

## **CALL FOR** CONTRIBUTIONS 16 - 19 OCTOBER 2023 • UNITED ARAB EMIRATES UNIVERSITY • AL AIN, UAE

WWW.SEG.ORG/EVENTS/ICEG23

**CONFERENCE ORGANIZERS** 











### **OVERVIEW**

The United Arab Emirates University (UAEU) and Al Ain City Municipality (AAM), in partnership with the Society of Exploration Geophysicists (SEG), are proud to announce the seventh edition of the International Conference on Engineering Geophysics (ICEG). This edition will take place 16–19 October 2023 on the grounds of the UAEU in the Conference Auditorium of the Crescent Building. The success of the first six editions of the ICEG was reflected by the number of participants and the great interest and positive feedback from both local authorities and the international geo-community working with geophysical methods applied to engineering, environmental, archaeological, geotechnical, and forensic problems. Overwhelming encouragement from this community led to the seventh edition, and a decision to maintain the broad and active areas of near surface-related specialties.

The United Arab Emirates continues to build a sustainable, balanced, and diversified economy intended to ensure stability and prosperity with innovation and excellence as priorities. This conference has been designed and operated with those attributes and guidelines as drivers. These priorities speak to social responsibility and strongly signal the need for effective and technically sound engineering geophysics supporting regional growth. Therefore, the conscientious and rigorous application of engineering geophysics has become mandatory prior to approval of any construction project in Abu Dhabi Emirate.

The objectives of the ICEG 2023 will concentrate on innovation, creativity, advances, and new approaches in the field of engineering/environmental geophysics and related fields that have global impact. In addition to the core engineering/environmental and geotechnical focuses of this coming event, special sessions in related applications of archaeology, monitoring, energy, and forensic geophysics will be included. Furthermore, international experts at the cutting edge of their disciplines will deliver keynote presentations on their latest research, experiences, future goals for engineering/environmental geophysics, and raising public awareness on the critical role of near-surface geophysics.

### **WHO SHOULD ATTEND?**

This will be an outstanding venue and opportunity to explore the many applications of near-surface geophysics in this rapidly developing region. The mixture of attendees' academic, research, government, and industry experience will provide the flavor, diversity, and challenges of regional problems, as well as insights into problems and solutions from other areas around the globe. This is a must-attend meeting for those looking for business development opportunities in this very active and rapidly-developing region, as well as researchers looking for truly unique challenges, where ground stability, infrastructure, and characterization cross paths with thousands of years of history and cultural development. Through information exchange and cultivation of collaborative relationships, academic, and personal growth will no doubt be a principle benefit to all those that attend.

### SUBMISSION GUIDELINES, PUBLICATIONS & TOPICS

The technical committee invites submissions of abstracts via the SEG website of abstracts. Format of abstracts should include a minimum of 1500 to a maximum of 2500 words (word count excludes minimum of 2 figures and references).

#### **PUBLICATION OPPORTUNITES:**

### ICEG is pleased to announce that for the first time, there will be two paths for publication of conference articles:

-The first publication will be through the ICEG conference proceedings volume -The second publication will be through the SEG Journal GEOPHYSICS (standard GEOPHYSICS publication fee will apply)

\*For more information on GEOPHYSICS Journal publication process, please refer here.

#### **CONFERENCE THEME:**

#### **Geophysics Role in Sustainable Development and Climate Change**

#### **TECHNICAL TOPICS:**

- 1. The role of (engineering) geophysics in the energy transition and response to climate change
  - Geothermal energy, subsurface / CO2-storage, hydrogen and methane hydrates
  - Innovations in earth resource exploration (hydrogeophysics and mining)
  - Geophysical characterization for platforms, wind turbines, pipelines
  - Geotechnics and geophysics for urban developments (e.g. smart cities)
  - Geophysics for sustainability

#### 2. Technological/methodological advances

- Seismics (active and passive)
- Electromagnetics
- Inversion, modelling and data integration (e.g. FWI)
- Borehole geophysics
- Unmanned geophysical surveying
- The role of near-surface geophysics in deep subsurface imaging and characterization
- Time-lapse geophysics
  - Other (e.g., gravity, magnetics, electrical resistivity, etc. )
- 3. Machine-Learning and AI in engineering geophysics
- 4. Geohazard and risk mitigation
- 5. Planetary and lunar geophysics (e.g. gravity, seismic, LPR, etc.)
- 6. Broader engineering geophysics
  - Forensics and achaeogeophysics
  - Cryogeophysics (e.g., ice sheet, glacier dynamics, sea-level rise, permafrost, etc.)
  - Agrogeophysics (agriculture geophysical mapping)
- 7. The role of geophysics in earthquake engineering
- 8. Standards and legislation governing engineering geophysical methods
- 9. Case studies of engineering geophysics

PLEASE FOLLOW THE GUIDELINES IN THE ABSTRACT KIT:

https://seg.org/Events/iceg23

PLEASE E-MAIL YOUR ABSTRACT TO:

alara@seg.org

#### **IMPORTANT:**

Late submissions will not be accepted. You will not be given the opportunity to resubmit a new version of your abstract after the deadline has passed.

### **STUDENT PARTICIPATION**

**ICEG** highly encourages all students to participate in this much-anticipated conference. The top three (3) shortlisted students, selected by the technical committee, will receive travel grants to participate in the conference. In addition, the ICEG committee will award the two best oral presenters and one poster presenter at the conference gala dinner on Wednesday, 18 October 2023.

### INNOVATION AWARD FOR GEOPHYSICS

It is with great pleasure that the ICEG sponsors (UAE University and Al Ain City Municipality in collaboration with the SEG) announce an open invitation to all delegates of the 2023 ICEG Conference to participate in a peer-judged completion in search of significant contribution to applied near-surface geophysics. This award focuses on innovative contributions that substantially advance the application of geophysics to near-surface problems.

# THE TOP THREE WINNERS OF THE COMPETITION

#### WILL RECEIVE CASH PRICES OF US\$10,000, US\$7,000 AND US\$5,000 RESPECTIVELY.

This competition is designed to both attract and recognize internationally renowned and respected researchers in near-surface geophysics and provide a unique opportunity for all in the near-surface geophysical community to judge for themselves some of the most monumental contributions of our time to our science and society. This is the first competition of its kind, and award winners will no doubt establish and solidify themselves as recognized leaders at the forefront of their field.

Presenters wishing to join a distinguished pool of candidates being considered for one of five finalist positions in the Innovation Award oral session should submit all of the below documents:

- Full Paper
- 2 Recommendation Letters
- Cover Letter

The submission, review, and winner selection process will generally be as follows:

- 1. Submit abstract via standard submission by deadline for conference abstracts
- 2. Author sends separate email indicating desire to be considered for awards

3. Innovation award committee reviews candidate's submitted documents (as requested above) to qualify for the award

4. Documents reviewed, five finalists selected to present at pre-conference session

5. During pre-conference session, the committee will evaluate final presentations, materials and recommendations to select winners

6. Awards will be presented during the opening ceremony

For Student Participation & Innovation Awards, please submit your abstract to alara@seg.org



المؤتمر العالمي السابع للجيـوفيزياء الهنـدسيـة Seventh International Conference on Engineering Geophysics

#### **ABSTRACT FORMAT**

Please refer to Abstract Kit and Abstract Template available on the ICEG website.

Please note that by signing below, you are agreeing to the following:

Transfer of Copyright for Publication of Expanded Abstract

License Agreement for Presentation Files

The SEG No Show Policy

Publication Privileges

NOTE: For a detailed description of the above points, please refer to pages 9 - 12 of the Abstract Kit available on the ICEG website.

#### **PRINT IN BLACK INK OR TYPE**

Dr. Mr. Ms.
SEG ID# (if currently a member):
Full Name: Job Title:
Company/Organization:
City & State and ZIP/Postal Code:
Country:
Address listed: Business Home
Business Phone: Email:
Please Specify if you are:
A Student? (Yes/No):
Submitting for Innovation Award? (Yes/No):
Abstract Title:
Conference Theme/Topic:
Secondary Theme/Topic:
Presentation Type: Oral Poster Both

Publication: To be considered for GEOPHYSICS Journal publication (All accepted contributions in GEOPHYSICS will be linked in the ICEG2023 conference proceedings volume) *\$175 voluntary fee per page (members) | \$325 required fee per page (non-members)* 

**NOTE:** The mechanical recording of any portion of the ICEG Conference in any form (photographic, electronic, etc.) is strictly prohibited. Printed reference to the conference presentations or discussions is not permitted without the consent of the parties involved. All participants are requested to omit public reference to the conference proceedings in any published work or oral presentation. Only registrants are permitted to attend conference sessions. In the event the presentation incorporates copyrighted material of others, the presenter warrants that all required permissions or releases have been secured. The presenter agrees to indemnify, defend, and hold conference organizers, its directors, officers, employees, and agents harmless against any claims to the contrary. Each participant agrees to these regulations when application is accepted, as indicated by his or her signature on this form.

Signature:

\_ Date: \_\_

Please email abstract and call for abstracts form by 19 JUNE 2023 to alara@seg.org and CC to china@seg.org.

#### **TECHNICAL COMMITTEE**

Hakim Saibi, UAE University - Committee Co-Chair; Richard Miller, Kansas Geological Survey - Committee Co-Chair Ala Aldahan, UAE University; Aman Mwafy, UAE University; Anna Lim, Argeo; Chi Zhang, University of Vienna; Chih-Ping Lin, National Chiao Tung University; Christopher Leech, Geomatrix Earth Science Ltd; Elita Li, Purdue University; Essam Aboud, King Abdulaziz University; Haydar Baker, UAE University; Hitoshi Mikada, Kyoto University: Jianghai Xia, Zhejiang University; John Bradford, Colorado School of Mines; Khalid Al Bloushi, UAE University; Mohammed Abdel Zaher, National Research Institute of Astronomy and Geophysics; Mohammed Farfour, Sultan Gaboos University; Munjed Maraqa, UAE University; Niels Grobbe, University of Hawai'i at Manoa; Reece Van Buren, SAGA (South African Geophysical Association); Steve Sloan, Engineer Research and Development Center; Susan Webb, University of Witwatersrand; Takeshi Tsuji, University of Tokyo; Yan Jianguo, Wuhan University