



Near-Surface Geophysics

Newsletter: April 2019

Dear Colleagues:

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

In this month's newsletter:

1. Upcoming Meetings

2. AGU Updates

- Session Proposals for AGU Fall Meeting 2019, San Francisco: Deadline, 17 April 2019
- AGU Honors Program: Nominations Deadline, 15 April 2019
- AGU–SEG Airborne Geophysics Workshop
- March 2019 AGU Council Meeting Wrap-Up: Xavier Comas, AGU NSG Section President
- GSSI Student Grant: Deadline, 1 May 2019

3. Near-Surface Geophysics Updates

- Section Incentive Program
- A Label by Any Other Name: An Interview with Drs. Andrew Binley and Lee Slater
- Student Spotlight: Yonesha (Yannie) Donaldson

4. Near-Surface Geophysics Position Announcement

- Three Ph.D. Positions: Bayesian Geophysical Inversion and Model Selection

5. FYIs

- GEM 2019
- ICEG 2019
- AOGS
- 2019 IUGG Womxn's Networking Event

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](#)!

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

Best regards,

Xavier Comas

President, Near-Surface Geophysics Section, AGU

1. UPCOMING MEETINGS

MEETING	LOCATION	DATES	SUBMISSION	REGISTRATION
<u>GEM</u>	Xi'an, China	19–22 May 2019	Closed	Deadline: 22 May 2019
<u>EAGE</u>	London, U.K.	3–6 June 2019	Closed	Deadline: 15 May 2019
<u>AGU–SEG</u>	Davie, Fla.	9–10 June 2019	Closed	Deadline: 8 May 2019
<u>AOGS</u>	Suntec City, Singapore	28 July to 2 August 2019	Closed	Early registration deadline: 21 May 2019
<u>SEG</u>	San Antonio, Texas	15–20 September 2019	Closed	Early registration deadline: 30 July 2019
<u>ICEG</u>	Al Ain, United Arab Emirates	21–24 October 2019	Deadline, 22 April 2019	Early registration deadline: 30 July 2019

2. AGU UPDATES

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

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 the 2019 Centennial celebration meeting in San Francisco will feature the biggest and best NS turnout ever. 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.

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

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. The Union Fellows nomination is closed, and the deadline for all other nominations is 15 April 2019. We urge you to take this opportunity to nominate a student, a colleague, a peer, or mentor whose achievements have made a difference in the Earth and space sciences. Visit the [AGU Honors Program home page](#) for more information.

- **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

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

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 are now [open](#). Registration deadline is 8 May 2019.

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

- **March 2019 AGU Council Meeting Wrap-Up**

By Xavier Comas, AGU Near-Surface Geophysics section president and associate professor, Department of Geosciences, Florida Atlantic University

From Wednesday, 6 March, to Friday, 8 March—International Women’s Day—the AGU Council met at AGU’s Washington, D.C., renovated headquarters. The meeting brought together all 25 sections, early-career and student representatives, committee chairs, and AGU leadership to celebrate the appointment of several new members. These included AGU president-elect Susan Lozier, who will follow current AGU president Robin Bell, continuing the succession of strong women in leadership positions at AGU. Our section president, Dr. Xavier Comas, gave the wrap-up talk at the meeting. More details are found here: <https://fromtheprow.agu.org/march-2019-council-meeting-wrap-up/>.

- **The GSSI Student Grant (Deadline: 1 May 2019)**

This grant was established through the generosity of Geophysical Survey Systems, Inc. (GSSI) to support the Near-Surface geophysics section’s student scientists conducting geophysical field research using ground-penetrating radar (GPR) and electromagnetic (EM) methods.

It is important for the advancement of the Near-Surface Geophysics section to support student members with opportunities that allow them to advance their research and fieldwork by receiving recognition and financial support. More details on eligibility, award amount, and application instructions are found here: <https://honors.agu.org/research-grants-and-awards/the-gssi-student-grant/>. Application deadline is 1 May 2019.

3. NEAR-SURFACE GEOPHYSICS UPDATES

- **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/>.

AGU will be extending the program in 2019, and the Near-Surface section is 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

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

for this incentive. Please help our section! And remember that your contribution can go toward our section or toward any AGU fund.

- **A Label by Any Other Name: An Interview with Drs. Andrew Binley and Lee Slater**

A conversation between student and professor, this discussion reveals the subtle dynamics between good friends, even when they outwardly seem to be very similar. This interview is part of the #AGU100 NS Centennial contribution. Audio available here:

<https://archive.storycorps.org/interviews/a-label-by-any-other-name-an-interview-with-andrew-binley-and-lee-slater/>.

- **NSG Student Spotlight**

[Yonesha \(Yannie\) Donaldson](#) is a first-year master's student in the geology program at the University of Georgia in Athens (UGA), where she works under Dr. Adam Milewski. Her current research is focused on integrating remote sensing and geophysical techniques (i.e., electrical resistivity tomography and airborne Bouguer anomaly) to validate the presence of inland freshwater lenses in arid regions. Before attending UGA, Yannie attended Rutgers University–Newark, where she graduated with a B.S. in geosciences in May 2018.

Before deciding to pursue a geosciences degree, Yannie was a biology/premed major. In her Caribbean household, Yannie says that her career choices were limited to either doctor, lawyer, or engineer, because those jobs traditionally represent success. However, after 2 years on this path, Yannie felt that it did not quite align with her passions or what she wanted to pursue as a “forever career.” Dr. Alexander Gates (Rutgers–Newark) first introduced Yannie to possible careers in the geosciences, of which she found hydrogeology to be especially appealing. Yannie was not introduced to geophysics until her junior year, but she took to it immediately and began to incorporate geophysical methods in her undergraduate research with Dr. Lee Slater. During 2 years of her undergraduate, Yannie worked as a research assistant collecting, analyzing, and presenting near-surface geophysical data on a multitude of projects ranging from determining depth to bedrock to monitoring chlorinated solvents and oil spills at Superfund sites. Yannie attributes a lot of her success and motivation to the unwavering support and expert guidance of her research family at Rutgers.



Near-Surface Geophysics (NSG) Section April 2019 Newsletter

As a researcher, Yannie has been awarded numerous scholarships, including the National Science Foundation's Bridge to the Doctorate Fellowship, the New Jersey Licensed Site Remediation Professionals Association Scholarship, and the Angelo Tagliacozzo Memorial Geological Scholarship from the American Institute of Professional Geologists. Yannie has also received numerous accolades, including Best Presentation from the Association of Environmental & Engineering Geologists (AEG) and Best Presentation from the Garden State-Louis Stokes Alliance for Minority Participation.

Outside of research, Yannie is an active member in the geophysical community. As an undergraduate, she helped to establish the first AEG student chapter in New Jersey and served as its vice president. Recently, Yannie has taken on another volunteer role as one of the 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 her research or to forward material for NSG's social media sites, please contact [Yannie Donaldson](#).

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](#).

4. NEAR-SURFACE GEOPHYSICS POSITION ANNOUNCEMENT

- **Three Ph.D. Positions in Bayesian Geophysical Inversion and Model Selection**

The Applied and Environmental Geophysics Group at the University of Lausanne has openings for three Ph.D. students working on

1. Geophysical inversion with complex geological priors using deep learning and multiple-point statistics
2. Accounting for petrophysical and upscaling errors in probabilistic and deterministic geophysical inversions
3. Geophysics-based falsification and corroboration with emphasis on frozen ground dynamics in an alpine catchment

The Ph.D. positions are funded for 4 years, and the starting date is 1 September 2019, or a slightly earlier or later date to be decided upon. Successful candidates ideally should hold M.Sc. degrees in geophysics, physics, statistics, mathematics, or quantitative Earth sciences. He or she should have a keen interest and preferably some experience in Bayesian statistics, scientific computing, geophysical forward modeling, and inversion. Field experience and knowledge

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

about hydrogeological, critical zone, or permafrost processes are beneficial for subproject C. We are a dynamic international research group working on a wide variety of topics in environmental and computational geophysics. More details about the project and its project partners are provided here: <https://wp.unil.ch/linde-hydrogeophysics/geofaces/>.

To apply, please send a cover letter clarifying your overall motivation for entering a Ph.D. program together with your curriculum vitae and the names, telephone numbers, and email addresses of two referees to Prof. Niklas Linde, Institute of Earth Sciences, Géopolis 3779, University of Lausanne, 1015 Lausanne, Switzerland, or by email to niklas.linde@unil.ch. The application deadline is 15 May 2019.

5. FYI

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

The International Workshop on Gravity, Electrical & Magnetic Methods and Their Applications (GEM 2019 Xi'an) will take place in Xi'an, China, from 19 to 22 May 2019. GEM 2019 Xi'an 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 of turning electromagnetic, gravity, and magnetics data into value-added information. For more information, visit [GEM 2019 Xi'an](#).

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

The United Arab Emirates University (UAEU) and the 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 of 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.

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

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](#).

III. 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 hazard-related issues through improving our understanding of the genesis of hazards through scientific, social, and technical approaches.

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

Recognizing the need of 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).

IV. 2019 IUGG Womxn's Networking Event

Join us at the 2019 IUGG in Montréal, Que., Canada for the first-ever IUGG Womxn's Networking Event!

Friday, 22 July, 7:00–9:00 p.m. @ Les 3 Brasseurs, 105 St-Paul Est, Montréal.

RSVP here: <https://forms.gle/EJB38Ws2F92LorWZ8>

The goal of this event is to foster relationships and solidarity among womxn members of IUGG (womxn is a term that includes cis and trans women).

Many of the womxn who attend the IUGG conference are the only womxn in their research group, so conferences and workshops are critical times for them to connect with other womxn in their field. This networking event aims to strengthen the community of womxn scientists in IUGG and provide a welcoming place for womxn to network with each other at the conference. Appetizers and ample time for meeting each other will be provided. The event will also include an acknowledgment of our sponsors and a discussion of next steps to support and build community among womxn geophysicists.

Near-Surface Geophysics (NSG) Section April 2019 Newsletter

The Earth Science Women's Network is cosponsoring this event. Other cosponsors for this event include ExxonMobil, Cooperative Institute for Research in Environmental Sciences (CIRES), GFZ Potsdam, Green Geophysics, and Lamont-Doherty Earth Observatory.

To contribute material to the NSG newsletter, send an email to [Kisa Mwakanyamale](#).

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!