2nd Greek – Romanian Seminar

Lessons learned from Earthquakes and Geotechnical Failures



October 9th, 2025 Amphitheatre I, K.E.D.E.A., Aristotle University of Thessaloniki



by:





& ΓΕΩΤΕΧΝΙΚΗΣ MHXANIKHΣ



Societatea Română de Geotehnică și Fundaţii



The Hellenic Society for Soil Mechanics and Geotechnical Engineering (HSSMGE) in cooperation with

the Romanian Society for Soil Mechanics and Foundation Engineering (SRGF) proudly announce the

2nd Greek - Romanian Seminar

Lessons learned from Earthquakes and Geotechnical Failures

on October 9th 2025 at Amphitheatre I, K.E.D.E.A., Aristotle University of Thessaloniki

for acknowledging the cooperation between the respective professional societies and to create a platform sharing expertise and fostering collaboration between the earthquake and geotechnical communities of Romania and Greece.

With both Romania and Greece located in seismically active regions, the seminar will offer the opportunity to discuss the latest developments and challenges in earthquake and geotechnical engineering, especially through the challenging lense of failures.

This seminar follows a most successful 1st Romania – Greece Seminar on Earthquake and Geotechnical Engineering held in Bucharest in March 2025.







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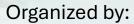












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Lessons learned from Earthquakes and Geotechnical Failures

October 9th 2025, Amphitheatre I, K.E.D.E.A., Aristotle University of Thessaloniki

09:15-09:30 **Opening Addresses** Michalis Bardanis, President, Hellenic Society for Soil Mechanics and Geotechnical Engineering Loretta Batali, President, Romanian Society for Soil Mechanics and Foundation Engineering Yiannis Xenidis, Head, School of Civil Engineering, Aristotle University of Thessaloniki Ilias Pertzinidis, President, Technical Chamber of Greece — Section of Central Macedonia **Dimitrios Pitilakis** 09:30-10:15 Urban-scale risk assessment including SSI and site amplification Loretta Batali 10:15-11:00 Forensic geotechnical, hydrological and hydrogeological analysis of instability phenomena occurred at a waste management centre 11:00-11:15 Coffee Break 11:15-12:00 Dan lancu & Horatiu Popa Influence of pile stiffness on behaviour of slender base isolated structures 12:00-12:45 Alexandra Ene, Horațiu Popa, Loretta Batali & Dragos Marcu Treatment of uncertainties for a deep excavation project in complex ground conditions 12:45-13:30 **Evangelia Garini** Soil Effects and Geotechnical failures in the 2023 Kahramanmaras Earthquakes in Turkey 13:30-14:30 **Lunch Break** 14:30-15:15 Evi Riga Verification of seismic risk models using observed damage from past earthquake 15:15-16:00 Anastasios Anastasiadis Subsurface Structure and Dynamic Soil Properties as Basis for Microzonation and Site Effects Studies: Lessons Learned from Studies in Greece and Cyprus 16:00-16:45 Michalis Bardanis Identification, investigation and remediation of slow-moving landslides 16:45-17:30 Discussion and Closing Panel Kyriazis Pitilakis, George Gazetas, Loretta Batali, Michalis Bardanis Moderator: Giorgos Belokas





Special Guest Speakers from Romania



Loretta Batali

Professor of Geotechnical Engineering, President of the Romanian Society for Soil Mechanics and Foundation Engineering, Vice Chair of CEN TC 250/SC7

Forensic geotechnical, hydrological and hydrogeological analysis of instability phenomena occurred at a waste management centre

Loretta Batali is full professor and habilitated for PhD research at the Technical University of Civil Engineering Bucharest (UTC), Department of Geotechnics and Foundations and Director of the Council for Doctoral Studies. She graduated the Hydraulic Works Faculty of UTCB in 1990, then she obtained a Master degree in 1993 and

her PhD degree in 1997, both from INSA Lyon France (with a PhD thesis on the Use of geosynthetic clay liners for landfills). Topics of interest: Soil mechanics, Foundation engineering landfills, Geosynthetics, Retaining structures, Unsaturated soils, Slope stability. Loretta Batali led 4 research projects as director (2 international and 2 national) and was member of another 7 international and 14 national research projects. She published several speciality books and numerous scientific and technical papers in journals and conference proceedings. Loretta Batali also has a rich technical activity for geotechnical investigations, geotechnical design and consultancy, verification and expertise, as well as author of technical norms and standards and member of various state commissions. She was involved in the revision of the Eurocode 7 at CEN as member of PT1 and then leading TG B on design examples and from 01.01.2025 vice chair of SC7. Since 2021 Loretta Batali is the President of the Romanian Society for Soil mechanics and Foundation Engineering (SRGF), after being vice president of it for 9 years. She is also member of the International Society for Soil Mechanics and Foundation Engineering (ISSMGE) and chair of the Awards Board Level Committee (AWAC).



Dan lancu

Structural engineer, Managing Partner, DI&A Design, Consulting Bucharest, Romania

Influence of pile stiffness on behaviour of slender base isolated structures

Dan lancu is a structural engineer with over three decades of professional experience, having practiced since 1993. He is appointed as Verifier and Expert by the Romanian Ministry of Public Works, a designation that confirms his qualifications in structural engineering oversight and technical evaluation. Since 2012, Dan lancu has served as managing partner at DI&A Design, Consulting, a consulting firm based in the Bucharest area. The company provides structural engineering design and consulting services for projects throughout Romania. His professional focus centers on seismic design methodologies, with particular emphasis on seismic base isolation sys-

tems. This field involves implementing technologies designed to reduce earthquake forces transmitted to building structures by decoupling them from ground motion. Soil-structure interaction has played a key role in the seismic design approaches he applies. Throughout his career, Dan lancu has worked on earthquake-resistant structural designs in Romania, where seismic activity is significant, particularly in the Vrancea region. His work focuses on pioneering the introduction of base isolation systems and added damping in Romanian structural designs, applying international standards and engineering solutions to enhance building performance during seismic events. He is active in several professional organizations: AICPS (Romanian Association of Structural Design Engineers), where he currently serves as Administrative Director; SRGF (Romanian Geotechnical Society), where he is an Executive Committee member; ASSISI (Anti-Seismic Systems International Society, Inc.); and C.T.S.A. (National Committee for Mechanical Resistance and Stability). As a practicing engineer and recognized expert, Dan lancu continues to contribute to structural engineering standards development and seismic protection technology implementation in Romania's construction industry.



Special Guest Speakers from Romania



Alexandra Ene

Civil engineer, UTCB, Secretary General of the Romanian Society for Soil Mechanics and Foundation Engineering

Treatment of uncertainties for a deep excavation project in complex ground conditions

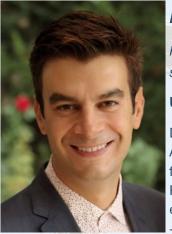
Alexandra Ene is a civil engineer mastered in geotechnical engineering, working in geotechnical and structural design since 2010. Most of the projects she took part in involved geotechnical structures such as retaining walls for deep excavations and foundations for buildings. Also, in her activity, there are site investiga-

tions and geotechnical and structural monitoring works, coordinating a team of about 10 people working in geotechnics. She is affiliated member of several professional associations and governmental experts group in Romania, including the Romanian Society of Geotechnics and Foundations where she has been General Secretary between 2021 and 2025. Alexandra has been involved in the revision of Eurocode 7 both as a working group expert and national delegate since 2006. She is also a Phd student at the Technical University of Civil Engineering in Bucharest, in geotechnics and foundations domain, where she is doing research on reliability-based design methods for geotechnical structures with the aim to apply these in practice.





Invited Speakers from Greece



Dimitris Pitilakis

Professor, Department of Civil Engineering, Faculty of Engineering, Aristotle University of Thessaloniki, Greece

Urban-scale risk assessment including SSI and site amplification

Dimitris Pitilakis is a Full Professor in the Department of Civil Engineering of the Aristotle University of Thessaloniki, Greece (M.Sc. in Engineering, University of California, Berkeley, Ph.D. in Earthquake Engineering from Ecole Centrale Paris, France). His research departs from soil-structure interaction and geotechnical earthquake engineering and aims toward the vulnerability assessment and resilient based design of soil-foundation-structure systems at a local or urban scale. He

has also been focusing on Geotechnical Seismic Isolation using soil mixtures with recycled materials, such as recycled tires. In addition, he has also been working on an earthquake early warning and early damage assessment of critical infrastructures, such as schools or industrial structures. He is a member of the TG207 committee of ISSMGE on soil-structure interaction and retaining walls. He is the author of more than 200 papers in peer-reviewed scientific journals and international conference proceedings. He is a member of national and international scientific societies on Earthquake Engineering and a reviewer of international scientific journals. He has developed software to simulate the soil-foundation-structure interaction, emphasizing nonlinear soil and structure behavior, and software for foundation design and analysis. He has extensive experience in experimental soil-foundation-structure interaction in small-scale (shaking table and centrifuge) and full-scale (EuroProteas in Euroseistest http://euroseisdb.civil.auth.gr/sfsis) facilities. He is currently in charge of the shaking table and the full-scale EuroProteas facility of the Laboratory of Soil Dynamics and Geotechnical Earthquake Engineering of the Aristotle University of Thessaloniki.



Evangelia Garini

Assistant Professor, Civil Engineer (Ph.D., M.S., Diploma), Technical University of Crete

Soil Effects and Geotechnical failures in the 2023 Kahramanmaraş Earthquakes in Turkey

Since 2023 serves as an Assistant Professor at the Department of Mineral Resources Engineering of the Technical University of Crete in the subject of "Static and Dynamic Analysis of Geotechnical Structures". Holds a Master of Science in Geotechnical engineering from the State University of New York at Buffalo and a

Diploma in Civil Engineering from the National Technical University of Athens. Obtained a Ph.D. degree in Geotechnical Engineering supervised by Professor G. Gazetas, on soil dynamics and soil-structure-interaction. During 2015–2022 she worked as a Researcher at NTUA in the Soil Dynamics Laboratory, where she was awarded twice with the IKY-Excellence-Siemens fellowship program (2013-14 and 2014-15). Her work has resulted in 22 articles in journals and 55 in conference proceedings. As a member of GEER (Geotechnical Extreme Events Reconnaissance, USA), HSSMGE (Hellenic Society of Soil Mechanics and Geotechnical Engineering), ETAM (Hellenic Society of Earthquake Engineering), and GeoWB (GeoEngineers Without Borders, ISSMGE) she participated in several Post-earthquake expeditions, and has published Reconnaissance Reports on Earthquake and Natural Disasters on: the Noto Peninsula (Japan) Earthquake of 1.1.24; the 5.9.23 Daniel Storm Flooding in Thessaly, Greece; the Mw 7.8 and Mw 7.5 earthquakes of 6.2.23 in Turkey; the Puebla (Mexico) 19-9-17 Mw 7.2 Earthquake; the 2016 Kaikoura Mw7.8 New Zealand Earthquake; and the 2014 January 26th and February 2nd Cephalonia, Greece, Earthquakes



Invited Speakers from Greece



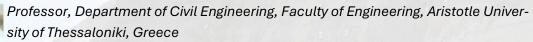
Evi Riga

Researcher and Teaching faculty at the Department of Civil Engineering, Aristotle University of Thessaloniki, Greece

Verification of seismic risk models using observed damage from past earthquake events

ing, Aristotle University of Thessaloniki (AUTH), specializing in Geotechnical Earthquake Engineering and Engineering Seismology. She earned her Civil Engineering diploma (2005) and MSc in Earthquake Engineering (2006) from AUTH, followed by a PhD (2015, with distinction) on "New elastic spectra, site amplification and aggravation factors for complex subsurface conditions, towards the improvement of Eurocode 8". Her research expertise covers local site effects and their incorporation into seismic hazard analyses and codes, soil and site characterization in geotechnical and earthquake engineering, seismic hazard and risk assessment at different scales (local, urban, national, European), seismic vulnerability of buildings, infrastructures and lifelines, as well as GIS-based applications. She has participated in 27 European and national research projects (e.g., SHARE, SERA, SERIES, SYNER-G, EPOS) contributing among others to seismic risk modeling, site effect characterization, and code-related developments. She is the author or coauthor of more than 90 scientific publications in peer-reviewed journals, book chapters, and conference proceedings, with more than 900 citations and an h-index of 13 (Scopus). Alongside her research, Dr. Riga has extensive teaching experience in undergraduate and postgraduate courses at AUTH. She also serves as a reviewer for international journals and an evaluator of research proposals and participates in numerous international working groups and committees related to earthquake engineering, including EFEHR and the ORFEUS strong motion committee

Anastasios Anastasiadis



Subsurface Structure and Dynamic Soil Properties as Basis for Microzonation and Site Effects Studies: Lessons Learned from Studies in **Greece and Cyprus**

Anastasios Anastasiadis is a professor of geotechnical engineering in the Department of Civil Engineering at the Aristotle University of Thessaloniki. Prior to joining the university, he worked as a senior researcher at the Institute of Engineering Seis-

mology and Earthquake Engineering (ITSAK-EPPO). His specialties include geotechnical earthquake engineering, with an emphasis on laboratory and in-situ testing; soil characterization in geotechnical and earthquake engineering; experimental and theoretical studies on seismic soil response; studies on the influence of local soil conditions; micro-zone studies; soil liquefaction; and improvement studies. He served as secretary of the ISSMGE Seismic Geotechnical Engineering Technical Committee (2008-2015), and he is a member of the ERTC-12 European Technical Committee, which evaluates and comments on Eurocode 8. He is also a member of several professional associations, including the ISSMGE, the ISRM, and the GCOLD. Since 2023 he is an elected board member of the Hellenic chapter of ISSMGE. He has worked as a scientific supervisor and as a researcher on more than 60 projects in Greece and the EU, primarily in the fields of geomechanics and geotechnical earthquake engineering. He has also worked as a consultant on over 20 major dynamic geotechnical and earthquake engineering projects. Throughout his career, he has published more than 150 scientific papers in peer-reviewed journals and international conference proceedings.



Invited Speakers from Greece



Michalis Bardanis

Partner & Director of the Geotechnical Laboratory, EDAFOS Engineering Consultants S.A., Athens, Greece, President, Hellenic Society for Soil Mechanics and Geotechnical Engineering

Identification, investigation and remediation of slow-moving landslides

Michalis Bardanis is Partner and Director of the Geotechnical Laboratory of EDAFOS Engineering Consultants S.A., a geotechnical consultancy based in Athens, Greece. He holds a Diploma in Civil Engineering from the National Tech-

nical University of Athens (NTUA), an MSc in Soil Mechanics from Imperial College, London, and a PhD degree in Unsaturated Soil Mechanics from NTUA. He has worked as a geotechnical engineer since 1998 on projects in Greece, Cyprus and Bulgaria, including large landslide remediation projects, highways, dams, airports, investigation and restoration of historical monuments etc. His research interests include unsaturated soil mechanics, laboratory and field testing, mechanical behaviour of reconstituted and structured soils, slope stability and landslide remediation, geotechnics of historical monuments and sites etc. Between 2018 and 2021 he was a Visiting Lecturer at Neapolis University Paphos, Cyprus, teaching in the Undergraduate Course of Civil Engineering, and between 2022 and 2023 a Lecturer under temporary contract at the MSc Course on Integrated Design of Hydraulic and Geotechnical Structures of the University of West Attica. He has been elected several times on the Executive Committee of the Hellenic Society for Soil Mechanics and Geotechnical Engineering (HSSMGE), serving as its Secretary General between 2015 and 2019, and as its President since 2019 (first elected in 2019, re-elected in 2023). He was the Chairman of the 8th International Conference on Unsaturated Soils, Milos, Greece, 2-5 May 2023, and the Chairman of the 9th National Hellenic Conference on Geotechnical Engineering, Athens, Greece, 4-6 October 2023. He has authored and co-authored 82 papers in journals and conferences and has delivered 16 lectures after invitation.

Closing Discussion Panel

The seminar will end with the Closing Discussion Panel moderated by HSSMGE Secretary General Giorgos Belokas and panelists Loretta Batali, Kyriazis Pitilakis, George Gazetas and Michalis Bardanis, discussing the scientific footprint and potential of these seminars on the engineering communities of the two countries, Greece and Romania, and the importance of similar bilateral activities among member societies of the ISSMGE.



G. Belokas Moderator



L. Batali Panelist



K. Pitilakis Panelist



G. Gazetas Panelist



M. Bardanis Panelist



We look forward to your participation in this exciting and informative event!

