





Dr Vassilis P. Marinos

IAEG President Candidate

CONTACT

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RECENT POSITIONS

- **Assistant Professor of Engineering Geology at the National Technical University of Athens**, School of Civil Engineering.
- **Vice President of the International Association for Engineering Geology and the Environment (IAEG)** for the geographic region of Europe for the period 2019-22.

ACADEMIC DEGREES

- PhD from the National Technical University of Athens (NTUA), School of Civil Engineering, Geotechnical Division.
- MSc with Distinction from Imperial College, London,
- Bachelor's degree in Geology from the University of Athens (graduated top of the class)

ACADEMIC EXPERIENCE

- **Previous Academic experience:** Associate Professor of Engineering Geology at the School of Geology, Faculty of Sciences, Aristotle University of Thessaloniki (2010-2020)
- **Area of expertise:** engineering geology in tunneling and dams, landslide risk assessment, geotechnical classification, assessment of weak and complex rock masses and geotechnical databases.
- **Publications:** more than 100 papers in international journals, book chapters and international conferences.
- **Research contracts:** in the field of tunnelling, landslide and rock slope stability, rock mass classifications, pipelines, geotechnical databases
- **Supervision of PhD theses:** Currently supervising 2 PhD theses (plus two completed) in the fields of i) laboratory intact rock and rock joint strength (completed), ii) landslide automatic detection using object image analysis, iii) construction of geotechnical database for urban environments and iv) TBM selection in soil deposits.

IAEG ACTIVITIES

- **Vice President (VP)** of the International Association for Engineering Geology and the Environment (IAEG) for the geographic region of Europe for the period 2019-22.
- **Promotion of IAEG:**
 - From 2019 to 2022, despite the Covid-19 restrictions, as a Vice President Dr. Marinos visited many National Groups (NGs) and made several contacts and presentations in promoting IAEG and the Regional Conference of IAEG. In particular he visited in person the National Groups of Albania, Austria, Belgium, Croatia, Czech Republic, France, Germany, the Netherlands, Romania, Slovakia, Turkey. Scheduled to visit: NGs of Serbia, Hungary, while he has been in close contact with the National Group of Italy, Portugal and Spain.
 - Organization of IAEG International Regional Conference (3rd EuroEngeo): Dr. Marinos was the chairman in organizing the 3rd European Regional Conference of IAEG, the council and the annual Executive Office meeting in 2021 in Athens.
- **Executive Committee work:** Dr. Marinos has been actively working to revise the Bylaws and Statutes of IAEG and a new version of Bylaws has been compiled. Several discussions were raised by the VP about revisiting Engineering Geology. The reason is a trend of deviation of Engineering Geology seen internationally. Engineering Geology “core values”, IAEG strategy, promotion and activities, were brought several times at Ex.Com. for discussion. Another issue that has been raised was the risks regarding the official journal of the IAEG (Bulletin of Engineering Geology and the Environment) in securing the engineering geological and international character.
- **Participated in numerous IAEG councils and in all the Executive Committee meetings** (jn person or virtually).
- **Greek national Group activities:** Active member of the executive committee of the Greek national Group; Dr. Marinos has been the President of the IAEG National Group of Greece, while he was an acting Secretary for 6 years. From the position of president and secretary of the Greek national group of IAEG he organized several workshops and created an informative and technical digital newsletter in order to communicate with the members. He promoted the relations of the Greek national group with IAEG as well as the participation of the group in activities and publications of IAEG. Dr. Marinos has also been a member of the organizing committee for various international and national conferences.

PROFESSIONAL EXPERIENCE

Consulting services for numerous highway projects, tunnelling, rockfall and landslide analysis, geohazards correlated to natural gas pipelines. Conventional engineering geological works (field work, ground investigation programs, geo-data processing, geotechnical analysis using Rocscience software), design of engineering structures in rock and use of 3D point clouds (from LiDar and UAVs) for rock mass structural analysis towards rockfall-landslide hazard and stability analysis and monitoring. Some indicative works-projects:

- Three-dimensional mapping and categorization of the landslide risk for the onshore and offshore slopes around the caldera, Thira Island. Contractor: “Municipality of Santorini) (2022-2024)
- Promotion of the geological history & improvement of the safe visit and passing by the geo-hazards of the area of the Red Beach of the Municipality of Thira. Municipality of Santorini) (2022-2023)
- Development of digital tools and integration of them in geotechnological methods for the investigation of the hazard of landslide occurrence in an environment of poor and complex rock masses in the area of Evrytania and the protection and support of road cuts per failure mechanism Contractor: “Perfecture of Central Greece”) (2022-2025)
- “Research of reality capture technologies integration in a) the assessment of engineering geological and geotechnical conditions related to the stability, hazard, and evolution of rockfall and landslide events, and b) the definition and evaluation of optimal support and protection measures of the Therma – Agios Fokas coast cliffs, Municipality of Kos” Contractor: “Municipality of Kos”) (2022)
- Engineering geological and geotechnical research with the application of modern digital technologies for the stabilization of the volcanic rocky slopes of the Holy Monastery of Panaghia Spiliani, Municipality of Nisyros. Contractor: “Municipality of Nisyros”) (2022)
- The influence of MICROstructure on EXPansivE soil behaviouR. Contractor: NTUA (2022-23)
- Engineering geological and geotechnical evaluation of railway tunnels Ormenis (7km) & Homorod (5km) in Romania. Contractor: OK S.A.) (2022)
- Geological study along the FSRU pipeline - Alexandroupoli (Geohazard expert, Contractor: “C&M Engineering”) (2022)
- Geological study along the Viora-Fier pipeline - Albania (Geohazard expert, Contractor: “C&M Engineering”) (2022)
- Field survey and landslide assessment in Albania and Greece section (as part of a large program: Assessment of earthquake loading and seismic response along Transadriatic natural gas pipeline –TAP (Lead Engineering Geologist - Geohazard expert, Contractor: “E-on Technologies”) (2014-2016)
- Geological and Geotechnical Studies of the Highway Melivoia Greek-Bulgarian Borders of the project "Vertical Axis 70 Egnatia Odos: Department". Engineering geological – geotechnical design of tunnels, road cuts, embankments and bridges (Contractor: Aktor S.A.) (2020)
- Rockfall hazard assessment at the Monastery of Temptations Jericho, Palestine (Use of LiDar technology-3D point clouds for rock slope stability and rockfall analysis, Contractor: Church of Greece) (2019)
- Engineering geological study of Red Beach high cliffs in Santorini island (Greece) and assessment on the stability of the slopes and support - reinforcement measures proposal (Contractor: Municipality of Thira) (Use of LiDar-UAV 3D point clouds for the analysis) (2015-16)

PROFESSIONAL EXPERIENCE (continue)

- 3D imaging services of the underground marble quarries of Paros island (Greece) with the use of terrestrial scanner LiDaR and analysis of the stability of the underground openings (Contractor: IGME) (2015-16)
- Geological and geotechnical study on the stability of the high rocky cliffs of the castle of Monemvasia (Greece) and adjacent castle walls and protection of underlying historical monuments. Proposal and design of support - reinforcement measures (Contractor: Ministry of Culture) (2003-2004, 2010-2011).
- Engineering geological study of Goulas tower cliffs in Oia village (Santorini island, Greece) and assessment on the stability of the slopes, the foundation zone of the traditional buildings, and support - reinforcement measures proposal (Contractor: Municipality of Thira) (2015-16).
- Earthquake disasters management integrated system: ERMIS (INTEREG program Greece-Italy) (Lead Engineering Geologist for Landslide hazards) (2018-2020)
- Slope stability analysis in the open pit lignite mine of Prosilio N. Kozani, Greece (Contractor: ME.TE. S.A) (2012)
- Engineering geological designs of numerous tunnels in Greece, Serbia and roadcuts and embankments in Bosnia (Contractors: Terna S.A., Egnatia Highway S.A, 3G Gruppe Geotechnik Graz ZT GmbH, Azvirt LLC & Hering d.d. and others) (2010-2020)
- Consulting services on Metro works (main and extension lines) in Athens and Thessaloniki (TBM selection, geological and engineering geological studies and designs, hydrogeological-inflow studies) (Contractor: Athens Metro S.A.) (2003-2006, 2009)
- Consulting services on the geotechnical classification of rock masses along three (3) tunnels of the Tel Aviv-Haifa Highway, Israel (2016-2017)
- Revision of geological and geotechnical designs of numerous tunnels of Egnatia Highway (Contractor: Egnatia Odos S.A.) (2002-2003)
- Research on the behavior of weak and complex rock masses during the construction of 62 tunnels of the Egnatia Highway and on the factors configuring the final construction cost (Contractor: Egnatia Odos S.A.) (2004-2006)

AWARDS - EXTERNAL VISIBILITY

- Graduated top of the class (Bachelor in Geology)
- Distinction from Imperial College (MSc in Engineering Geology)
- Awarded from the International Association of Engineering Geology (IAEG) with a runner-up certificate of the Richard Wolters Prize.
- Visibility: More than 2000 citations of my scientific papers, while research results are included in the industry (in design specifications of large projects, in geotechnical software suits and use in geotechnical design of large engineering works internationally).
- Keynote speaker in the 1st Specialized Conference on Soft Rocks» of ISRM (Beijing, 2014), the Asian Regional Conference of Engineering Geology 2019 (Beijing, 2019), the 2nd Shaoxing International Forum on Rock Mechanics and Engineering Geology (SXFRG, Shaoxing, 2019), in the annual lecture of the Greece Tunnelling Society (member of ITA) (Athens, Greece 2007), XV Symposium on Engineering Geology and Geotechnics» (Belgrade, Serbia 2016). Workshop leader in Webinars of British Tunnelling Society - Young Group and of IAEG-YEG groups (2020). Invited to give the 1st Mediterranean Lecture in 2022 (Mediterranean Geo-Community).
- Scholar from Golder Associates to perform joint research and deliver lectures in Queens University (Canada, 2014).
- Several invited lectures in Universities as Queen's University and Royal Military College (Canada), University of Twente (Netherlands), University of Leeds (United Kingdom), Delft University (Netherlands), Centre of Rock Mechanics and Geohazards of Shaoxing University (September –October 2019), Beijing University of Geosciences (October 2019), Technical University of Munich (Germany), Istanbul Technical University (Turkey), University of Mons (Belgium), Technical University of Bratislava (Slovakia), University of Tirana (Albania), Chinese Academy of Sciences (October 2019), in scientific associations like Croatian Geological Institute (Croatia), Boku University (Austria), University of Bucharest (Romania) and others.

OTHER SCIENTIFIC ACTIVITIES

- Member of numerous professional and scientific bodies (IAEG, ISRM, ISSMGE, ITA and others)
- Organizing international and national conferences (Chairman of the IAEG 2020 Conference, WTC2023 Program committee chair, Track Leader in American Rock Mechanics Association 2019, Convener in Mediterranean Symposium on Landslides (MSL-2021), Convener in 5th World Landslide Forum (WLF5) and others.
- Member of the editorial board of the scientific journals "Bulletin of Engineering Geology and the Environment" and "Journal of Geotechnical and Geological Engineering", while reviewer for the journals, "Rock Mechanics and Rock Engineering", "Journal of Geotechnical and Geological Engineering", "Engineering Geology" and "Tunnelling and Underground Space Technology".