networks]*
- To facilitate partners' collaboration with better resourced host institutions. *[Networks]*
- To build on local, needs-based ownership of research activities and training, applying a collegial approach to collaboration, and with a focus of improving the local conditions for developing scientific activities. *[Supported groups and networks]*

Strategies proposed in the 2013-2017 plan, that will continue

- To focus on supporting physics, chemistry and mathematics in present partner countries and to develop new collaboration in additional countries, where there is a need, and to promote interdisciplinary cooperation. *[Supported groups and networks]*
- To further increase the transparency in the "application by invitation" modality. *[Challenges]*
- To continue contributing to the enhancement of quality at all levels with supported partners, including establishment of a well-developed academic and scientific research culture. *[Publications, Conference contributions]*

- To continue increasing supported partner's skills with regard to financial management. *[Expenditures]*
- To develop and implement guideline criteria for the phase out of ISP support. *[Challenges]*
- To refine the monitoring and evaluation of ISP's performance to better show the results and the efficiency of the programme. *[Challenges]*
- To continue promoting gender equality among supported partners. *[Gender]*
- To continue increasing the visibility of the programme. *[ISP Success stories, Acknowledgements, Conferences, Outreach]*
- To continue supporting research groups in complementarity with Sida's bilateral programmes and facilitate regional cooperation. *[Supported groups and networks]*
- To continue cooperation with other organisations to the benefit of the programme. *[TICA, SU, AIP, ThEPCenter, UPE]*

New strategies 2019-2024 (extended to 31 December 2026)

- To develop and implement an instrument for systematic baseline assessment and chronology of capacity development stages with supported partners. *[Challenges]*
- To develop an instrument for periodical planning of progress expectations with supported partners at a time course over a number of support agreement cycles. *[Challenges]*
- To further develop the Terms of Reference for, and operation of, the Scientific Reference Groups to obtain a more coherent scientific review and support process. *[Challenges]*
- To clarify the possibility to budget postdoctoral activities within awarded allocations. *[Expenditures]*
- To increase the use of capacity built in research groups and networks to facilitate the strengthening of more recently introduced partners. *[Challenges]*

4.3 How does ISP measure results?

To improve monotoring and evaluation of supported groups and networks, ISP uses indicators (since 2010) to measure the results. These indicators apply a Results Based Management (RBM) approach.

In a meeting with Sida in 2018 it was agreed that the number of indicators would be reduces for the next agreement period. The Annual report 2020 was the first report using the revised indicators.

The following indicators are kept:

d) Expenditures in relation to final yearly budgets.
e) Yearly amount of funding granted from other sources than ISP.
g) Gender proportion of staff.
h) Gender proportion of PG students and graduates.
i) Number of admitted students remaining or graduating/year.
j) Duration of study of graduating PhDs, both total, and sandwich (SWH) and local (LOC) graduates.
n) Total number of yearly scientific publications, and proportion in indexed journals.
o) Total number of yearly conference contributions, and proportion international.
p) Number of yearly Master's graduations.
q) Number of yearly Doctoral graduations.

The following indicator is kept after revision:

c) ISP scientific reference group rating of received applications.

The following indicators were abandoned (but ISP continues to collect data for internal use):

a) Number of applications received in relation to invitations.

b) Number of applications granted in relation to submissions.
f) Number of activities phased out of support yearly because sustainability has been achieved.
k) Number of external scientific collaborators per group, and share international (I), regional (R), national (N) and local (L).
l) Share of groups and networks stating to be fully or to a large extent satisfied with the access to equipment needed to carry out research.
m) Measures recommended by ISP to reduce natural environmental impact that have been implemented. – ISP has revised the indicator and still publish results
r1) Number and share of graduates having published results before thesis defense.
r2) Number and share of graduates having published results two years after thesis defense.
s) Total number of outreach activities reported and share of groups and networks reporting outreach activities.
t) Total number of reported honors and share of groups and networks reporting honors.
u) Total number of instances of use reported and share of groups and networks reporting instances of use.
v) Share of graduates remaining in their home countries or regions after graduation.