Newsletter: March 2019

Dear Colleagues:

The latest Near-Surface Geophysics (NSG) section newsletter is now available. Please follow this link to see the full version online.

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Recent announcements of interest to the NSG community (conferences, academic positions, graduate student opportunities, etc.) can be found on the AGU Near-Surface Geophysics section website.

Early-career scientists: Check out the NSG early-career website.

Follow NSG on Facebook and Twitter @NS_AGU!

Best regards,

Xavier Comas
President, Near-Surface Geophysics Section, AGU
1. Upcoming Meetings

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<tr>
<td>EGU</td>
<td>Vienna, Austria</td>
<td>7–12 April 2019</td>
<td>Closed</td>
<td>Open; standard registration</td>
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<tr>
<td>GEM</td>
<td>Xi’an, China</td>
<td>19–22 May 2019</td>
<td>Closed</td>
<td>Deadline: 22 May 2019</td>
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<tr>
<td>AGU–SEG</td>
<td>Davie, Fla.</td>
<td>9–10 June 2019</td>
<td>Closed</td>
<td>Deadline: 8 May 2019</td>
</tr>
<tr>
<td>AOGS</td>
<td>Suntec City, Singapore</td>
<td>28 July to 2 August 2019</td>
<td>Closed</td>
<td>Early registration deadline: 21 May 2019</td>
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<tr>
<td>SEG</td>
<td>San Antonio, Texas</td>
<td>15–20 September 2019</td>
<td>Deadline: 1 April 2019</td>
<td>Early registration opens 1 April 2019</td>
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<tr>
<td>ICEG</td>
<td>Al Ain, United Arab Emirates</td>
<td>21–24 October 2019</td>
<td>Deadline: 22 April 2019</td>
<td>TBA</td>
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2. AGU Updates

- **Propose a session for AGU Fall Meeting 2019 in San Francisco (Deadline: 17 April)**

To support a vibrant near-surface geophysics technical program at AGU, we rely on members of the science community like you to take a leadership role in convening sessions on a range of exciting, timely topics—we sincerely thank those NS members who have proposed Fall Meeting sessions in the past. Following up on our success at Fall Meeting 2018 in Washington, D.C., we hope to make the 2019 Centennial celebration meeting in San Francisco the biggest and best NS turnout yet. To achieve this goal, we hope that you will consider submitting a session proposal to NS, due 17 April: https://meetings.agu.org/fall-meeting-2019/?utm_medium=email#session-proposal.

If you have submitted a session proposal in the past, it may be appropriate to submit a similar topic again this year. Of course, we also strongly encourage completely new session concepts from both past conveners and those of you who are new to proposing sessions. Examples of topics that we think may draw submissions are “Geophysical measurement of clays” and “Geophysical detection and monitoring of karst, voids, fractures, and cavities.” If you would be interested in helping out with either of these topics, or have a novel idea that you would like to discuss, please contact Andy Parsekian.

We also strongly encourage collaborative “co-organized” sessions with NS as the lead. https://fallmeeting.agu.org/2018/files/2018/02/018_28071_FM18-Session-Type-Flowchart_Proof3.pdf
If you have any questions about the session proposal process, how to improve the number and quality of submitted abstracts, or how to increase participation from underrepresented groups, please do not hesitate to contact Andy Parsekian, the NS Fall Meeting Planning Committee rep. If you know of anyone who is thinking about being a “first-time convener” (particularly students, postdocs, and early career), please encourage them to contact Andy. It is important to emphasize that we are actively seeking to engage new session conveners and session topics and increase participation in Near-Surface sessions.

Thanks again for your efforts, and we look forward to seeing you in San Francisco.

• **AGU Honors Program: 2019 AGU Honors nominations deadline: 15 April 2019**

The AGU Honors Program recognizes colleagues for their outstanding contributions to the advancement of the geophysical sciences, for service to the community, and for contributions to the public’s understanding. Nominations for 2019 AGU Union medals, Fellows, awards, and prizes, and section awards and lectures, are now open, with a 15 March 2019 deadline for Union Fellows nominations and a 15 April 2019 deadline for all other nominations. We urge you to take this opportunity to nominate a student, a colleague, a peer, or a mentor whose achievements have made a difference in the Earth and space sciences. Visit the [AGU Honors Program home](#) for more information.

• **Section Incentive Program: Please consider donating!**

AGU launched the Section Incentive Program in 2015 to reward the sections that had at least 5% of their primary affiliated members make financial contributions of $50 or more to any AGU fund, including the Austin Endowment for Student Travel. More details on the Section Incentive Program thresholds can be found here: [http://sites.agu.org/leadership/sections-focus-groups/section-and-focus-group-incentive-program/](http://sites.agu.org/leadership/sections-focus-groups/section-and-focus-group-incentive-program/).

AGU will be extending the program in 2019, and in the Near-Surface section we are currently at 3.15% of primary affiliates making a contribution of $50 or more, so we need just 1.85% more to start receiving incentives that will go toward our section events and student initiatives. That means that we need only 11 more NS primary affiliates to contribute $50 (or more) to start qualifying for this incentive. Please help our section! And remember that your contribution can go toward our section or toward any AGU fund.

• **NSG Student Spotlight**
Tonian (Toni) Robinson is a second-year Ph.D. student in the geology program at the University of South Florida (USF), where she works under Dr. Sarah Kruse. Her research is currently focused on sinkhole deformation in western Florida using space-based satellite imaging (i.e., interferometric synthetic aperture radar, or InSAR) coupled with ground-based measurements from ground-penetrating radar (GPR), structure from motion, light detection and ranging (lidar), and geotechnical reports. Toni’s most recent work was presented at AGU Fall Meeting 2018 and focused on statistical analyses on time series data sets targeting rapid settling and subsidence events related to karst processes in western central Florida’s “sinkhole alley.”

Toni was first exposed to geophysics as an undergraduate during her sophomore year at Rutgers University–Newark. During the Intro to Geophysics course, she learned about many different methods, data processing, and report writing. While at Rutgers, Toni also worked as an undergraduate research assistant on various hydrogeophysics projects and credits these experiences and the support and inspiration from her professors and mentors as the motivation behind her pursuing further education and research opportunities.

Upon entering graduate school, Toni was awarded the Bridge to the Doctorate Fellowship, which is awarded by the National Science Foundation through the Florida–Georgia Louis Stokes Alliance for Minority Participation. This program aims to enhance recruitment and retention of underrepresented minority students in science, technology, engineering, and mathematics (STEM) disciplines. Outside of her many academic achievements, she is an active volunteer at USF, where she was appointed as the outreach coordinator for the Geoscience Graduate Student Organization. Toni recently has also taken on another volunteer role as one of two social media representatives for the AGU Near-Surface Geophysics section, so be sure to check out NSG’s Facebook and Twitter.

For more information about near-surface applications of geophysical and satellite-based methods for monitoring natural hazards, or to forward material for NSG’s social media sites, please contact Toni Robinson.
Interested in being highlighted, or know a student who should be? Please email Matthew Sirianni for more information about the Student Spotlight. We are also seeking research highlights that showcase use of near-surface geophysics in other AGU sections and focus groups. If you are interested in writing a short, one-page highlight, please contact Kisa Mwakanyamale.

- **AGU–SEG Airborne Geophysics Workshop**

  The AGU–SEG Airborne Geophysics Workshop will be held in Davie, Fla., on 11–13 June 2019. The workshop will be held to share advancements and applications of airborne geophysics for groundwater, mineral, petroleum, geotechnical, and hazards investigations. Preconference short courses are also available 9–10 June 2019. For more information, visit AGU–SEG 2019. The abstract submission period has closed. Workshop registration and preworkshop short course registration is now open. Registration deadline is 8 May 2019.

https://connect.agu.org/2019aguseg/registration

- **3. Near-Surface Geophysics Position Announcements**

  - **Postdoctoral Researcher: Electrical Engineering Properties of Soils and Sediments**

    The Department of Earth and Environmental Sciences at Rutgers University–Newark is seeking to hire a postdoctoral researcher (postdoctoral associate) on a calendar year basis beginning 1 July 2019 and continuing through 30 June 2021. The postdoctoral researcher will investigate the relationships between low-frequency electrical properties and engineering properties of soils and sediments. In addition to performing basic and applied research in electrical geophysics, the postdoctoral scientist will be expected to supervise a cohort of undergraduate-level minority students engaged as research assistants on this project.

    Qualified individuals with an interest in this position should submit an application using the following link: https://jobs.rutgers.edu/postings/86000. In addition to strong research skills and evidence of a commitment to publishing scientific results, the successful applicant will also show a commitment to mentoring undergraduate students in research. A Ph.D. degree is required at the time of appointment. Rutgers University–Newark is an urban campus with excellent access to New York City and the surrounding metropolitan area.

    For further details, see the link to the job posting, or contact Lee Slater.

  - **Two Ph.D. studentships: Near-surface geophysics/hydrogeophysics**

    The Department of Earth and Environmental Sciences at Rutgers University-Newark has two studentships in near-surface geophysics/hydrogeophysics available starting in September 2019. One project focuses on applying electrical geophysical techniques to better understand the role of preferential flow on subsurface transport of nutrients from agricultural fields to drainage ditches. The focus of the second studentship can be in any area of near-surface geophysics, although preference will be given to applicants with an interest in incorporating a petrophysics component into their research. The studentships cover full tuition, salary, and health benefits.
Rutgers University–Newark is an urban campus with excellent connections to New York City and the greater metropolitan area. The Department of Earth and Environmental Sciences currently has four full-time faculty in near-surface geophysics/hydrogeophysics. The department has outstanding laboratory and field facilities for performing research in hydrogeophysics and petrophysics. For further information about this opportunity, please contact Lee Slater.

4. FYIs

I. Paper request: SEG Near-Surface Geophysics Technical Section

The SEG Near-Surface Geophysics Technical Section is recruiting papers for the technical sessions listed below. Submit your abstracts from 1 February to 1 April 2019. To submit abstracts and access the abstract kit, please click here. If you have questions, please contact ns@seg.org.

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<td>Near-Surface Geophysics for Archaeological and Forensic Applications</td>
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<td>Near-Surface Geophysics for Impacts from O&amp;G E&amp;P</td>
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<td>Near-Surface Geophysical Methods Applied to Mining Geophysics and Environmental Issues</td>
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<td>Borehole Geophysics</td>
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<td>Near-Surface Geophysics Applied to Dam and Levee Siting, Monitoring, Rehabilitation</td>
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<td>Full Waveform Inversion</td>
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Near-Surface Geophysics in the Dynamic Coastal Environment: Crossing the Land/Sea Interface

Multiple Method Modeling Applied to Solve Near-Surface Geophysics Problems

Smart Cities: Near-Surface Geophysics Challenges for Urban Geophysical Exploration

Texas Water Resource Challenges

Near-Surface Geophysics in Challenging Environments

II. International Workshop on Gravity, Electrical & Magnetic Methods and Their Applications

The International Workshop on Gravity, Electrical & Magnetic Methods and Their Applications (GEM 2019) will take place in Xi’an, China, from 19 to 22 May 2019. GEM 2019 is targeted to be an international forum for geophysicists to communicate the latest developments and exchange ideas in potential fields and electromagnetics. Specifically, the goal of GEM 2019 Xi’an is to bring together geophysics researchers and practitioners from academia, government agencies, resource companies, and contractors to share the latest technological and methodological advancements and their successful applications to practical problem-solving, and to inspire discussions among the participants about the best practices for turning electromagnetic, gravity, and magnetics data into value-added information. For more information, visit GEM 2019 Xi’an.

III. 5th International Conference on Engineering Geophysics (ICEG)

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 in the Conference Auditorium of the Crescent Building on the grounds of UAEU.

The objectives of ICEG 2019 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. To submit your abstract, visit https://iceg2019.abstractcentral.com. The submission program is now open. There is a 10-megabyte file size limit per uploaded abstract. Abstract submissions must be complete before 5:00 p.m. U.S. central daylight time on 22 April 2019. For more information, visit ICEG 2019.
IV. AOGS 16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS)

The Asia Oceania Geosciences Society (AOGS) was established to promote geosciences and its application for the benefit of humanity, specifically in Asia and Oceania and with an overarching approach to global issues.

The Asia Oceania region is particularly vulnerable to natural hazards, accounting for almost 80% of human lives lost globally. AOGS is deeply involved in addressing hazards-related issues through improving our understanding of the genesis of hazards through scientific, social, and technical approaches.

AOGS holds annual conventions providing a unique opportunity of exchanging scientific knowledge and discussion to address important geoscientific issues among academia, research institutions, and the public.

Recognizing the need for global collaboration, AOGS has developed good cooperation with other international geoscience societies and unions such as the European Geosciences Union (EGU), American Geophysical Union (AGU), International Union of Geodesy and Geophysics (IUGG), Japan Geoscience Union (JpGU), and Science Council of Asia (SCA).

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To contribute material to the NSG newsletter, send an email to Kisa Mwakanyamale.

Deadline: Material must be received 5 full business days before the first of the month.

Guidelines for submissions: All members are welcome to submit content of interest to the near-surface community. Please keep messages brief, and provide contact information and (if available) a web address for additional information.

Get your message out to NSG members faster.

You no longer need to wait until the end of the month to share an important or time-sensitive contribution via the newsletter. Appropriate contributions to the newsletter will also be shared ASAP via Twitter. Please note that only NSG members who follow @NS_AGU will receive Twitter announcements, so make sure that you sign up!