

Curriculum Vitae

Ayşe Kaslılar Sisman (Ayşe Kaşlılar Şişman)

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Contact Information

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Date of Birth: 10.10.1967, Germany
Nationality: Turkish
Marital Status: Married, no children

Degrees

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| 2000 | Ph.D in Geophysical Engineering Program, Istanbul Technical University Graduate School of Science Engineering and Technology, Turkey. |
| 1991 | M.Sc. in Geophysical Engineering Program, Istanbul Technical University Graduate School of Science Engineering and Technology, Turkey. |
| 1989 | B.Sc. in Geophysical Engineering, Istanbul Technical University Faculty of Mines, Turkey. |

Docent

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| 2024 | Docent , Uppsala University |
| 2009 | Docent , Intercollegiate Board, Council of Higher Education, Turkey |

Positions/Employment

April 2018 -	Senior Lecturer , Uppsala University, Earth Sciences Department, Geophysics, Uppsala, Sweden
July 2014 - April 2018	Full Professor , Istanbul Technical University, Faculty of Mines, Geophysical Engineering Department, Istanbul, Turkey
January 2009 - July 2014	Associate Professor , Istanbul Technical University, Faculty of Mines, Geophysical Engineering Department, Istanbul, Turkey.
April 2005 - January 2009	Assistant Professor , Istanbul Technical University, Faculty of Mines, Geophysical Engineering Department, Istanbul, Turkey.
October 2003 - April 2005	Post-Doc , Delft University of Technology, Delft Institute of Applied Mathematics, Mathematical Physics, Delft, The Netherlands (contact person : Gerard Herman (deceased)) Project : Guide to Water, SHELL International Exploration and Production BV The Netherlands).
September 2002 – October 2003	Visiting Scientist , Freie University Berlin, Department of Geophysics, Berlin, Germany (contact person : Sergei Shapiro. Project : WIT (Wave Inversion Technology) Consortium Project and Deformation Process in the Andes Deutsche Forschungsgemeinschaft Collaborative Research Center SFB 267).
September 2000 - March 2002	System Analyst [†] , Istanbul Technical University, Student Administration Office, Information Systems and Automation, Istanbul, Turkey.
February 1998- July 2000	Ph.D. Student, self-financed , Istanbul Technical University, Geophysical Engineering Department, Istanbul, Turkey.
August 1996-January 1998	Sales and Marketing Representative [†] , Dogus Holding Automotive Co. Porsche Sales and Marketing Department, Istanbul, Turkey.
October 1995-July 1996	Geophysical Engineer [†] , EGM Limited Company, Geotechnical Department, Istanbul, Turkey.
December 1989-October 1995	Graduate Research Assistant , Istanbul Technical University, Faculty of Mines, Geophysical Engineering Department, Istanbul, Turkey.

[†]Non-academic employment

Appointments

2016 - 2018	Head of the Faculty Committee for the preliminary evaluation of the R&D project proposals submitted to the ITUARI-Techpark of Istanbul Technical University.
2015 - 2018	Member of PhD Qualification Committee of Geophysical Engineering Program, <u>Istanbul Technical University</u> Graduate School of Science Engineering and Technology.
2015 - 2018	Member of PhD Qualification Committee of Geophysical Engineering Program, <u>Ankara University</u> Graduate School of Science Engineering and Technology.
2010 - 2018	Head of Computational Seismology Research Group, Istanbul Technical University
2010 - 2018	Founder and Head of Computational Geophysics Laboratory, Department of Geophysical Engineering, Istanbul Technical University.
2014 - 2015	Vice Dean , Istanbul Technical University, Faculty of Mines, responsible for student affairs.
2009 - 2012	Graduate Program Coordinator of the Geophysical Engineering Program, Istanbul Technical University, Graduate School of Science Engineering and Technology.
2009 - 2012	Member of PhD Qualification Committee of Geophysical Engineering Program, Istanbul Technical University, Graduate School of Science Engineering and Technology.
2006 - 2013	Committee Member for the Development of Graduate Program for Geophysical Engineering, Istanbul Technical University, Graduate School of Science Engineering and Technology.
2005 - 2015	Erasmus Coordinator of the Geophysical Engineering Department, Istanbul Technical University EU Center.
2005 - 2009	Double Major Program Committee Member , Istanbul Technical University, Faculty of Mines.

Editorial Boards

- Geophysics, SEG, Associate Editor for *Geophysics Letters*, since 2017
- Near Surface Geophysics, EAGE, Associate Editor, since 2017
- Solid Earth, EGU , Guest editor, Special Issue on *Seismic imaging from the lithosphere to the near surface*, 2024-2025
- Near Surface Geophysics, EAGE, Lead Guest Editor, *Special Issue on Near Surface Applications of Distributed Acoustic Sensing*, 2024-2025

Other boards and committees

- 2022 - 2025 **Committee member**, SEG Europe Regional Advisory
- 2023 - 2025 **Faculty Advisor**, Uppsala University, SEG and EAGE Student Chapter
- 2015 – 2018 **Faculty Advisor**, Istanbul Technical University, EAGE Student Chapter

Other scientific merits

Scientific Research Projects Involved

Explanations are in the order of *Project Title, Funding Agency, International Contributors, Project Duration and Task*.

ITU: Istanbul Technical University

TUBITAK: The Scientific and Technological Research Council of Turkey

PI: Principle Investigator

- VHT-STORAGE, EUREKA, *Very High-Temperature Borehole Thermal Energy Storage*, 2026-2028 (co-applicant)
- NOD, *National lab for fibre optic sensing data*, Vinnova 2023-02785, (October 2023-2026), (co-applicant).
- *3D delineation and characterization of Blötberget and Bäckgruvan mine tailings by seismic ambient noise techniques integrated with existing geodata*, Geological Survey of Sweden, 2023-2024), (149k SEK/ 13k EUR), **PI**.
- *FUTURE, Fiber-optic sensing and UAV-platform techniques for innovative mineral exploration*, ERA-MIN 3, Raw Materials for the Sustainable Development and the Circular Economy, Joint-Project, (April 2022-2024), **Co-leader of WP2-Sweden part**.
- *Micro-seismic Monitoring and Interpretation in a Geothermal Field Hverahlíð, Iceland*, TUBITAK 2219 International Post-Doc Research Program, B. Selek-Post-Doc researcher, research conducted in UU, 2020-2021, , scholarship 25.2K Euro, **PI**.
- *Integrated smart testing environment for the mining industry, stage 2, year 1-3*, SMIG-VINNOVA, 2018-04507, 2018-2021, , total budget appr. 22.000K SEK, (co-applicant).
- *VISUAL 3D Visualisation of 3D–4D models in exploration and geosciences*, EIT/EIT RAW MATERIALS/ Project number_16258, 2018-2020, (co-applicant).
- *Modelling three dimensional elastodynamic wave scattering using Born approximation*, TUBITAK 1002 Research Projects, 2018-2019, (30k TRY/ 65k SEK/ 6.5k EUR), **PI**.
- *Signal processing and analysis of TRIGA MARK-II Nuclear Research Reactor*, ITUNOVA Technopolis Company, 2014-2016, (282k TRY/ 860k SEK/ 91k EUR), **PI**.
- *Investigation of Spatial and Temporal Properties of Seismic Noise in the Adana Basin*, ITU Research Fund for Graduate Thesis 38795, 2015-2016, (5k TRY/ 15k SEK/ 1.7k EUR), **PI**.
- *Examining the applicability of seismic ambient noise Green's functions to the main basins in Turkey: Estimating the seismic velocity and site amplification factor*, TUBITAK-BIDEB National Post-Doc Research Program, 2012-2014, scholarship 22K Euro , **Project advisor**.
- *Detecting near surface scatterers by inverse scattering and seismic interferometry of scattered surface waves*, TUBITAK, in collaboration with Delft University of Technology, KULeuven, Boise State University Physical Acoustics Lab., 2011-2013, (148k TRY/ 550k SEK/ 62k EUR), **PI**.
- *Computational Geophysics Lab. Infrastructure*, ITU Research Fund, 2012, (50k TRY/ 200k SEK/ 22k EUR), **founder of the lab and PI**
- *Imaging near surface scatterers by seismic interferometry of scattered surface waves*, ITU Research Fund for Graduate Thesis 35066, 2011-2013, (5k TRY/ 18.5k SEK/ 2k EUR), **PI**.
- *Imaging near surface scatterers by scattered surface wave* ITU Research Fund for Graduate Thesis, 35067, 2011–2013, (5k TL/ 18.5k SEK/ 2k EUR), **PI**.
- *Imaging Crustal Near-Surface Structures Using Scattered Seismic Surface Waves - Passive Seismics for Exploration and Surveillance*, Project consortium: SHELL International Exploration and Production BV The Netherlands, Massachusetts Institute of Technology, Delft University of

Technology, Politecnico di Torino, 2007-2009, (360k SEK/ 40k EUR), **PI in ITU-SHELL Contract**.

- *Investigation of Attenuation Structure of Western (Darıca) Basin of Izmit Bay by Using Seismic Reflection Data*, TUBITAK, 2009-2010, (11k TRY/ 57k SEK/ 5k EUR), **PI**.
- *Guide to Water*, SHELL International Exploration and Production BV The Netherlands, 2003-2007, **Post-Doc Researcher**.
- *Deformation Process in the Andes*, Deutsche Forschungsgemeinschaft Collaborative Research Center SFB 267, 2002, **Post-Doc Researcher**.
- *Wave propagation in random media*, Wave Inversion Technology Consortium Project, 2003, **Post-Doc Researcher**.
- *Evolution of Eastern Marmara*, TUBITAK, 2000, **Researcher**.
- *Investigation of the Velocity and Attenuation Structure in The Marmara Sea and its Surroundings* TUBITAK, 1996-1997, **Researcher**.

Peer-reviewed journal articles

- Wilczyński, Z., **Kaslilar, A.**, Malehmir, M., Juhlin, C., Markovic, M., Gyger, L., Manzi, M. Performance of surface-DAS in near-surface seismic exploration: a comparison with conventional sensors, *accepted Geophysical Journal International* (2026).
- Wilczyński, Z., **Kaslilar, A.**, Malehmir, M., Manzi, M., Vivin, L., Lepine, J., Valishin, O., Högdahl, K. Ambient noise surface-wave imaging in a hardrock environment: implications for mineral exploration, *Geophysical Journal International*, 240, 571-590, (2024)
- Gyger, L., Malehmir, A., Manzi, M., Vivin, L., Lepine, J., **Kaslilar, A.**, Valishin, O., Marsden, P. Hamerslag, R. Broadband seismic data acquisition and processing of iron-oxide deposits in Blöterget, Sweden, *Geophysical Prospecting*, 73, 73-80, (2024).
- Bakirci, T., **Kaslilar, A.**, Kocaoglu, A. 3D S-Wave Velocity Structure of the Adana-Iskenderun Basins By Ambient Noise Tomography, *Geophysical Journal International*, 239, 1530-1544, (2024).
- Wilczynski, Z., **Kaslilar, A.**, Ivandic, M., Juhlin, C. Drill bit position monitoring using Seismic-While-Drilling data; numerical and field examples from Sweden, *Geophysical Prospecting*, special issue on Mineral Exploration and Mining Geophysics (2023).
- Harmankaya, U, and **Kaslilar, A.** Modelling 3D elastodynamic wave scattering due to density and Lamé parameter contrasts of near-surface scatterers. *Near Surface Geophysics*, <https://doi.org/10.1002/nsg.12199>, (2022)
- Sun, R., **Kaslilar, A.**, Juhlin, C. High resolution seismic reflection PP and PS imaging of the bedrock surface below glacial deposits in Marsta, Sweden, *Journal of Applied Geophysics*, <https://doi.org/10.1016/j.jappgeo.2022.104572>, (2022)
- Ivandic, M., **Kaslilar, A.**, Juhlin, C. Subsurface seismic imaging with a hammer drilling source at an exploration drilling test center in Örebro, Sweden. *Advances in Geosciences* 56, 163–169, (2022).
- S. Karabetoglu, Z.F. Ozturk, **A.Kaslilar**, C.Juhlin, A.Sisman. Effect of layered geological structures on borehole heat transfer, *Geothermics*, Volume 91, (2021)
- Sun, R., **Kaslilar A.**, Juhlin, C. Reprocessing of high-resolution seismic data for imaging of shallow groundwater resources in glacial deposits, SE Sweden, *Near Surface Geophysics*, 18, 545–559, (2020).
- Harmankaya, U., **Kaslilar, A.**, Wapenaar K. and Draganov, D., Locating scatterers while drilling using seismic noise due to TBM, *Journal of Applied Geophysics*, (2018).
- **Kaslilar, A.**, Harmankaya, U, van Wijk, K., Wapenaar K. and Draganov, D., Estimating Location of Scatterers using Seismic Interferometry of Scattered Rayleigh Waves, *Near Surface Geophysics*, 12, 721- 730 (2014).
- **Kaslilar, A.**, Harmankaya, U, Wapenaar K. and Draganov, D., Estimating the Location of a Tunnel Using Correlation and Inversion of Rayleigh-wave Scattering, *Geophysical Research Letters*, 40, 6084-6088, (2013).
- Harmankaya, U., **Kaslilar, A.**, Thorbecke, J., Wapenaar K. and Draganov, D., Locating near-surface scatterers using non-physical scattered waves resulting from seismic interferometry, *Journal of Applied Geophysics*, 91, 66-81, (2013).
- **Kaslilar, A.** Inverse Scattering of Surface Waves: Imaging of Near-Surface Heterogeneities, *Geophys. J. Int.* 171, 352-367 (2007).

- **Kaslilar, A.**, Y.A. Kravtsov, S.A. Shapiro, S. Buske, R. Giese, and Th. Dickmann, Estimation of the Rocks Statistical Parameters from Traveltime Measurement, *Stud. Geophys. Geod. Special Issue*, 50, 325-336 (2006).
- Kravtsov, Y.A., **Kaslilar, A.**, S. A. Shapiro, S. Buske and T. Müller, Estimating Statistical Parameters of an Elastic Random Medium from Traveltime Fluctuations of Refracted Waves, *Waves in Random and Complex Media*, 15, 43-60 (2005).
- **Kaslilar-Özcan A.**, A. Boztepe-Güney and B. Ecevitoglu, Estimates of Attenuation Structure in the Çınarcık Basin of the Marmara Sea, northwest Turkey, *Physics of the Earth and Planetary Interiors*, 130, 1-16 (2002).
- Okay A.I., **Kaslilar-Özcan, A.**, C. Imren, A. Boztepe-Güney, E. Demirbağ and i. Kuşçu, Active faults and evolving strike-slip basins in the Marmara Sea, northwest Turkey: a multichannel seismic reflection study, *Tectonophysics*, 321, 189-218 (2000).
- Horasan G., **Kaslilar-Özcan, A.**, A. Boztepe-Güney and N. Türkelli, S-wave attenuation in the Marmara Region, northwestern Turkey, *Geophysical Research Letters*, 25, 2733-2736 (1998).

Book chapter

- **Kaslilar, A.**, Y.A. Kravtsov and S.A. Shapiro, “Geometrical Optics of Acoustic Media With Anisometric Random Heterogeneities: Travel Time Statistics of Reflected and Refracted Waves”, *Advances in Geophysics*, 50, ed. H. Sato and M. Fehler, Burlington Academic Press, Elsevier, 95-122, ISBN: 978-0-12-374509-5, (2008).

Contributions to Conferences

Extended Abstracts

- **Kaslilar, A.**, Lund, B., Papadopoulou, M., Rantatalo, M. Extracting phase-velocity spectra from train-induced vibrations: A case study from Malmbanan, Kiruna, Sweden, Extended Abstracts, EAGE Annual 87th Conference and Exhibition, Aberdeen, UK, June, (2026), (*accepted*).
- Panea, I., **Kaslilar, A***, Draganov, D., Using active- and ambient noise-source seismic data to map subsurface structures influencing saltwater emergence, Extended Abstracts, EAGE Annual 87th Conference and Exhibition, Aberdeen, UK, June, (2026), (*accepted*).
- Van Meulebrouck, S., **Kaslilar, A.**, Bastani, M., Draganov, D., Wilczynski, Z. and Juhlin, C. Mine Tailings Depth Estimation with the HVSr Method: A Case Study in Bäckegruvan, Central Sweden EAGE NSG 2025, 6th Conference on Geophysics for Mineral Exploration and Mining, Sep 2025, Volume 2025, DOI: <https://doi.org/10.3997/2214-4609.202520204>, (2025)
- Stender, V., Malehmir, A., Papadopoulou, M., **Kaslilar, A.** and Hamerslag, R. Collocated with Fiber-Optic Multi-Element Seismic Survey for Characterizing Mine Tailings in Central Sweden. EAGE NSG 2025, 6th Conference on Geophysics for Mineral Exploration and Mining, Sep 2025, Volume 2025, Volume 2025, DOI: <https://doi.org/10.3997/2214-4609.202520202>, (2025)
- **Kaslilar, A.**, Wilczyński, Z. Juhlin, C., Bastani, M. 3D delineation of the mine tailings by ambient noise methods: A case study in Sweden, Extended Abstracts, EAGE Annual 85th Conference and Exhibition, Oslo, Norway, June, (2024).
- Draganov, D., Ghose R., Harmankaya, U., **Kaslilar, A.**, van der Burg, D., Schoolderman, A. Imaging and Locating Buried Tunnels Using a High-Resolution S-wave Seismic Survey: Feasibility Field Test From Netherlands, Near Surface Geoscience Conference & Exhibition, 3-7 September, Edinburgh, UK, (2023).

- Gyger, L., Malehmir, A., Manzi, M., Vivin, L., Lepine, J., **Kaslilar, A.**, Valishin, O., Marsden, P., Hamerslag, R. Broadband seismic acquisition and processing in hardrock environment: a case study from Blötberget, Sweden, Near Surface Geoscience Conference & Exhibition, 3-7 September, Edinburgh, UK, (2023).
- Wilczyński, Z., **Kaslilar, A.**, Malehmir, M., Manzi, M., Vivin, L., Lepine, J., Valishin, O. Synthetic, broadband MEMS, and DAS comparison - surface-borehole array for surface-wave analysis and mineral exploration, 84th EAGE Annual Conference & Exhibition, European Association of Geoscientists and Engineers, 5-8 June, Vienna, Austria, (2023)
- Wilczyński, Z., **Kaslilar, A.**, Malehmir, M., Manzi, M., Marsden, P. Seismic wavefield modeling of surface and borehole distributed acoustic sensing arrays for deep iron-oxide deposit targeting, South African Geophysical Association's 17th Biennial Conference & Exhibition Sun City, South Africa, (2022)
- Gyger, L., Malehmir, A., **Kaslilar, A.**, Manzi, M., Valishin, O., Vivin, L., Lepine, J., Marsden, P. Simultaneous borehole-surface distributed acoustic sensing for deep iron-oxide deposit targeting in Blötberget, Sweden, South African Geophysical Association's 17th Biennial Conference & Exhibition Sun City, South Africa, (2022).
- **Kaslilar, A.**, and Juhlin, C. Estimating the bedrock depth below glacial deposits using the HVSR method, Extended Abstracts of the Near Surface Geoscience Conference & Exhibition, 18-22 September, Belgrade, Serbia, (2022).
- **Kaslilar, A.**, Wilczynski, Z., Markovic, M., Marsden, P., Manzi, M. and Malehmir, A. A prefeasibility study for passive seismic imaging in hard rock environment, EAGE Extended Abstracts of the Near Surface Geoscience Conference & Exhibition, 18-22 September, , Belgrade, Serbia, (2022)
- Wilczynski, Z., **Kaslilar, A.**, Ivandic, M., Juhlin, C. Feasibility study on Seismic-While-Drilling drill bit deviation monitoring, EAGE Extended Abstracts of the Near Surface Geoscience Conference & Exhibition, 18-22 September, Belgrade, Serbia, (2022)
- Wilczynski, Z., **Kaslilar, A.**, Monitoring a Spatial Drilling Trajectory Deviation Using a Drill-Bit Signal as a Source. EAGE Extended Abstracts of the Near Surface Geoscience Conference & Exhibition, August 29 September 2, Bordeaux, France, 2021.
- J., Ridderbusch, M., Abbasian, A., **Kaslilar**. Monitoring Drilling Trajectory by Using Drill-bit Signal as a Source, Extended Abstracts of the Near Surface Geoscience Conference & Exhibition - 8 December 2020, Online (2020).
- U. Harmankaya and **A.Kaslilar**. Inverse scattering of surface waves: Imaging density and Lamé parameter contrasts of near surface scatterers, Extended Abstracts of the Near Surface Geoscience Conference & Exhibition, 7-8 December 2020, Online, (2020).
- S. Karabetoglu, Z.F. Ozturk, **A.Kaslilar**, C.Juhlin, A.Sisman, Effect of Geological Formations on Thermal Performance Modelling of a Deep Borehole, Proceedings World Geothermal Congress 2020, Reykjavik, Iceland, April 26 – May 2, 2020, (*presented in 2021*)
- R. Sun, **A.Kaslilar**, C. Juhlin Seismic imaging of shallow groundwater resources in glacial deposits, Sweden, Extended Abstracts of the Near Surface Geoscience Conference & Exhibition 2019, 8-12 September 2019, The Hague, Netherlands (2019).
- U. Harmankaya and **A.Kaslilar**, Imaging near surface scatterers by scattered surface waves: Revamping an inverse scattering code, Extended Abstracts of the Near Surface Geoscience Conference & Exhibition 2019, 8-12 September 2019, The Hague, Netherlands (2019).
- M. Cakman, U. Harmankaya, B. Barutcu, P. Inci Kocak, A. Ilki, **A.Kaslilar**, Spectral analysis of vibrations of ITU TRIGA MARK-II nuclear research reactor building, Istanbul, Turkey, Extended

Abstracts of the Near Surface Geoscience Conference & Exhibition 2019, 8-12 September 2019, The Hague, Netherlands (2019).

- N.Bulut, A.Kocaoglu, **A.Kaslilar**, Investigation of ambient noise levels in the Adana Basin and its surroundings, Southern Turkey, Extended Abstracts of the 78th EAGE Meeting, 28 May-3 June, Vienna, (2016).
- T.Bakirci, **A.Kaslilar**, A.Kocaoglu. Ambient Noise Tomography in the Adana Basin of Southern Turkey, Extended Abstracts of the 78th EAGE Meeting, 28 May-3 June, Vienna, (2016).
- U. Harmankaya, **A. Kaslilar**, K. Wapenaar, D. Draganov. Locating scatterers ahead of a tunnel boring machine using noise correlation, Extended Abstracts of the 78th EAGE Meeting, 28 May-3 June, Vienna, (2016).
- U. Harmankaya, **A. Kaslilar**, K. van Wijk, K. Wapenaar, D. Draganov. Estimating the location of scatterers using correlation of scattered Rayleigh-waves, Extended Abstracts of the 77th EAGE Meeting, 1-6 June, Madrid, (2015).
- **A. Kaslilar**, U. Harmankaya, K. Wapenaar, D. Draganov Estimating the location of a tunnel using interferometric times of Rayleigh-wave scattering. Workshop 15, Imaging, Characterization and Monitoring Using Interferometric Methods, Extended Abstracts of the 77th EAGE Meeting, 1-6 June, Madrid, (2015).
- U. Harmankaya, **A.Kaslilar**, B. Verstraeten, S.Creten, C.Glorieux, K. Wapenaar, D. Draganov, Locating a buried cavity using ghost scattered waves in a scale-model experiment, Extended Abstracts of the 76th EAGE Meeting, 16-19 June, Amsterdam, (2014).
- U. Harmankaya, **A.Kaslilar**, J. Thorbecke, K. Wapenaar, D. Draganov, Locating scatterers by non-physical scattered waves obtained by seismic interferometry, Extended Abstracts of the 75th EAGE Meeting, London. X008, (2013).
- Fazelian, Y., **Kaslilar, A.**, Harmankaya, U. 2D Elastic Wavefield Modeling of a Near-surface Scatterer, Extended Abstracts of 19th International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey 31-34, (2013)
- Bulut, N., Harmankaya, U., **Kaslilar, A.**, Locating near-surface scatterers by seismic interferometry of scattered surface waves: Investigating the effect of an offline cavity, Extended Abstracts of 19th International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey, 27-30, (2013).
- Erdem, Z.E., Harmankaya, U., **Kaslilar, A.**, Estimating the location of multiple scatterers by seismic interferometry of scattered surface wave, Extended Abstracts of 19th International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey, 515-519, (2013).
- Demirel, S., Harmankaya, U., **Kaslilar, A.**, Examining the effect of depth and size of the scatterer in inverse scattering of surface waves. Extended Abstracts of the Istanbul International Geophysical Conference and Oil & Gas Exhibition, Istanbul. 174, (2012).
- Harmankaya, U., **Kaslilar, A.**, Thorbecke, J., Wapenaar K., Draganov, D., Estimating the location of scatterers by seismic interferometry of scattered surface waves, Extended Abstracts of the 74st EAGE Meeting, Copenhagen. X008, (2012).
- Harmankaya, U., **Kaslilar, A.**, Thorbecke, J., Wapenaar, K., Draganov, D., Estimation of the location of a scatterer from interferometric ghosts of the scattered surface waves. Extended Abstracts of the Istanbul International Geophysical Conference and Oil & Gas Exhibition, Istanbul. 173, (2012).
- Varilsuha, D., **Kaslilar, A.**, Estimating Statistical Parameters from Travel Time Fluctuations of Non-gaussian Media, Extended Abstracts of the 74st EAGE Meeting, Copenhagen. A001, (2012).

- Harmankaya U. and **Kaslilar A.**, Acoustic Modeling in Periodically Stratified Media, The 19th International Geophysical Congress and Exhibition of Turkey, 23-26 November 2010, Ankara, Turkey, Extended Abstracts, 237-240, (2010).
- Baydar B. and **Kaslilar A.**, Seismic Quality Factor (Q) Estimation from Marine Seismic Reflection Data: A Case Study in Western Izmit Bay, The 19th International Geophysical Congress and Exhibition of Turkey, 23-26 November 2010, Ankara, Turkey, Extended Abstracts, 31-34, (2010).
- **Kaslilar, A** and X. Campman, Scattered Surface Wave Imaging from Lab to the Field, First International Conference on Frontiers in Shallow Subsurface Technology 20-22 January, 2010, Delft, The Netherlands, Extended Abstracts, 37451, (2010).
- Campman, X. and **Kaslilar, A.**, Imaging and Characterizing Shallow Heterogeneity with Scattered Seismic Surface Waves, First International Conference on Frontiers in Shallow Subsurface Technology 20-22 January, 2010, Delft, The Netherlands, Extended Abstracts, 37454, (2010).
- Baydar B. and **Kaslilar, A.**, Investigation of Seismic Q Parameter Variations Around the North Anatolian Fault in the Western Izmit Bay, International Symposium on Monuments and Sites in the Eastern Mediterranean Region 500th Anniversary Year of the 1509 September 10, Marmara Earthquake, Proceedings Book of Extended Abstracts, 238-241, Istanbul, Turkey, September 10-12, (2009).
- **Kaslilar, A** and X. Campman, Imaging Scattered Seismic Surface Waves with Non-uniform Receiver Arrays, 71th EAGE Conference & Exhibition, Amsterdam, 8-11 June, 2009, WS7, 46-50, (2009).
- **Kaslilar, A.**, Estimating Attenuation by Using Marine Seismic Reflection Data, 70th EAGE Conference & Exhibition, Rome, Italy, 9 - 12 June 2008, P172, (2008).
- **Kaslilar, A.**, Imaging Shallow Heterogeneities By Scattered Surface Waves Symposium On Geophysics And Remote Sensing In Determination Of Near-Surface Structures, İzmir, Turkey, 30 April- 2 May, OS01-06, (2008).
- **Kaslilar, A.** and G.C. Herman, Imaging by Scattered Surface Waves: Preliminary Results from Seismic Field Data, Near Surface 2007, 13th European Meeting of Environmental and Engineering Geophysics, 3-5 September, Istanbul, Turkey, Extended Abstracts, B14, (2007).
- **Kaslilar, A.** and G.C. Herman, Imaging of Scattered Surface Waves: Application to Ultrasonic Data EAGE 68th Conference and Technical Exhibition, 12-15 June, Vienna, Austria, Extended Abstracts, H009, (2006).
- **Kaslilar, A.**, C.D. Riyanti, X. Campman and G.C. Herman, Forward and Inverse Scattering of Surface Waves EAGE 67th Conference and Technical Exhibition, 13-16 June, Madrid, Spain, Extended Abstracts, A034, (2005).
- **Kaslilar, A.**, Y.A. Kravtsov, S. A. Shapiro, S. Buske, R. Giese and Th. Dickmann, Estimating Statistical Parameters from Tunnel Seismic Data, EAGE 66th Conference and Technical Exhibition, 7-10 June, Paris, France, Extended Abstracts, E041, (2004).
- Kravtsov, Y.A., **Kaslilar, A.**, S.A. Shapiro, S. Buske and T. Mueller, Extracting Statistical Parameters of Elastic Medium from Traveltimes of Refracted Waves, Proceedings of 6th Annual Meeting of Wave Inversion Technology Consortium (WIT), p.3, 9-12 February, Hamburg, Germany, (2003).
- Buske, S., **Kaslilar, A.**, Kravtsov, Y.A., Krueger, O., Lueth, S., Tessmer, Investigations on interpretability of heterogeneities, 3rd Annual Meeting of Integrated Seismic Imaging System (ISIS) working group, 26. November 2003, Potsdam, Germany, (2003).

- Kuşçu, İ., Demirbağ, E., Kurt, H., **Kaslilar-Özcan, A.**, Güney, A., and İmren, C., The North Anatolian Fault Zone Under the Sea of Marmara, Imaged by Seismic Reflection Profiles Active Fault Research for the New Millenium, Proceedings of the Hokudan International Symposium and School on Active Faulting, Japan, (eds: Koji Okumura, Keita Takada, Hideaki Goto), p.199-208, (2000).
- Okay, A.I., E. Demirbağ, **A. Kaslilar-Özcan**, A. Boztepe-Güney, H. Kurt, N. Okay and İ. Kuşçu, “North Anatolian Fault System Under The Marmara Sea”, International Conference On The Kocaeli Earthquake 17-August-1999, December, Maçka, Istanbul, p 9-15, (1999).

Abstracts

- **Kaslilar, A.**, Papadopoulou, M., Lund, B., Rantatalo, M., Near-Surface Characterization Using Train-Induced Vibrations Recorded by DAS and Nodal Sensors, 40th General Assembly of the European Seismological Commission, 6-11 September, Istanbul, Turkiye, (2026), (*accepted*).
- **Kaslilar, A.**, Bastani, M., Brodic, B., Juhlin, C., Near-Surface Characterization of Mine Tailings Using Seismic Ambient Noise, 40th General Assembly of the European Seismological Commission, 6-11 September, Istanbul, Turkiye, (2026), (*accepted*).
- Wilczynski, Z., **Kaslilar, A.**, Malehmir, A., Juhlin, C., Gyger, L., Markovic, M., and Manzi, M.: Comparative analysis of surface-DAS and collocated 3-component geophones for surface-wave studies, EGU General Assembly 2025, Vienna, Austria, 27 Apr–2 May 2025, EGU25-9579, <https://doi.org/10.5194/egusphere-egu25-9579>, 2025.
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- **Kaslilar A.**, Juhlin C., Wilczyński, Z., Papadopoulou M., Lund B. Comparison of DAS and nodal sensor measurements for near-surface characterization, Seismix24, The 20th International Symposium on Deep Seismic Profiling of the Continents and their Margins, Uppsala Sweden, June (2024).
- Wilczyński, Z., **Kaslilar, A.**, Malehmir, M., Manzi, M., Vivin, L., Lepine, J., Valishin, O. Ambient noise surface wave analysis for delineating geological contacts: mineral exploration context, Seismix24, The 20th International Symposium on Deep Seismic Profiling of the Continents and their Margins, Uppsala Sweden, June (2024).
- Gyger, L., Malehmir, A., Manzi, M., Vivin, L., Lepine, J., **Kaslilar, A.**, Valishin, O., Marsden, P. Hamerslag, R. Simultaneous borehole-surface distributed acoustic sensing for mineral exploration in Blötberget, Sweden, Seismix24, The 20th International Symposium on Deep Seismic Profiling of the Continents and their Margins, Uppsala Sweden, June (2024).
- **Kaslilar, A.**, Wilczyński, Z. Juhlin, C., Bastani, M. Delineation of mine tailings by ambient noise horizontal-to-vertical spectral ratio method, EGU General Assembly, Vienna, April, (2024).
- Gyger, L., Malehmir, A., Manzi, M., Vivin, L., Lepine, J., **Kaslilar, A.**, Valishin, O., Marsden, P. Hamerslag, R. Broadband seismic acquisition and processing of iron-oxide deposits in Blötberget, Sweden, 36th Nordic Geologic Winter Meeting, Gothenburg, January, (2024).
- Ivandic, M., **Kaslilar, A.**, Juhlin, C. Subsurface seismic imaging with a hammer drilling source at an exploration drilling test center in Örebro, Sweden. In: European Geophysics Union, 2021, Online (2021).

- U. Kocum, G. Yetermishli, T. Godoladze, H. Babayan, A. Malovichko, J. Nabelek, K. Mackey, **A. Kaslilar**, E. Sandvol, Determination of Phase and Group Velocities between Greater Caucasus and North-Eastern Anatolia, AGU Fall Meeting, (2019).
- A.H. Kocaoglu, Bakirci, T., and **Kaslilar, A.**, Shear-wave velocity structure in the Adana Basin of Southern Turkey by Ambient Noise Tomography, AGU Fall Meeting, 12-16 December, San Francisco, (2016).
- Sabuncu, A., Eriş, K.K., **Kaslilar A.**, Çağatay, N., Gasperini, L., Filikci, B. Late Glacial to Holocene evolution and sea-level history of Gulf of Gemlik, Sea of Marmara, Turkey, EGU General Assembly, 17-22 April, Vienna, (2016).
- Orgulu, G., **Kaslilar, A.**, Boztepe Güney, A., Tan, O., Yoruk, A., Pabbucu, Z., Ergintav, S. Spatial variations of the Vp/Vs ratios and b-values beneath the West Anatolian Extensional Province in Turkey, 26th International Union of Geodesy and Geophysics Meeting, (2015).
- Bakırcı T., **Kaslilar, A.** Kocaoglu A., Retrieval of Green's Functions from Ambient Noise Measurements in the Adana and Bursa Basins of Turkey, EGU General Assembly, 27 April-2 May, Vienna, (2014).
- Baydar B., **Kaslilar A.**, Estimating the seismic quality factor Q in the western İzmit Bay, Northwest Turkey, AGU Fall Meeting Abstracts, 3-7 December, San Francisco, USA, (2012).
- Baydar B., **Kaslilar A.**, Q estimation from a marine seismic reflection data of İzmit Bay, NW Turkey: Comparison of correlation coefficient and L2 norm methods, International Earth Science Colloquium on the Aegean Region, 1-5 October, 2012, Izmir, Turkey, Abstracts, 259, (2012).
- Örgülü G., **Kaslilar A.**, Boztepe Güney A., Eyidoğan H., Tan O., Ergintav S., Baş M., Ergün K. Investigation of the spatial variations of the Vp/Vs ratios and seismic b-values beneath the West Anatolian Extensional Province in Turkey, 1-5 October, 2012, Izmir, Turkey, Abstracts 238, (2012).
- **Kaslilar, A.**, Imaging near-surface heterogeneities: surface wave scattering and inversion by Born approximation, Geophysical Research Abstracts, European Geophysical Union General Assembly, Vienna, Austria, 13-18 April, EGU2008-A-01116 (2008).
- **Kaslilar, A.** and G.C. Herman, Near-surface Imaging using Scattered Surface Waves, American Geophysical Union (AGU) Fall Meeting, Abstracts CD, 11-15 December, San Francisco, CA, USA, (2006).
- **Kaslilar, A.**, Y.A. Kravtsov, S.A. Shapiro, S. Buske, R. Giese and Th. Dickmann, Estimation of the Rocks Statistical Parameters from Traveltime Measurements, Workshop meeting on seismic waves in laterally inhomogeneous media VI, 20-25 June, Hrubá Skála, Czech Republic, No.52, (2005).
- Giese, R., Th. Dickmann, **A. Kaslilar**, Y.A. Kravtsov and S. Buske, Interpretation Einer Seismischen Tomographie zur Tunnelumfelderkundung im Seitenstollen West der Multifunktionsstelle Faido des Gotthard-Basis-Tunnels, Deutschen Geophysikalischen Gesellschaft, 64. Jahrestagung, Abstracts p.435-436, 8-12 March, Berlin Germany, (2004).
- Y.A. Kravtsov, **A.Kaslilar**, S.A.Shapiro, S. Buske and T. Mueller, Estimates of Elastic Medium Statistical Parameters from Travel Time of Refracted Waves, Deutschen Geophysikalischen Gesellschaft, 63.Jahrestagung Abstracts p.340-341 23-28.February.2003, Jena, Germany, (2003).
- Okay, A.I., E. Demirbağ, **A. Kaslilar-Özcan**, C. İmren, H. Kurt, A.Boztepe-Güney, N. Okay and İ. Kuşçu, Active Faults and Strike-slip Basins in the Marmara Sea, Northwest Turkey, International Earth Sciences Colloquium on the Aegean Region (IESCA-2000), 25-29 September, Abstracts p.6, Dokuz Eylül Üniversitesi, İzmir, (2000).

- Okay, A.I., **A. Kaslilar-Özcan**, A. Boztepe-Güney, C. İmren, E. Demirbağ, H. Kurt, N. Okay and İ. Kuşçu, The North Anatolian Fault Under the Marmara Sea, EGS XXV General Assembly, April, Nice, France, (2000).
- Horasan, G., **A. Kaslilar-Özcan**, A. Boztepe-Güney, N. Türkelli and R. Gök, An Investigation of Attenuation at the Marmara Region, 51th Geological Congress of Turkey, Chamber of Geological Engineers of Turkey, METU-Ankara. 16-20 February, p.76, (1998).
- **Kaslilar, A.** and N. Canitez, Synthetic Seismogram Calculations by Asymptotic Ray Theory, 9th. Petroleum Congress and Exhibition, Ankara, p.75, (1992).

Extended Abstracts (in Turkish)

- Bulut, N. Kocaoglu, A., **Kaslilar, A.**, Investigation of ambient noise levels in the Adana Basin and its surroundings, Southern Turkey, 4th International Conference on Earthquake Engineering and Seismology, 11-13 October, Eskisehir, Turkey, (2017).
- Harmankaya U., **Kaslilar, A.**, Draganov, D., Wapenaar K., Estimating Scatterer Locations with The Correlation of Tunnel Boring Machine Induced Noise, 4th International Conference on Earthquake Engineering and Seismology, 11-13 October, Eskisehir, Turkey, (2017).
- Kocum U. and **Kaslilar, A.**, Investigation of Seismic Noise Properties in the Southern Marmara Region, 4th International Conference on Earthquake Engineering and Seismology, 11-13 October, Eskisehir, Turkey, (2017).
- Sabuncu, A., Eriş, K.K., **Kaslilar, A.**, Çağatay M.N., Gasperini, L., and Filikçi B., Late Glacial to Holocene sea-level history of Gulf of Gemlik, Sea of Marmara, Turkey, VII Quaternary Symposium of Turkey, 8-11 May, Istanbul Technical University, Turkey, (2016).
- **Kaslilar, A.** and Harmankaya, U. Detecting Near Surface Scatterers by Seismic Interferometry of Scattered Waves, Extended Abstracts of Second Turkish Conference on Earthquake Engineering and Seismology, 25-27 September 2013 Hatay, Turkey, (2013).
- Bakirci T., **Kaslilar A.** and Kocaoglu A., Extracting Green's Functions for Adana and Bursa Basins Using Ambient Noise Data, Extended Abstracts of Second Turkish Conference on Earthquake Engineering and Seismology, TDMSK220, 25-27 September 2013 Hatay, Turkey, (2013).
- Okay, A.I., **Kaslilar-Ozcan, A.**, Boztepe-Güney, A. and Kuşçu, I., *Cenozoic Basins and the North Anatolian Fault in the Eastern Part of the Marmara Sea*, TÜBİTAK-MTA-ITU, Workshop V on Geology-Geophysics Researchs in Turkish Sea, MTA Ankara, 24-25 May 1999, p.1-4, (1999).
- Horasan, G., **Kaslilar-Ozcan, A.**, Boztepe-Güney, A. and Turkelli, N., S-wave attenuation in Marmara Region, Workshop 4 on Marine Geology, Marine Researches in Turkey, Vefa, İstanbul, (1998).

Popular science publications (in Turkish)

- Okay A.I., **Kaslilar-Özcan A.**, Boztepe-Güney A. and Kuşçu I., *The faults in the sea of Marmara threatening Istanbul*, Cumhuriyet Science and Technology, Special Issue on Earthquake 28 August, No. 649, 8-10, (1999).
- Okay A.I., Görür, N., Demirbağ, E., Boztepe-Güney A., **Kaslilar-Özcan, A.**, Okay, N. and Kuşçu, İ., *There are more than one active fault in the sea of Marmara*, Cumhuriyet Science and Technology, No. 653, 14-16, (1999).

Published Reports

- **Kaslilar, A.**, *3D delineation and characterization of Blötberget and Bäckegruvan mine tailings by seismic ambient noise*, Final report submitted to geological Survey of Sweden, August, (2024).

- **Kaslilar, A.**, Harmankaya U., *Modelling three dimensional elastodynamic wave scattering using Born approximation*, 117Y310 TUBITAK 1002 (2019).
- **Kaslilar, A.**, Harmankaya U., Demirel S., *Locating near-surface scatterers by inverse scattering and seismic interferometry*, 110Y250 TUBITAK 1001 (2013).
- **Kaslilar, A.**, Baydar, B., *Investigation of Attenuation Structure of Western (Darica) Basin of Izmit Bay by Using Seismic Reflection Data*, 108Y344 TUBITAK 1002 Project (2009).
- **Kaslilar, A.** and Herman, G.C., *Inverse scattering of surface waves*. In Progress Report 2003-2006 of the task group on scattering and heterogeneity, IASPEI commission on Seismological Observation and Interpretation, Chair: Haruo SATO, (2006).
- **Kaslilar, A.**, Kravtsov, Y.A., Shapiro, S.A., Buske, *Estimating statistical parameters of a random elastic medium from travel-time fluctuations of diving refracted waves*. In Progress Report 2003-2006 of the task group on scattering and heterogeneity, IASPEI commission on Seismological Observation and Interpretation, Chair: Haruo SATO, (2006).
- Kravtsov, Y.A., **Kaslilar, A.**, Shapiro, S.A., Buske, S., Muller, T., *Estimation of the statistical parameters from the travel-time fluctuations of refracted waves*. Wave Inversion Technology Consortium (WIT), Annual Report No:7, 236-248 (2003).
- Boztepe-Güney, A., Türkelli, N., Horasan, G., Gök, R., **Kaslilar-Özcan, A.**, *A study of crustal velocity structure and attenuation beneath the sea of Marmara and Surrounding Region*. TUBITAK, Istanbul Technical University and Kandilli Observatory and Earthquake Research Institute, TUBITAK-YDABCAG-429/G (1997).

Referee for International Journals

- Geophysical Journal International
- Geophysical Prospecting
- Geophysical Research Letters
- Geophysics
- Near Surface Geophysics

Memberships

- EAGE (European Association of Geoscientists and Engineers)
- SEG (Society of Exploration Geophysicists)
- AGU (American Geophysical Union)
- EGU (European Geosciences Union)
- JFMO (Chamber of Geophysical Engineers, Turkey)

Conference Organization

- *EGCE 2025*, Antalya, Turkey, *Scientific Committee Member*
- *Seismix 2024*, Uppsala, Sweden, *Organizing Committee Member*
- *VISUAL 3D* Visualization of 3D/4D Models In Geosciences, Exploration And Mining, 1-2 October 2019, Uppsala, Sweden, (<https://www.visual3d.info/conference>) *Organizing Committee Member*.
- *INERMA*, International Energy Raw Materials and Energy Summit, 1-3 October 2015, Istanbul Hilton Bosphorus Convention Center, *Organizing Committee Member, Scientific Committee Member*.
- Istanbul International Geophysical Conference and Oil and Gas Exhibition, The Society of Exploration Geophysics and Chamber of Geophysical Engineers of Turkey, 17-19 September 2012, Istanbul. *Vice Technical Chair, Organizing Committee Member, Technical Committee Member*.
- Organizing Committee Member, TMMOB Geophysical Engineers Chamber, 3rd Students Congress of Geophysical Engineering, 20-21 October 2005, ITU, Istanbul.
- Organizing Committee Member, Prof. Dr. Nezihi Canitez Symposium, 12-14 April, 1995, ITU, Mining Faculty, Istanbul.

Research Interests

- Passive and active source seismic imaging of subsurface structures for mineral, geothermal, and groundwater exploration.
- 3D modeling and inversion of scattered surface waves
- 2D-3D Wave propagation in random and inhomogeneous media
- Seismic tomography and attenuation

OTHER SCIENTIFIC MERITS

Founder of Computational Geophysics Lab in ITU Department of Geophysical Engineering

I established a modest high-performance computing laboratory in the Geophysical Engineering Department in 2010. At that time, this laboratory was the first example within the Geophysical Engineering Departments in Turkey. The establishment of the laboratory started in 2008 by the projects supported by Shell Int. E&P, The Netherlands, and by Istanbul Technical University Scientific Research Funds. This effort was appreciated by Dr. Özdoğan (Oz) Yılmaz, the CEO of Anatolian Geophysical Co., and he also donated a high-performance computing system to the laboratory. Both systems are designed for High-Performance Computational (HPC) tasks running under the Linux operating system.

Field Experience

At Uppsala University, I am regularly attending to the seismic fieldwork. Some examples are *National lab for fibre optic sensing data* (NOD), CCS Project Denmark (UU-GEUS), Mineral Exploration in Ludvika-Nordic Iron Ore (ERAMIN FUTURE), Seismic investigation of mine tailing dams Blötberget, Ludvika (SGU), Groundwater exploration in Marsta Uppsala University test site. In the past, I had limited opportunities to join fieldwork, and below are the ones that I have contributed:

July, 2000	Multi-channel, airgun-source seismic reflection data acquisition for submarine mapping of the active faults and ridges in the Central Marmara Sea, Turkey. Research vessel: MTA Sismik-1.
June-July, 1998	Side Scan Sonar and Subbottom Profiling studies in Blue Stream natural gas pipeline project Black Sea (Russia-Turkey). Research vessel: Mare Oceano
March, 1992	Acquisition of aftershocks of Erzincan earthquake (IPG-ITU-TUBITAK)
July-August, 1988	Training at Belirti Engineering and Consulting Limited Company, Water exploration and site studies.

TEACHING EXPERIENCE

Since April 2018 I am working as a Senior Lecturer in the Department of Earth Sciences at Uppsala University. I started my academic career as an assistant professor in the Geophysical Engineering Department of Istanbul Technical University in 2005. Also, I had teaching experience when I was a research assistant in the same department between 1989-1995, and I was assisting with the lectures and assignments, grading exams and assignments.

Courses given in Undergraduate and Graduate Program

UU: Uppsala University, ES: Department of Earth Sciences

ITU: Istanbul Technical University, GE: Department of Geophysical Engineering

C: Compulsory, E: Elective

Name of course	Institution	Course type	Terms	ECTS	Percentage	Role
BSc						
1GV177 Geophysical Methods with Applications	UU, ES	C	Since HT18	10	80	Head Teacher* & Teacher
1GV064 Statistic Methods in Earth Science	UU, ES	E	Since VT20	5	50	Head Teacher & Teacher
MSc & PhD						
1GE052 Applications of Geodynamics	UU, ES	E	Since HT18/	5	40	Teacher
Project course	UU, ES	E	VT19	15	100	Head teacher
Project course	UU, ES	E	HT24, VT25	30	100	Head teacher
1GE049 Time Series Analysis	UU, ES	C	Since HT22	5	70	Teacher
1GE054 Reflection Seismology	UU, ES	E	HT22-HT23	5	60-80	Head Teacher & Teacher
1GE070 Seismic Imaging (formerly 1GE054)	UU, ES	E	Since HT24	5	80	Head Teacher & Teacher
BSc						
MAT271E Probability and Statistics	ITU, <i>service course for all engineering students of ITU</i>	C	2005-2015	4	100	Head teacher
JEF212E Signal Processing	ITU, GE	C	2005-2018	6	100	Head teacher
JEF432E Groundwater Exploration	ITU, GE	E	2013-2017	4	100	Head teacher
JEF451E Gravity and Magnetic Prospecting	ITU, GE	C	2015-2018	6	50	Head teacher
JEF452 Engineering Seismology	ITU, GE	C	2011	4	50	Head teacher
JEF492/JEF492E Graduation projects	ITU, GE	C	2005-2018	8	100	Teacher, advisor
MSc & PhD						

JFM515E Generalized Inverse Theory in Geophysics	ITU, GE	C	2009-2018	7.5	100	Head teacher
JFM597 Seminar	ITU, GE	C	2010-2012	-	100	Head teacher
JFM500 Thesis	ITU,GE	C	2005-2018	30	100	Advisor
BSc						
Geoelectric methods	ITU, GE	C	1990-1993		50	Assistant
Interpretation in geophysics	ITU, GE	C	1990-1993		50	Assistant
Signal Processing	ITU, GE	C	1990-1995		100	Assistant
Seismology	ITU, GE	C	1994-1995		50	Assistant
Applied geophysics	ITU, GE	C	1994-1995		50	Assistant
Field measurements in geophysics	ITU, GE	C	1990-1995		50	Assistant

**Headteacher or course-responsible teacher*

ITU Geophysical Engineering undergraduate program is accredited (<http://www.geop.itu.edu.tr/en/accreditation>) by the Engineering Accreditation Commission (EAC) of ABET, www.abet.org.

Teaching Language:

Except for JEF452 Engineering Seismology and some Graduation projects (JEF492) all courses are/were given in English.

The number of students:

- Student count in Uppsala University is approximately 160 students between 2018-2023
- Student count in Istanbul Technical University is 1163 between 2005-2018
- Student count in Istanbul Technical University is on average more than 50 per course between 1990-1995

Short Courses Taught

A.Kaslilar, *Seismic Reflection Method and Data Processing*, TMMOB Chamber of Geophysical Engineers, vocational course, 5-6 December 2009, Ankara.

A.Kaslilar, *Introduction to Metallogeny of Fennoscandia*, Lecture given to Imperial College MSc Metals and Energy Finance (MEF) program, Arena Hotel, Uppsala, Sweden, 21.05.2023.

Pedagogical leadership roles

ITU: Istanbul Technical University, **GSSET:** Graduate School of Science Engineering and Technology

UU: Uppsala University

Leadership role	Institution	Period	Comments
Vice Dean	ITU, Faculty of Mines	2014-2015	University and Faculty level responsible for education
Graduate program coordinator (director of studies at both MSc and PhD levels)	ITU, GSSET	2009-2012	University level -ITU
Member of PhD Qualification Committee	ITU, GSSET	2009-2012 2015-2018	Graduate school level-ITU
Member of PhD Qualification Committee	Ankara University, Graduate School	2015-2018	Intercollegiate graduate school level- Ankara University
Committee Member of Development of Graduate Program	ITU, GSSET	2006-2013	Graduate school level -ITU
Committee Member of ABET Accreditation (https://www.abet.org/)	ITU, GSSET	2005-2017	Faculty-level educational affairs committee
Erasmus Coordinator	ITU EU Center representative for Geophysical Engineering	2005-2015	University and program-level
Double Major Program Committee Member	ITU Geophysical engineering	2005-2009	University and program-level
EAGE Student chapter faculty advisor	ITU	2015-2018	Faculty level
Mentor program	UU	2018-2019	About 6 months
Mentoring	ITU	2005-2018	Approximately 3 students per year. This advisory involves course guidance, career development, motivation, confidence building, sharing, and solving (if possible) private problems.
Course responsible teacher	UU	Since 2019 Since 2020 Since 2022	1GV177 Geophysical Methods w. Applications 1GV064 Statistics for Earth Scientist 1GE054 Reflection Seismology /1GE070 Seismic Imaging
Course responsible teacher	ITU	2005-2018	All courses given in “ITU” indicated as “Head Teacher” and listed in the section “Courses given in Undergraduate and Graduate Program”
System Analyst	ITU Student Administration Office, Information Systems and Automation	2000-2002	University level, responsible for the implementation of the regulations when transferring from manual to digital student administration system both for graduate and undergraduate education.

SUPERVISION EXPERIENCE

Number of students supervised at various levels and the roles as principal supervisor and co-supervisor.

Level	Number of students as principal supervisor		Number of students as co-supervisor		Institution
	Completed	In progress	Completed	In progress	
BSc	21 (ITU) 1(UU)	-			ITU
MSc	8 (ITU), 1(TUDeft+UU)	-	1 (ITU)		ITU
PhD	1 (ITU)+1(UU)	-	4 (UU)	6 (UU)	ITU / UU
Post-Doc	1 (ITU)+1 (UU)	-			

UU:

Uppsala University, ITU: Istanbul Technical University

Post-Doctoral Supervision and Projects Completed

Title: *Micro-seismic Monitoring and Interpretation in a Geothermal Field (Hverahlíð, Iceland)*

Post-Doc researcher & duration: B. Sele, 2020-2021, research conducted in Uppsala University

Advisor: A.Kaslilar

Project supported by: TUBITAK (The Scientific and Technological Research Council of Turkey) 2219 International Post-Doc Research Program

Title: *Examining the applicability of seismic ambient noise Green's functions to the main basins in Turkey. Ambient noise tomography and S-wave velocity structure of Adana Basin and its surroundings*

Post-Doc researcher & duration: T. Bakirci, 2012-2014

Advisers: A.Kaslilar and A.Kocaoglu

Project supported by: TUBITAK (The Scientific and Technological Research Council of Turkey) BIDEB National Post-Doc Research Program

PhD Completed:

Wilczynski, Z., Advancing near-surface seismic investigations for mineral exploration, Uppsala: Acta Universitatis Upsaliensis, 2025, p. 119, (main supervisor)

Harmankaya, U., 3D Elastodynamic Modeling and Inversion of Scattering by Born Approximation; Istanbul Technical University Graduate School of Science Engineering and Technology, April 2023 (supervisor).

Ruixue Sun, Near Surface High-Resolution Seismic Imaging of Glacial Deposits in Sweden at the Heby and Marsta Sites, licentiate, September 2020; (co-supervisor)

Magdalena Markovic Juhlin, Seismic Exploration Solutions for Deep-Targeting Metallic Mineral Deposits From high-fold 2D to sparse 3D, and deep-learning workflows, November 2022. (co-supervisor)

Jorge Donoso, Seismic imaging of volcanogenic massive sulfide deposits From legacy to innovative surveys September, 2022. (co-supervisor)

Pertuz, T. Innovative seismic imaging solutions: From hardrock mineral exploration to quick-clay site characterization, 2024. (co-supervisor)

Zappala,S., Dual-Element Onshore Seismic Data Acquisition and Imaging Techniques: Case studies from Seoul metropolitan and Danish CCS sites, 2025. (co-supervisor)

PhD in Progress

Co-supervision in progress:

Lea Gyger, Simultaneous borehole-surface distributed acoustic sensing for deep iron-oxide deposit targeting (planned June,2026).

Manos Konstantinidis, CO₂ geological site characterization in Denmark (planned 2026).

Yolanta Putnaite, Innovative reflection seismic solutions for geological carbon storage, Thorning site, Denmark (planned 2027).

Viktor Stender, High-resolution seismic imaging for direct targeting and tailing characterization including prototype testing (planned 2028).

Arianna Koufopoulou, Crustal-scale seismic footprints of tier-1 critical raw material (planned 2028).

Yang Cui, High Resolution Seismic Imaging for Mineral Exploration with Machine Learning, (planned, 2030)

MSc. Completed

- **Jacob Teunis Johannes (Sjaak) van Meulebrouck**, Characterization of mine tailings using seismic ambient-noise methods. A case study of the Bäckegruvan tailings in central Sweden, IDEA League, MSc in Applied Geophysics, May 2025.
- **Cakman S.M.**, *Seismic Monitoring Of ITU TRIGA MARK II Research Reactor Building*, ITU Graduate School of Science Engineering and Technology, January 2018.
- **Koçum, U.**, *Investigation of Spatial and Temporal Properties of Seismic Noise in the Southern Marmara Region*, ITU Graduate School of Science Engineering and Technology, December 2016
- **Sabuncu A.**, *Investigation of Sea Level Changes in Gulf of Gemlik with Geophysical Methods*, ITU Graduate School of Science Engineering and Technology, June 2016. (**co-advisor**)
- **Bulut N.**, *Investigation of Spatial and Temporal Properties of Seismic Noise in the Adana Basin*, ITU Graduate School of Science Engineering and Technology, June 2016.
- **Garan A.Y.**, *Estimating the 3D Location of Scatterers from Crosscorrelation Times of Scattered Surface Waves*, ITU Graduate School of Science Engineering and Technology, January 2015.
- **Varılsuha D.**, *Estimating Medium Statistical Parameters Using First Arrival Travel Times*, ITU Graduate School of Science Engineering and Technology, January, 2015
- **Harmankaya U.**, *Imaging near surface scatterers by seismic interferometry of scattered surface waves*, ITU Graduate School of Science Engineering and Technology, June 2012.
- **Demirel, S.**, *Imaging near surface scatterers by scattered surface waves*, ITU Graduate School of Science Engineering and Technology, January 2012
- **Baydar, B.**, *Attenuation Estimation and Application to Izmit Bay Seismic Reflection Data*, ITU Graduate School of Science Engineering and Technology, June 2009.

Supervised Undergraduate Graduation Projects, submitted as Graduation Thesis

- D.N. Mercan, *Modeling with Acoustic Wave Equation*, 2008.
- S. Demirel, *Acoustic Modeling in Random Media*, 2009.
- M. Buker, *Acoustic Modeling of Cavities*, 2009.
- Kandemir, *Least Squares Inversion of a Horizontal Cylinder Gravity Anomaly*, 2009.
- E. Noyan, *b-Parameter Estimation in Western Anatolia*, 2009.
- B.Tezer, *Investigation of the b-Parameter Variations in Marmara Region*, 2009.
- U. Harmankaya*, *Scale Dependent Seismic Velocity in Periodically Layered Medium*, 2010.

- F. Yigit, *Examination and Filtering of Seismic Records in the Frequency-Wavenumber Domain*, 2010.
- E. Karal, *Acoustic Modeling of Lateral Velocity Variations: Examination of the Pitfalls on the Shot and Exploding Reflector Records*, 2010.
- D. Varilsuha, *Estimating the Inhomogeneity Scale Lengths of a Medium from First Arrival Traveltimes of Seismic Waves*, 2011.
- U. Ozkan, *Acoustic Modeling of Reservoir Scale Inhomogeneties: Examination of the Amplitude Variations on zero offset VSP Records*, 2011.
- A.Y. Garan, *Surface Wave Removal by Seismic Interferometry and Matching Filter*, 2012.
- R.K. Erson, *2D Finite Difference Modeling of a Strike Slip Fault*, 2013.
- Y. Fazelian*, *Modeling Near-Surface Scatterers by 2D Elastic Wave Propagation*, 2013.
- Z.E. Erdem*, *Estimating the Location of Scatterers by Seismic Interferometry of Scattered Surface Waves*, 2013.
- N. Bulut*, *Estimating the Location of a Scatterer by Seismic Interferometry of Scattered Surface Waves: Scatterers off to the Receiver Lines*, 2013.
- U. Koçum, *Estimating the Depth of a Fractured Zone by Crosscorrelation of Scattered Waves*, 2014.
- M. Cakman, *Estimating Acoustic Green's Functions by Seismic Interferometry*, 2014.
- B. Celik, *Locating scatterers by Using Drill-bit Noise*, to be submitted in May 2017
- G.B. Yalcin, *Deconvolution in Frequency Domain Applied to a Wedge Model*, to be submitted in May 2017
- C. Taskiran, *Finite Difference Modeling of a Wedge Model*, to be submitted in May 2017

***See publication list for publications related to the BSc theses**

PEDAGOGICAL DEVELOPMENT

Contribution to Pedagogical Conference

Kaslilar A. Implementing Problem-Based Learning for Groundwater Exploration in Geophysics
Högskolepedagogisk konferens, 26-27/4 2022, Uppsala University

List the pedagogical courses taken

Name	Institution	Term	Workload (days)
Introduction to PhD supervision	UU	2019	4 days
Supervising PhD students	UU	2020	3 weeks
Academic Teacher Training Course	UU	2022	5 weeks
TUR Hands-on: renew your online teaching (2 days, 2x3hours) Short Course on Zoom	UU	2021	

UU: Uppsala University

BOARD PARTICIPATION

- Recruitment committee member for Senior Lecturer
- Recruitment committee member for Full Professor
- Docentship exam committee member
- Recruitment committee member for research assistant exams
- PhD Qualification Exam Committee Member
- Project reviewer/evaluator
- Faculty Committee Head for the evaluation of the R&D project proposals

Member of PhD thesis defense committee (students' name, thesis title, university, date)

- Zehra Altan, *3-D velocity structure of the Gulf of Izmir (western turkey) by using traveltime tomography*, Istanbul Technical University Graduate School of Science Engineering and Technology, November 2022.
- Michal Chamarczuk, *Development of seismic body-wave interferometry imaging for mineral exploration*, Institute of Geophysics, Polish Academy of Sciences, September 2021.
- Adil Tarancioglu, *Tomographic imaging of the three-dimensional velocity structure of the Marmara sea and it's surrounding*, Istanbul Technical University Graduate School of Science Engineering and Technology (in Turkish), March 2021.
- Georgina Maries, *Seismic investigations and physical property studies of natural resources in Scandinavia, Efficient exploration of groundwater and mineral resources*, Uppsala University, June 2020.
- Samar Amini, *Source analysis of multiplet earthquakes*, Uppsala University, June 2020
- Ao Wang, *Seismic and ultrasonic surface wave differential imaging for monitoring anthropogenic structures and the surrounding subsurface*, L'Université de Nantes, Géosciences, Agronomie et Alimentation, Sciences de la Terre et de l'environnement, November 2020.
- Burcu Selek, *3D Seismic characterization of a gas field in thrace basin by passive seismic methods*, Ankara University Ankara University Graduate School of Natural and Applied Sciences (in Turkish), April 2018.
- Özcan Özyildirim *two dimensional joint inversion of radiomagnetotelluric and direct current resistivity data incorporating surface topography using unstructured mesh*, Ankara University Graduate School of Natural and Applied Sciences (in Turkish), June 2017.
- Ismail Demirci, *Joint inversion of earthquake and magnetotelluric data*, Ankara University Graduate School of Natural and Applied Sciences (in Turkish), March 2015.
- Yildiray Palabiyik, *Numerical simulation and investigation of pressure and temperature behaviors of single-phase water geothermal reservoir due to production and injection activity of a single well*, Istanbul Technical University Graduate School of Science Engineering and Technology Turkey, 2013.

PhD Thesis steering committee member completed (student name, university, duration)

- Aylin Karaaslan, Istanbul Technical University, since 2016, to be completed in 2023
- Zehra Altan, Istanbul Technical University, completed in 2022
- Adil Tarancioglu, Istanbul Technical University, completed in 2021