







#### 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 fifth edition of the International Conference on Engineering Geophysics (ICEG). This edition will take place 21-24 October 2019 on the grounds of the UAEU in the Conference Auditorium of the Crescent Building.

The success of the first four editions of the ICEG is reflected by the number of participants and the great interest shown by and 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 has led to the fifth in the series and decision to extend the fields of interest to a wider range of near surface related specialties including groundwater, time-lapse, security, seismicity, and geothermal to name a few options. Beyond this 2019 event, this world class series will be broadened to allow sharing of the event with other regional partners with equivalent enthusiasm for the application of geophysics to near-surface problems.

The United Arab Emirates is building a sustainable, balanced and diversified economy to ensure stability and prosperity through innovation and excellence as priorities. This conference has been designed and operated with those attributes and guidelines as drivers. Those 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 2019 are to concentrate on global innovation, creativity, advances and new approaches in the field of engineering/environmental geophysics and in related fields. In addition to the core engineering/environmental and geotechnical focuses of this coming event, special sessions in related applications to Archaeology, Energy and Forensic Geophysics will be held. Furthermore, international experts at the very cutting edge of their science or engineering will be delivering 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 and acquaint with the many applications of near surface geophysics in this rapidly developing region. The mixture of academia, research, government and industry attendees 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 in industry looking for business development opportunities in this very active and rapidly developing region, as well as researchers looking for those truly unique challenges, where ground stability, infrastructure and characterization cross paths with thousands of years of history and cultural development, where the crossroads of many millennium of civilizations are part of everyday engineering problems. Academic and personal growth through information exchange and cultivating of collaborative relationships will no doubt be a principle underpinning that all those that attend will benefit from.

#### STUDENT PARTICIPATION

ICEG highly encourages international and regional students to participate in this much awaited conference. Top three (3) shortlisted students by the organizing committee will receive travel grants to participate in the conference. In addition, the ICEG committee will also be awarding two best Oral Presenters & one Poster Presenter at the Conference Gala Dinner on Wednesday 23 October 2019.

#### 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 topics:

- Engineering Geophysical Methods
- Near Surface Geophysics to Improve Exploration Geophysics (e.g. Characterizing Dunes)
- Time-Lapse Monitoring
- Unmanned Geophysical Survey (Robotic/UAV)
- Advanced Geophysical Tomographic Methods
- Anomaly Delineation and Classification
- Method Integration / Joint Inversion
- Geohazards (Natural & Man-made)
- Groundwater/Hydrogeophysics (frack water,

contamination, injection induced seismicity)

- Archaeology / Archaeogeophysics
- Geothermal and Underground Storage: Geophysical Exploration and Monitoring
- Soil Characterization & Pavement Geoengineering
- Geotechnical: Geophysical Determination of Properties and
  Parameters
- Environmental Radioactivity and Remediation Methods
- Machine learning / Al in near surface characterization, information value

## To submit the abstract, please visit www.seg.org/abstracts/ICEG2019 DEADLINE: 1 APRIL 2019, 5:00 PM CENTRAL TIME

Important: Late submissions will not be accepted. You will not be given the opportunity to resubmit a new version of your abstract after the call has closed. Please follow the guidelines described in the Abstract Kit: www.seg.org/Events/ICEG2019/Abstract-Information

# INNOVATION AWARD FOR GEOPHYSICS

It is with great pleasure that the ICEG sponsors (UAE University and AI Ain City Municipality in collaboration with the SEG) announce an open invitation to all delegates of the 2019 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 or 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 four finalist spots in the Innovation Award oral session should submit a paper and accompanying application as described on the conference web page. The submittal, review, and winner selection process will generally be as follows:

- 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
- Selected authors will be requested to submit a white paper and reference letters
- 5. Documents reviewed, four finalists selected to present at pre-conference session
- During pre-conference session, invited judges / reviewers evaluate presentations and materials and make recommendations
- . Technical Committee reviews recommendations and selects winner
- Awards will be presented during the opening ceremony

