

October 25-28  
أكتوبر 2021



المؤتمر العالمي السادس  
لجيوفيزياء الهندسية  
Sixth International Conference  
on Engineering Geophysics

# CALL FOR ABSTRACTS

25-28 OCTOBER 2021 • UNITED ARAB EMIRATES UNIVERSITY • AL AIN, UAE

[WWW.SEG.ORG/EVENTS/ICEG21](http://WWW.SEG.ORG/EVENTS/ICEG21)  
[WWW.ICEG.AE](http://WWW.ICEG.AE)

UAEU

جامعة الإمارات العربية المتحدة  
United Arab Emirates University



SOCIETY OF EXPLORATION  
GEOPHYSICISTS

طائرة التخطيط العمراني والبلديات  
DEPARTMENT OF URBAN PLANNING  
AND MUNICIPALITIES



بلدية مدينة العين  
AL AIN CITY MUNICIPALITY



# 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 Sixth edition of the International Conference on Engineering Geophysics (ICEG). This edition will take place 25–28 October 2021 on the grounds of the UAEU in the Conference Auditorium of the Crescent Building. The success of the first five 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 sixth edition and a decision to expand the fields of interest to a wider range of near surface-related specialties including: groundwater, time-lapse, security, seismicity, and geothermal. Beyond this 2021 event, this world-class series will permit sharing of the event with other regional partners that have equivalent enthusiasm for the application of geophysics to near-surface problems. In ICEG2019, we had a strong preference from companies in the region and many of the talks were focused on near-surface challenges in deeper exploration geophysics imaging.

The United Arab Emirates is building a sustainable, balanced, and diversified economy 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 2021 will concentrate on global innovation, creativity, advances, and new approaches in the field of engineering/environmental geophysics and related fields. In addition to the core engineering/environmental and geotechnical focuses of this coming event, special sessions in related applications of archaeology, energy and forensic geophysics will be included. Furthermore, international experts at the very 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, technical innovations, 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 principal benefit to all those that attend.



**CALL FOR ABSTRACTS:**

**27 MAY 2021, 5:00 PM CENTRAL TIME**

# SUBMISSION GUIDELINES & TOPICS

The technical committee invites submissions via the SEG website of extended abstracts, four (4) pages in length (including figures and references) under the following themes and topics:

## **CONFERENCE THEMES**

### General Topics/New Technologies Session Topics

- Engineering Geophysical Methods
- Near Surface Geophysics to Improve Exploration Geophysics
- Method Integration in Engineering Geophysics
- Developments in UAV Geophysical Survey
- AI and Machine Learning in Engineering Geophysics
- Advances in Acquisition and Sensor Technologies
- Advanced Geophysical Tomographic Methods
- Advanced Geophysical Imaging and Characterization Methods
- Monitoring: Passive, Time-lapse.

### Geo-Civil Engineer Session Topics

- Geotechnical: Geophysical Determination of Properties & Parameters
- Non-destructive Testing on Pavement, Concrete, and Lining Structure
- Subsurface Target Delineation and Classification
- Geophysics to Support Underground Storage

### Geo-Environmental Session Topics

- Geophysics and Climate Change
- Environmental Investigation and Remediation Monitoring
- Environmental Radioactivity and Remediation Methods

### Geo-Hazard (Natural & Human-made) Sessions

- Disaster Mitigation Applications: landslides, voids, berms/levees/dams
- Earthquake studies

### Geo-Resources Sessions

- Groundwater Management and Hydrogeophysics
- Geothermal Exploration
- Geophysics applied to Green Energy
- Mining Geophysics

### Other Applications

- Archaeology and Forensic Geophysics
- Agricultural Geophysics

### Special Sessions in Geophysics

- Planetary Near-Surface Geophysics
- Gas Hydrate

## **PLEASE FOLLOW THE GUIDELINES IN THE KIT:**

<https://seg.org/Events/iceg21>

<https://conferences.uaeu.ac.ae/iceg2019/en/abstracts.shtml>

## **PLEASE E-MAIL YOUR ABSTRACT TO:**

[hdalisay@seg.org](mailto:hdalisay@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 organizing 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, 27 October 2021.

# 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 2021 ICEG Conference to participate in a peer-judged competition 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 PRIZES 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. Meeting attendees wishing to join a distinguished pool of candidates being considered for one of five finalist positions in the Innovation Award oral session should submit a paper and accompanying application, as described on the conference web page. 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. Technical committee reviews candidate abstracts for award and creates finalist list
4. Selected authors will be requested to submit a white paper and reference letters
5. Documents reviewed, five finalists selected to present at pre-conference session
6. During pre-conference session, invited judges/reviewers evaluate presentations and materials and make
7. recommendations
8. Technical committee reviews recommendations and selects winner
9. Awards will be presented during the opening ceremony

**For Student Participation & Innovation Awards, please submit your abstract to [hdalisay@seg.org](mailto:hdalisay@seg.org)**