Commission C4 – Education and Training

Chair(s): Vassilis Marinos

Co-Chair(s): *To be appointed*

Contact Email(s): marinosv@civil.ntua.gr

Commission Mission Statement (2025–2026)

The Commission on Education and Training (C4) is dedicated to strengthening the global foundation of engineering geology through academic and professional development. Its mission for the 2025-2026 term is to systematically gather and catalog information on the diverse education and training courses available worldwide. A key objective is to foster a robust network of practitioners and academics, creating a dynamic team of active participants within the commission. Ultimately, C4 aims to synthesize its findings into a strategic 10-year plan designed to promote and advance education and training across the discipline.

Work Plan and Deliverables

Over the next 18 months, C4 will execute a phased work plan. The initial six months will focus on networking and building a core team of active participants through email communication and meetings at IAEG events. By the 12-month mark, the commission plans to complete a comprehensive review paper on the state of education in engineering geology, targeted for publication in the Bulletin of Engineering Geology and the Environment (BoEG). The final phase will culminate in the organization of a dedicated workshop in Greece in early 2027, which will serve as a platform to present global findings and gather further input.

Planned Workshop or Training

The commission will organize a workshop titled "Education in Engineering Geology." This event is designed for academicians, policy makers, and key stakeholders involved in geoscience education. It is planned as a standalone workshop in Greece during the first semester of 2027.

Planned Publications

A significant publication output will be a review paper with the tentative title "Education in

Engineering Geology – global and regional practices." This paper will be led by Chair Vassilis Marinos and the C4 team, with a target submission date of December 2026.

Membership List

The commission is currently in the process of forming its core membership team and welcomes interested parties to contact the Chair.

Commission C10 – Building Stones and Ornamental Rocks

Chair(s): Björn Schouenborg

Co-Chair(s): Nike Luodes

Contact Email(s): bjorn.schouenborg@ri.se and nike.luodes@gtk.fi

Commission Mission Statement (2025–2026)

Commission C10 is focused on enhancing international collaboration and communication in the field of building and ornamental stones. A central part of its mission is to contribute to the development of international standards and guides. The commission maintains a close and active collaboration with the IUGS Commission on Geoheritage, particularly its Sub-commission on Heritage Stones, to promote the understanding and preservation of significant stone resources.

Work Plan and Deliverables

The commission has a structured plan for the coming term. Within the first six months, it will plan a short course on the practical use of natural stone, scheduled for October 2025 in Turkey. Over the following year, efforts will include planning the next Global Stone Congress (GSC) and contributing to international standards through ISO TC 327. A major 18-month deliverable involves coordinating a workshop with C17 (Aggregates) in Delft and producing a practical guide on the dimensioning of building stone elements for structural use.

Planned Workshop or Training

A key activity is a "Short Course on the Practical Use of Stone in Buildings and Infrastructure," with a focus on paving. The target audience includes students, industry professionals, and authorities. This course is associated with MERSEM and involves collaboration with IUGS and C17.

Planned Publications

C10 plans to publish an original research paper in BoEG titled "Öland limestone - a Swedish heritage stone widely used in the Hanseatic castles." The lead authors are Björn Schouenborg, Linda Wickström, and Ruth Siddall. Drafting is scheduled for the first half of 2026, with submission expected within the 18-month window. The guide on dimensioning stone elements may be published as a standalone document with a summary in BoEG.

Membership List

The core leadership consists of the Chair and Co-Chair, with wider membership drawn from international partners and collaborators in industry and academia.

Commission C17 – Aggregates

Chair(s): Prof. Dr. Atiye Tuğrul

Co-Chair(s): Prof. Dr. Isabel Fernandes, Prof. Dr. Akos Török

Contact Email(s): tugrul@iuc.edu.tr; tugrulatiye@gmail.com

Commission Mission Statement (2025–2026)

The Aggregates Commission (C17) aims to track and promote global research and developments in the field of construction aggregates. Its primary mission is to facilitate international collaboration by creating platforms for knowledge exchange. A key objective is to produce a comprehensive article that details the current state of aggregates worldwide.

Work Plan and Deliverables

The commission's main deliverables are concentrated around the XV IAEG Congress in 2026. It will organize a special session on aggregates in Delft, providing a forum to discuss current research and plan international collaborations. Furthermore, the commission will prepare an original paper, "State of Aggregates in the World Today," which will synthesize the latest global developments for submission to the BoEG.

Planned Workshop or Training

The special session on aggregates at the XV IAEG Congress will serve as the commission's primary workshop. It is intended for all scientists, engineers, and students with an interest in construction materials. The exact date and venue will be determined by the congress organizing committee.

Planned Publications

The flagship publication will be the paper "State of Aggregates in the World Today," to be authored by Prof. Dr. Atiye Tuğrul, Akos Török, Isabel Fernandes, and Murat Yılmaz. The timeline for submission is within the next 1.5 years.

Membership List

The commission is led by its Chair and Vice-Chairs and encourages participation from the global IAEG community interested in geomaterials.

Commission C24 – The Committee on Neotectonics and Geohazard

Chair(s): Prof. Yueping Yin

Co-Chair(s): Prof. Yongshuang Zhang

Contact Email(s): zhys100@cugb.edu.cn

Commission Mission Statement (2025–2026)

Commission C24 is dedicated to advancing the understanding of geohazards influenced by neotectonic activity. Its mission is threefold: to actively engage in and disseminate research at key international conferences; to achieve theoretical advancements in landslide research, particularly concerning the control of active structures and the rapid prediction of earthquake-induced landslides; and to enhance member skills through international training programs like LARAM.

Work Plan and Deliverables

The work plan is strategically laid out over 18 months. Initial activities include active participation in the 2025 Asian International Engineering Geology Conference in Nepal and other IAEG events, leading to a workshop proposal. In the following year, the commission will contribute to revising China's national standard for engineering geology terminology and participate in international training, resulting in a technical report. The final phase will focus on strengthening research to produce a groundbreaking paper for publication in BoEG.

Planned Workshop or Training

C24 will conduct a "Neotectonics and Geohazard Workshop" for its members. This workshop is associated with the 2025 Asian International Engineering Geology Conference and is scheduled for November 27–29, 2025, in Nepal.

Planned Publications

The commission plans to submit an original research paper to BoEG by December 31, 2026. The tentative titles are "The controlling role of active faults on large landslides" or "The rapid prediction of earthquake-induced landslides," with Mingdong Zang et al. as the lead authors.

Membership List

The commission comprises a group of active researchers and practitioners in the field of neotectonics and geohazards, led by Prof. Yueping Yin and Prof. Yongshuang Zhang.

Commission C25 – Engineering Geological Models

Chair(s): Fred Baynes

Co-Chair(s): Steve Parry

Contact Email(s): fredb@imet.net.au

Commission Mission Statement (2025–2026)

Commission C25 is committed to advancing the development and application of Engineering Geological Models (EGMs). Its mission is to collect relevant information, encourage research, and widely disseminate this knowledge throughout the global engineering geology community. The commission pursues strategic objectives including the continuous improvement of its guidelines, their translation and dissemination, targeted training and education, and increased interaction with industry.

Work Plan and Deliverables

C25 has a robust and ongoing work plan. A revised version (2.0) of its EGM Guidelines has been released, and a sub-committee will work on updating the digital 3D modeling section in 2025-2026. Translation efforts into multiple languages are underway. A series of EGM workshops are planned for 2024-2026 in locations including Australia, New Zealand, Dubrovnik, New Delhi, Kathmandu, Brazil, France, and Italy. A key session is planned for Delft 2026 focusing on "training the trainers."

Planned Workshop or Training

The commission is actively involved in organizing multiple EGM workshops globally. These workshops target engineering geologists and students. Key upcoming events are planned for New Delhi and Kathmandu in 2026, alongside sessions led by National Groups in Brazil, France, and Italy. A special "training the trainers" session will be held at the XV IAEG Congress in Delft.

Planned Publications

The primary publication is the continuously updated "Guidelines for the development and application of engineering geological models," which is freely available on the IAEG website.

Membership List

C25 benefits from a wide network of contributors. Key individuals include Fred Baynes,

Steve Parry, Ross Roberts, Mark Eggers, and Anthony Bowden, with active National Groups in Australia, New Zealand, the UK, Croatia, Taiwan, Brazil, Argentina, China, Turkey, Italy, Vietnam, India, Nepal, and France (see Table 1 in the original report for a detailed list).

Commission C28 – Reliability Quantification of the Geological Model

Chair(s): Antonio Dematteis

Co-Chair(s): Giovanna Vessia

Contact Email(s): giovanna.vessia@unich.it; antonio.dematteis@lombardi.group

Commission Mission Statement (2025–2026)

Commission C28 focuses on the critical task of quantifying reliability in geological modeling. Its mission is to define, collect, and introduce both qualitative and quantitative methods for studying the Reliability of Conceptual and Observational Engineering Geological Models (REGM). These methods are then applied to civil engineering works, risk assessment, and urban planning, with the ultimate goal of publishing formal guidelines for managing uncertainty and natural variability in model parametrization.

Work Plan and Deliverables

The commission's work plan is built on collaboration and practical application. In the first six months, C28 will cooperate with C25 to update the EGM Guidelines from a reliability standpoint and will also update its own C28 Guideline. Over the following year, the REGM approach will be applied to various case studies, with findings compiled into a journal paper for BoEG. By the 18-month mark, the commission will update its inaugural publication and draft a dedicated C28 Guideline on managing uncertainties.

Planned Workshop or Training

C28 plans to hold a workshop titled "How to quantify uncertainties and spatial variability in Engineering Geological Design." This workshop is designed for technicians and PhD students and is proposed to be associated with the IAEG European Congress in 2026.

Planned Publications

A key publication will be a Guidelines report for the IAEG Web, submitted to BoEG as a Technical Note, with the tentative title "Managing uncertainties and spatial variability in Conceptual and Observational Engineering Geological Models." The lead authors are Antonio Dematteis, Giovanna Vessia, and Diego Di Curzio, with a submission timeline of 2026-2027.

Membership List

C28 is looking to expand its membership, particularly to involve more young engineering geologists, and encourages interested individuals to contact the chairs.

Commission C34 – Marine Engineering Geology

Chair(s): Yonggang Jia

Secretary-General: Xiaolei Liu

Contact Email(s): yonggang@ouc.edu.cn; xiaolei@ouc.edu.cn

Commission Mission Statement (2025–2026)

Commission C34 is at the forefront of advancing the science and practice of marine engineering geology. Its mission is to tackle the challenges of climate change adaptation and sustainable offshore development through interdisciplinary collaboration and the application of emerging technologies. Key objectives include standardizing monitoring and assessment methodologies, facilitating global knowledge exchange, expanding disciplinary frontiers into deep-sea environments, building capacity among early-career professionals, and linking research to UN Sustainable Development Goals.

Work Plan and Deliverables

The commission has a comprehensive and output-oriented plan. In six months, it will compile global case studies and propose an IAEG-endorsed workshop. Within twelve months, draft guidelines for marine geohazard investigations will be developed. By the 18-month mark, the commission will synthesize its findings into a detailed technical report and a peer-reviewed paper for BoEG, with all major deliverables targeted for presentation at the XV IAEG Congress in 2026.

Planned Workshop or Training

The flagship workshop, "Sustainable Development in Marine Engineering Geology: Challenges and Innovations," is planned for October 31, 2026, at the XV IAEG World Congress. It targets academics, industry professionals, and early-career researchers.

Planned Publications

C34 plans multiple high-impact publications: a Guidelines report titled "Standardized Methodologies for Coastal and Offshore Geohazard Assessment," a peer-reviewed paper "From fluid seepage to seafloor failure...", and a Detailed Technical Report. Lead authors are Xiaolei Liu and Yonggang Jia, with a phased submission timeline over the next 18 months.

Membership List

The commission is led by Prof. Yonggang Jia and Secretary-General Xiaolei Liu, and is actively seeking to grow its membership, especially from coastal and island nations.

Commission C35 – Monitoring Methods and Approaches

Chair(s): Daniele Giordan

Co-Chair(s): Martina Cignetti

Contact Email(s): daniele.giordan@cnr.it

Commission Mission Statement (2025–2026)

Commission C35 is dedicated to innovating and refining monitoring techniques for engineering geology applications. Its work is centered on two primary themes: defining effective monitoring and early warning solutions for active landslide management, and developing innovative approaches for assessing glacier-related instabilities. Additionally, the commission plays a key role in the management of the IAEG Summer School.

Work Plan and Deliverables

Over the next 18 months, C35 will focus on delivering practical outcomes. At the 12-month mark, it will present findings on "The use of in-place inclinometer systems for deep displacement monitoring" at a conference. By 18 months, the commission will submit a publication to BoEG that consolidates case studies and strategies on "active landslide monitoring using innovative solutions and early warning systems."

Planned Workshop or Training

The commission will organize a workshop on "The use of in-place inclinometer systems for deep displacement monitoring" at the IAEG Congress in Delft, 2026. This event is aimed at scientists and practitioners.

Planned Publications

The main publication will be an original research paper in BoEG, titled "active landslide monitoring using innovative solutions and early warning systems: case studies and strategies." Lead authors are Daniele Giordan and Martina Cignetti, with submission expected within 12 to 18 months.

Membership List

The commission is coordinated by its Chair and Co-Chair and involves a network of experts in geomatics and geohazard monitoring.

Commission C36 – Engineering Geology for Waste Disposal

Chair(s): Prof. Ye Wei-Min

Co-Chair(s): *To be appointed*

Contact Email(s): ye_tju@tongji.edu.cn

Commission Mission Statement (2025–2026)

Commission C36 addresses the critical engineering geological challenges associated with waste disposal. Its mission is to serve as a global hub for knowledge exchange by hosting international meetings and events to discuss emerging challenges, best practices, and research needs. A key focus is on facilitating joint initiatives with other IAEG commissions and related organizations in geotechnics and environmental engineering.

Work Plan and Deliverables

The commission has a clear agenda for the coming term. It will host the 6th International Conference on Unsaturated Soil Mechanics and Waste Disposal (UNSAT-WASTE 2025) within six months. In twelve months, a hybrid event will benchmark THMC modeling cases, leading to a review paper on deep underground high-level waste (HLW) disposal. An 18-month investigation into multi-scale features of compacted bentonite will result in a detailed technical report.

Planned Workshop or Training

A significant activity is a "Site tour of the Beishan URL (Underground Research Laboratory)" in Gansu Province, China, scheduled for September 29, 2025. This tour is aimed at engineering geologists, repository implementers, regulators, and graduate students. It is associated with the UNSAT-WASTE 2025 conference.

Planned Publications

C36 plans to submit an original research paper to BoEG on the "Effect of macro technological void on the microstructure of compacted bentonite." The lead authors are Weimin Ye, Yonggui Chen, Qiong Wang, and Yucheng Li, with an expected submission date in November 2025.

Membership List

The commission is actively seeking to broaden its membership and encourages collaboration with YEG and related commissions.

Commission C38 – Rockmass Characterisation with Emphasis in Rock Slope Hazards

Chair(s): Haris Saroglou

Co-Chair(s): Christian Zangerl

Contact Email(s): saroglou@central.ntua.gr, christian.j.zangerl@boku.ac.at

Commission Mission Statement (2025–2026)

Commission C38 aims to improve international communication and the exchange of ideas and information among engineering geologists specializing in rock mass characterization and rock slope hazards. Its primary activities include the preparation and publication of state-of-the-art review papers, the organization of workshops at IAEG conferences, and the dissemination of knowledge through collaboration between experienced members and younger colleagues.

Work Plan and Deliverables

The commission's deliverables are tightly scheduled. Within six months, it will complete and submit its first commission paper to BoEG. Over the following year, the paper will undergo revision with the goal of acceptance and publication. A central activity is the organization of a dedicated C38 workshop at the XV IAEG Congress in Delft in October-November 2026, limited to 30 participants to foster in-depth discussion.

Planned Workshop or Training

The "Workshop Commission C38 - Rockmass Characterization with Emphasis in Rock Slope Hazards" will be held during the XV IAEG Congress in Delft (Oct 30 - Nov 6, 2026). It is open to all congress participants, with a special welcome for Young Engineering Geologists. The commission has requested IAEG funding for the workshop room and open-access publication fees.

Planned Publications

The flagship publication is a comprehensive review paper titled "Rock slope hazards: a state-of-the-art review of geological factors, failure and trigger mechanisms." The paper has a large author team led by Haris Saroglou and Christian Zangerl and is scheduled for submission in Winter 2025.

Membership List

Haris Saroglou, Christian Zangerl, Bill Murphy, Mark Eggers, Louise Vick, Shengwen Qi, Mirko Francioni, Alkis Gkouvalias, Renato Macciotta, Harun Sonmez, Goh Thian Lai, Sohail Akram.

Commission C41 – Cascading Geohazards

Chair(s): Zhenming Shi

Secretary: Ming Peng

Contact Email(s): 94026@tongji.edu.cn; pengming@tongji.edu.cn

Commission Mission Statement (2025–2026)

Commission C41 is dedicated to the complex and interconnected field of cascading geohazards. Its mission is to promote cutting-edge research, facilitate international knowledge exchange, and bridge the gap between science and public awareness. The commission focuses on understanding the mechanisms, monitoring, simulation, and risk management of disaster chains through academic forums, field investigations, and outreach activities.

Work Plan and Deliverables

C41 has a dynamic and multifaceted work plan. Recent activities include the successful organization of the 2024 Yangtze River Delta Urban Engineering Geology Forum in Shanghai and an 11th science outreach event for students. Forthcoming deliverables include a special issue in the Journal of Earth Science, a field investigation of the Sedongpu landslide in Tibet, and active participation in new journal initiatives. Future plans involve chairing sessions at international conferences and organizing a symposium in Shanghai in December 2025.

Planned Workshop or Training

The commission organizes numerous events, including the Yangtze River Delta Urban Engineering Geology Forum and a Symposium on Cascading Geohazard Research in Shanghai (Dec 2025). It also engages in public outreach, such as science events for school children. These activities target a wide audience from experts to the general public.

Planned Publications

A major publication effort is a special issue in the Journal of Earth Science (Chinese Edition) titled "Evolution Mechanism and Risk Prevention and Control of Cascading Geohazards," scheduled for 2025. Commission members are also involved in the new international journal "Geohazards & Remediation."

Membership List

The commission is led by Prof. Zhenming Shi and Secretary Ming Peng, with involvement from Prof. Yu Huang and a growing network of international experts and young researchers.