Letter from the Chair

Dear Fellow SEG NSTS Members,

Spring is here and this year is already flying by. As I write this, we are fast approaching the abstract submission deadline for the SEG Annual Meeting this fall in Houston, Texas, September 24-29. Expanded abstracts are due April 1st, so there is still a little time left. There will be four Special Sessions this year that have a near-surface focus: Hydrogeophysics, Surface Waves, Engineering Geophysics, and Archaeology, in addition to the sessions formed from the general near-surface contributions. Thank you to all who have volunteered to review the submitted abstracts this spring. We receive more near-surface submissions each year and it would not be possible to read, review, and sort through them all without you.

The fourth installment of the International Conference on Engineering Geophysics will also be held this fall from October 9-12 at the United Arab Emirates University in Al Ain, UAE. I had the good fortune to attend the last one in 2015—it was a great experience, both for the technical program as well as the wonderful social activities planned each evening. I highly recommend attending if you have the chance. The abstract submission deadline is also April 1st for ICEG. This year the ICEG sponsors have also announced the Innovation Award for Geophysics, which is a competition seeking innovative contributions that substantially advance the application of geophysics to near-surface problems. The top three winners of the competition will received cash prizes of $10,000, $7,000, and $5,000. More details on the award and how to enter can be found on the SEG/ICEG website.

Not to get ahead of myself with the 2017 Annual Meeting in Houston still around the corner, but the 2018 Annual Meeting will be held in Anaheim, California. We are hoping to take advantage of the new venue and maximize near-surface exposure. Thanks to all who have volunteered to serve on the planning committee for Anaheim—we will be kicking off shortly and look forward to the collaboration and new ideas. If you are not on the committee, but would like to participate, please send an email to ns@seg.org. We welcome your thoughts and ideas to shape the NS events in 2018.

To wrap up, we have been accepting nominations to the NSTS executive committee for the Chair-Elect and Vice Chair positions, with elections coming up in early summer. Be sure to watch your inbox for the link and please take a few minutes to look at the candidates and vote for your choices!

Steve Sloan
Overview of This Issue of the NS Views

- **Featured Article: March for Science**
- **On the horizon: next Generation NSG**
  - Catarina Paz
  - Yudi Pan
  - Gordon Osterman
  - Chandra Prakash Dubey
- **Paper Call:**
  - SEG Annual Meeting Near-Surface Geophysics Extended Abstracts
  - 4th ICEG Extended Abstracts
  - The Leading Edge: Special section on unmanned autonomous vehicles
- **Join SEG Near Surface Geophysics Technical Section**
- **Calendar of Upcoming Events**
- **The Dog Ate my Homework - Three tips for improving your academic writing**
- **Job postings**
March for Science, April 22, 2017, in a city near you!

www.marchforscience.com

by Louise Pellerin

395 Satellite Marches
Maria Catarina C. da Paz graduated from the Faculty of Sciences, University of Lisbon (Portugal) in 2004 with a 5-year degree in Geophysical Sciences. While a graduate student, Catarina participated in research projects that included seismic zonation using ambient vibrations in Azores (Portugal); and investigating contacts of tectonic terrains in the Iberian Peninsula using magnetotellurics. The latter was a 9-month internship in the Department of Geodynamics and Geophysics, University of Barcelona (Spain).

From 2004 to 2011 Catarina worked as a freelance geophysicist in projects of near surface geophysics, mostly using electrical resistivity tomography. In 2009, Catarina completed her master’s degree in Environmental Engineering from Instituto Superior Técnico (IST), University of Lisbon, with a thesis about mathematical modeling of groundwater flow with applications in land use management.

Catarina continued in IST, working at the investigation unit Civil Engineering Research and Innovation for Sustainability (CERIS) where she is finishing her PhD in earth resources. The scope of Catarina’s PhD project is applications of near surface geophysical techniques in groundwater research, especially in groundwater-dependent ecosystem research. Catarina has been a member of SEG since 2007.

Recent Publications:


Yudi Pan has been a postdoctoral researcher in the Geophysical Institute at Karlsruhe Institute of Technology (KIT) since 2016. He is interested in utilizing surface waves to investigate physical properties of near-surface materials. Yudi achieved his B.S. and Ph.D. from China University of Geosciences (Wuhan) in 2012 and 2016, respectively. He has been a visiting scholar at Jülich Research Center in 2015. He joined SEG as a student member in 2013, and became an active member in 2017.

At KIT, he and his group are interested in 2D and 3D near-surface seismic imaging, joint inversion of seismic and ground penetrating radar data, seismic interferometry, and high-performance computing. They mainly use phase-velocity and full-waveform inversions of shallow seismic wavefields to reconstruct elastic properties of near-surface materials. Recently, they are working on multi-parameter high-resolution shallow seismic imaging method, aiming to describe the complex near-surface medium in a more precise way.

**Recent Publications:**
Gordon Osterman obtained his B.S. in Geophysics at the Colorado School of Mines in 2012, and his interest in hydrogeophysics as an undergraduate lead him to pursue a graduate degree at the Department of Earth and Environmental Sciences at Rutgers University-Newark. Now in the fifth year of his PhD, Gordon has studied methods of combining spectral induced polarization and nuclear magnetic resonance measurements to develop improved rock physics models characterizing the hydraulic properties of geological media. Although his research keeps him in the lab much of the time, he has sought out field projects outside his research, often through his involvement with the Rutgers-Newark Geophysical Society SEG student chapter. As chapter president, he helped coordinate the Rutgers Hydrogeophysics Workshop from 2013 through 2016 and most recently collaborated with researchers at the Shale Hills Critical Zone Observatory. The workshop allows students to experience a large-scale hydrogeophysical field campaign and has spawned on-going research projects. As chapter president, he also attended the SEG Student Leadership Symposium at the 2015 Annual Meeting and was awarded Best Student Oral Paper at the same meeting. After graduation later this year, Gordon will be joining the Hydrogeophysics Group at Aarhus University as a post-doctoral fellow. He hopes to stay in academia where he can pursue a career of research and teaching in hydrogeophysics.

Publications:

Dr.Chandra Prakash Dubey received his M.Sc. (Physics) degree from University of Lucknow, India in 2008 and M. Tech (Mineral Exploration) from University of Hyderabad, India in 2010. Soon after his M. Tech degree, he joined CSIR-NGRI (Council of Scientific and Industrial Research - National Geophysical Research Institute), Hyderabad, India and received his Ph.D. degree (Geophysics) in 2015. Presently, he is working as a regular scientist in one of the esteemed organizations National Centre for Earth Science Studies (NCESS), Ministry of Earth Science (MoES) located in Thiruvananthapuram, Kerala southernmost part of peninsular India. His research interests are in the field of joint geophysical inversion, global geodynamics problems like most striking unsolved phenomenon of Indian Ocean Geoid Low particularly using gravity, gravity gradiometry, geoid data combined with other high resolution data. During his Ph.D., he has worked extensively on enhanced visualization of three dimensional arrangements of complex geometries using interdisciplinary geophysical approach and to understand the mechanism of deeper subsurface structures associated with lithosphere and the cause of mantle deformation using density model. His present research mainly emphasize on developing a new hypotheses of mass distribution through mantle convection and its correlation with long wavelength anomalies to get better understanding in evolution of the deep earth.

Dr. Dubey has received DAAD Sandwich Fellowship in 2012 to work with Christian Albrecht’s University Kiel, Germany. He is also honoured with SEG Student Leadership Symposium Award 2014 and Student Education Program Award 2015 to represent his research and curricula in Denver, USA and Prague, Czech Republic respectively. He has been continuously serving SEG as a member from last seven years. Additionally, he is also an active member of SEG-EPIC and providing his services in several review committees of SEG. (For more details, kindly visit:  http://www.ncess.gov.in/institute/staff/scientists/crustal-processes-crp-group-dr-chandra-prakash-dubey-profile.html)

Recent Publications:
SEG Annual Meeting Extended Abstract Deadline is 1 April 2017

The SEG Near Surface Technical Section is currently recruiting papers for the following special technical sessions as well as all other near-surface technical sessions: Hydrogeophysics, Archaeological Research, and Engineering geophysics. If you would like to submit an abstract please review the abstract submission webpage HERE to find all the information you need. If you have questions or comments, please contact ns@seg.org.

Special Session Annual Meeting Codes, be sure to check out the special sessions!

<table>
<thead>
<tr>
<th>Code</th>
<th>Full Session Title</th>
<th>Lead Session Chairpersons</th>
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<tbody>
<tr>
<td>SS</td>
<td>Developments and applications of Surface-wave methods</td>
<td>Choon Park</td>
</tr>
<tr>
<td>SS</td>
<td>Engineering Geophysics (standing session)</td>
<td>Koya Suto</td>
</tr>
<tr>
<td>SS</td>
<td>AGU-SEG Hydrogeophysics (standing session)</td>
<td>John Lane</td>
</tr>
<tr>
<td>SS</td>
<td>WNC Near-surface Geophysical Methods for Archaeologic Research</td>
<td>Blair Schneider</td>
</tr>
</tbody>
</table>

Special Session Synopses:

**Developments and applications of Surface-wave methods**
This session will focus on developments and practical applications of surface waves using active and passive seismic sources for 1-D, 2-D, and 3-D shear-wave velocity (Vs) imaging. Possible topics include advances in dispersion-curve modeling and interpretation, field-parameter optimization, multi-mode inversion, and sensitivity analysis. Theoretical developments and applications of the MASW method in karstic environments and for assessment of cavities and voids are of special interest, as are examples of joint inversion of surface-waves with other geophysical data.

**Engineering Geophysics:**
This special session will highlight the application of near-surface geophysics to engineering and geologic problems associated with civil engineering and geotechnical investigations.

**AGU-SEG Hydrogeophysics**
This session will include papers that record new methods for analysis and interpretation of hydrogeophysical data; development of cutting-edge instruments, and presentation of novel case studies.

**WNC Near-surface Geophysical Methods for Archaeological Research**
This session is designed to bring papers on various methods as well as case studies on geophysical delineation and exploration of archaeological sites and culturally significant finds. Both land and marine geophysical methods will be highlighted.

**Near Surface General Sessions**
The general near-surface geophysics sessions are based on abstract method/applications received. In the past we have had sessions on statics, seismic imaging, processing and inversion, gravity and magnetics, electrical methods, and many others. So, please submit an abstract and join us in Houston for another great conference.
Paper Call: 3D forward Modeling and inversion of electromagnetics and applications - GEOPHYSICS

Three-dimensional (3D) electromagnetic (EM) techniques are important and powerful tools for natural resources exploration (oil, minerals, geothermal, etc.) and geotechnical and environmental investigations as 3D imaging can provide detailed information on the subsurface. This special section is dedicated to 3D EM methods and their applications. It aims to present current state-of-the-art developments in theoretical and practical applications, and to stimulate interests across a wide range of geophysicists.

We invite researchers to contribute original research articles, as well as review articles, exploring as many aspects as possible of new developments in 3D EM theory (forward modeling and inversion), data processing, and interpretation. This special section will promote extensive and innovative applications of 3D EM techniques and spark new ideas to address unsolved challenges in geophysical problems.

The special section invites manuscripts on:
- forward modeling of 3D EM
- inverse problems of 3D EM
- data processing of 3D EM
- case histories of 3D EM

Manuscripts must be uploaded using the Geophysics online submission system (https://mc.manuscriptcentral.com/geophysics) and will undergo the standard SEG GEOPHYSICS review process, which includes a peer review by three reviewers. When uploading manuscripts, please select **3D forward modeling and inversion of electromagnetics and applications** as the manuscript type.

We will work according to the following timeline:

- Submission deadline: 1 June 2017
- Peer review complete: 15 October 2017
- Publication of issue: January-February 2018

**Special-section editors:** Xiangyun Hu, Qinghua Huang, Colin Farquharson, Evert Slob, and Klaus Spitzer
The Leading Edge: Special section on unmanned autonomous vehicles

*The Leading Edge (TLE)* announces the Call for Papers for a special section on UAVs scheduled for publication in July 2017. The special section will showcase applications of UAVs that contribute to geophysical, geological, geotechnical and infrastructure surveys and assessments. Contributions utilizing airborne, marine and surface platforms using conventional and novel sensors as well as innovative data analysis and multi-sensor data integration approaches are encouraged.

The paper submission deadline is March 31, 2017.

Guest Editor: Johannes Stoll (jstoll.atumre@gmail.com)

Coordinating Editors: John Lane (jwlane@usgs.gov) and Tracy Stark (tstark3@verizon.net)

Submission guidelines: [http://seg.org/Portals/0/SEG/Publications/TLE/TLE%20Author%20Instructions.pdf](http://seg.org/Portals/0/SEG/Publications/TLE/TLE%20Author%20Instructions.pdf)
Submit here: [https://mc.manuscriptcentral.com/tle](https://mc.manuscriptcentral.com/tle)
We invite you to join the
SEG NEAR SURFACE TECHNICAL SECTION

Striving to advance and promote the rigorous science, technology, and professional practice of applied near-surface geophysics.

From lost archaeological treasures, exploration for potable water and water resource management solutions, geotechnical and engineering exploration of the subsurface to ensure infrastructural integrity, to delineation of dangerous geological faults with the capacity to produce devastating earthquakes, near-surface applications are increasing in number and societal value. Sharing and communicating theoretical advances, technology developments, and best practices are essential to the advancement and effective application of geophysics.

Every year the Near Surface Technical Section conducts multiple business and technical meetings, and hosts a full suite of technical sessions at the SEG Annual Meeting. Many Near Surface Technical Section members take the lead in organizing oral, poster, and special sessions at the SEG Annual Meeting, and special articles and issues for The Leading Edge (TLE), Interpretation and Geophysics. The Near Surface Technical Section newsletter, Near Surface Views, is published quarterly to keep members updated on the latest near-surface developments.

For more information on joining the SEG Near Surface Technical Section, contact Laurie Whitesell at lwhitesell@seg.org.
SEG Near Surface Technical Section is currently seeking volunteers to serve on several subcommittees:

SEG Near Surface Technical Section, Anaheim 2018 Planning Subcommittee
This committee will kick off at the beginning of April 2017, and will work together develop an enlarged the near-surface geophysics technical program, series of pre- and post-conference workshops/short course, develop panels that will bring industry, academia, and regulatory agencies together to address pertinent issues associated with water resource management, infrastructure challenges, and geohazards. Additionally, this subcommittee will be developing equipment demonstrations. If you are interested in volunteering, please contact ns@seg.org with the subject line: SEG NSTS Anaheim 2018.

SEG Near Surface Technical Section, Core Competency Subcommittee
SEG Near Surface Technical Section is currently seeking volunteers who are willing to help develop core competencies to be used in the SEG members only competency management system, which is designed primarily with recent graduates and young professionals in mind. The system will assist SEG members test their knowledge against the core competencies to identify any data gaps and to identify learning tools the member can use to address those gaps. All data is confidential and only the member will have access. If you are a subject matter expert in any number of near-surface geophysical methods and are interested in volunteering, please contact ns@seg.org with the subject line: SEG NSTS Core Competencies.
<table>
<thead>
<tr>
<th>Events</th>
<th>Location</th>
<th>Dates</th>
<th>Submissions</th>
<th>Registration</th>
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<tbody>
<tr>
<td>SAGEEP 30th Anniversary</td>
<td>Denver, USA</td>
<td>19-23 March 2017</td>
<td>Closed</td>
<td>Deadline: 15 March</td>
</tr>
<tr>
<td>6th International symposium on three-Dimensional electromagnetics</td>
<td>Berkeley, USA</td>
<td>28-30 March 2017</td>
<td>Closed</td>
<td>TBD</td>
</tr>
<tr>
<td>European Geosciences Union General Assembly 2017</td>
<td>Vienna, Austria</td>
<td>23-28 April 2017</td>
<td>Closed</td>
<td>Early registration ends 16 March 2017</td>
</tr>
<tr>
<td>Progress in Electromagnetics Research Symposium</td>
<td>St Petersburg, Russia</td>
<td>22-25 May 2017</td>
<td>Closed</td>
<td></td>
</tr>
<tr>
<td>AGES Congress: Geosciences applied to solve humanitarian problems all over the world</td>
<td>Belgrade, Serbia</td>
<td>24-26 May 2017</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>NovCare 2017</td>
<td>Dresden, Germany</td>
<td>6-9 June, 2017</td>
<td>Closed</td>
<td>1 April 2017</td>
</tr>
<tr>
<td>International Workshop on Advanced Ground Penetrating</td>
<td>Edinburgh, Scotland</td>
<td>28-30 June 2017</td>
<td>16 Dec 2016</td>
<td>23 Feb 2017</td>
</tr>
<tr>
<td>AGU-SEG Hydrogeophysics Workshop</td>
<td>Standford, USA</td>
<td>24-27 July 2017</td>
<td>Closed</td>
<td>Opens 25 April</td>
</tr>
<tr>
<td>EAGE Near Surface Conference</td>
<td>Malmo, Sweden</td>
<td>3-7 Sept. 2017</td>
<td>Close 15 April</td>
<td>Opens 1 April</td>
</tr>
<tr>
<td>SEG Annual Meeting</td>
<td>Houston, USA</td>
<td>24-29 Sept. 2017</td>
<td>Close 1 April</td>
<td>Opens 10 May</td>
</tr>
<tr>
<td>International Conference on Engineering Geophysics</td>
<td>Al Ain, United Arab Emirates</td>
<td>9-12 Oct 2017</td>
<td>Close 1 April</td>
<td>TBD</td>
</tr>
</tbody>
</table>
1. “How to plan and conduct qualitative and quantitative research, and write a successful PhD”
Source: http://buff.ly/2mmj1PY -- let me know if that link doesn't work, it's from James P. Sampson, a faculty at Florida State University in the Dept. of Educational Psychology and Learning Systems.

2. “Words to avoid in your technical writing”
Source: http://buff.ly/2LWDfK -- from the "Writing a journal article" Wordpress.

3. “Want to become a productive writer? Try timed writing”
Source: http://buff.ly/2lokwrJ -- Dr. Rebecca Cantor, Writing Center Director at Azusa Pacific University

- Use a timer. (There's an app for that.)
- Write for 30 to 45 minutes at a time.
- Then take a break or come back tomorrow.
- You know more than you think you know; so, start writing!

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### Writing Fast Enough to Get Ahead of Your Fear

<table>
<thead>
<tr>
<th>AVOID</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like xyz</td>
<td>such as xyz</td>
</tr>
<tr>
<td>(e.g. xyz)</td>
<td>(e.g. xyz)</td>
</tr>
<tr>
<td>Etc.</td>
<td>spell out and end the list with 'and' or 'or'</td>
</tr>
<tr>
<td>A number of</td>
<td>Several or many; ideally list the actual number if possible</td>
</tr>
<tr>
<td>But (at beginning of sentence)</td>
<td>However, ...</td>
</tr>
<tr>
<td>... while ...</td>
<td>... whereas ... (use 'while' only in a temporal context)</td>
</tr>
<tr>
<td>... as ...</td>
<td>... because ... (use 'as' only in a temporal context)</td>
</tr>
<tr>
<td>In contrast, ...</td>
<td>By contrast, ... (though 'in contrast' is not technically wrong)</td>
</tr>
<tr>
<td></td>
<td>For example, ... For instance, ...</td>
</tr>
<tr>
<td></td>
<td>Furthermore, ...</td>
</tr>
<tr>
<td></td>
<td>In addition, ...</td>
</tr>
<tr>
<td></td>
<td>Notably, ...</td>
</tr>
<tr>
<td></td>
<td>Surprisingly, ...</td>
</tr>
<tr>
<td>About, roughly</td>
<td>Approximately</td>
</tr>
</tbody>
</table>
EEGS is excited to announce that SAGEEP will be co-located with the National Ground Water Association (NGWA) spring meeting March 20 & 21. This opportunity will bring together a diverse audience from a wide range of backgrounds, including both EEGS and NGWA membership. All technical sessions will be open to both groups. In addition to the SAGEEP technical program, the NGWA conference will feature talks and posters with a focus on two topic tracks: Applications of Hydrogeophysics to Groundwater Characterization, Monitoring, and Management & Deep Groundwater Applications.

SAGEEP is internationally recognized as the leading conference on the practical application of shallow geophysics. First held in 1988 at the Colorado School of Mines, the 30th Anniversary SAGEEP will return to Colorado to celebrate this important milestone and is being held in Denver, Colorado USA March 19-23, 2017. We invite you to visit the SAGEEP 2017 pages for details on abstract submissions, hotel reservations and conference registration as more information becomes available.

For the past 30 years, SAGEEP has been held over a 5-day period at locations throughout the United States, with approximately 150 oral and poster presentations, several educational short courses and workshops, numerous vendor presentations, and a commercial exhibition. A set of proceedings, composed of technical presentations, is distributed on CD or USB memory drive (ISSN 1554-8015) and accessible online via the EEGS Research Collection.

More information can be found: http://www.eegs.org/sageep-2017
In this workshop, we will bring together hydrogeophysicists and other critical zone scientists to explore new ways to work together, using recent advances in hydrogeophysics to address key scientific questions about the critical zone. We propose to develop a framework for advancing both hydrogeophysics and CZ science through communicating and coordinating research agendas. New insights into CZ processes will be gained through the enhanced use of hydrogeophysics, and the detailed interdisciplinary observations made in CZ studies will provide opportunities for advancing hydrogeophysical methods.

We invite abstracts for the four following sessions:

1) Interfaces in the Critical Zone,
2) Hydro-bio-geo-chemical processes in the Critical Zone,
3) Critical Zone properties & rock physics,
4) Scaling of Critical Zone data to address science questions.

Each session will begin with two invited talks - one hydrogeophysicist and one Critical Zone scientist. All other presentations will be as posters. Before the viewing of posters, there will be an oral session where each presenter has 3 minutes to introduce their poster. In order to encourage the exchange of ideas and development of new collaborations, we will have all lunches and one dinner together. See full descriptions of sessions [here](#).

Notification of abstract acceptance and final program will be published on 22 March 2017. The preliminary program can be found [here](#).

Organizing Committee:
Rosemary Knight and Kristina Keating (co-chairs), Anja Klotzsche, Kate Maher, Daniella Rempe, and Kamini Singha
CALL FOR CONTRIBUTIONS

SUBMISSION DEADLINE: 1 MAY 2017 AT 5:00 PM (CENTRAL TIME)

TO SUBMIT YOUR ABSTRACT:
WWW.SEG.ORG/EVENTS/ICEG2017

Innovation Award for Geophysics
Top three winners will win US $10,000, US $7,000 and US $5,000.

Contact: Award-Geophysics@uaeu.ac.ae
**Consultant - UXO Graduate**

RPS Group, Dorchester, South West England, England

RPS Energy Explosives Engineering Services (EES) are a fast growing team that work globally to give advice and consultancy to clients on UXO / ERW risk on sites, whether it be in the construction industry or Oil and Gas etc. We are looking for a graduate with a geophysical background to join our Dorchester team.

You will have an educational background in geophysics and a willingness to learn new methods. Through the use of magnetomery you will learn how to detect Unexploded Ordnance (UXO) for both land and marine environments. For the full job description and more information on this role please apply or contact the energy recruitment team.

**APPLY HERE**

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**Senior Geophysicist, Center for Groundwater Evaluation and Management (GEM Center)**

Stanford University - 74186

APPLY HERE

**One year, fixed-term position**

The GEM Center was founded in 2008 to focus on advancing the use of geophysical methods for groundwater evaluation and management. The Center includes faculty, graduate students and post-doctoral fellows, engaged in fundamental research involving geophysical imaging, with a commitment to facilitate the rapid transfer of research results into practice. Our approach involves working in partnership with groundwater managers and districts where we explore novel ways to employ state-of-the-research approaches for groundwater applications.

We seek to hire an individual who has the background to act as the lead scientist in all GEM Center projects involving the acquisition of electromagnetic and nuclear magnetic resonance (NMR) data, using laboratory, borehole, ground-based and airborne systems. This will involve managing collaborative research projects and taking primary responsibility for the analysis and interpretation of the acquired geophysical data.

Some of the duties and responsibilities of this position might include ongoing communication with research partners; handling logistics of field projects; review of existing data and modeling as needed to develop survey design and data acquisition schedules; acquisition of field data, engaging and training personnel as needed; processing of data using in-house and/or commercial software; development of new processing streams as required; interpretation of results including integration with other forms of data; writing and presenting proposals for new projects and final reports.

Other duties may also be assigned.

**MINIMUM REQUIREMENTS:**

*Education & Experience:*
Bachelor's degree and four years of experience in related scientific field, or combination of education and relevant experience.

*Knowledge, Skills and Abilities:*

- Extensive experience applying multidisciplinary scientific principles and practices to perform experimental design and coordinate laboratory activity.
- In-depth understanding and experience with analysis and interpretation of research data, and ability to recognize and resolve irregularities and invalid results.
- Demonstrated experience with and ability to organize data and develop models allowing for integration and display of data.
- Extensive experience with scientific software applications, systems, or programs relevant for the job.
Job postings

- Ability to provide technical leadership and coordinate major installation, materials, tooling, supplies, and scheduling of work crews; ability to work with scientific or research staff in developing/supporting technical procedures.
- Ability to communicate effectively, both verbally and in writing and to contribute to development of research plan.

STRONGLY PREFERRED EDUCATION AND EXPERIENCE

Advanced degree in Geophysics or a closely related field, and expertise in the modeling and inversion of electromagnetic and NMR data (acquired using laboratory, borehole, ground-based and airborne systems) for groundwater applications. Experience should include the acquisition and analysis of electromagnetic and NMR data, management of geophysics field projects, and a solid understanding of groundwater hydrology. Given the nature of the position applicants will also be expected to have excellent communication skills.

PHYSICAL REQUIREMENTS*:

- Frequently stand, walk, twist, bend, stoop, squat, grasp lightly, use fine manipulation, grasp forcefully, perform desk-based computer tasks, use telephone, write by hand, lift, carry, push and pull objects weighing over 40 pounds.
- Occasionally sit, kneel, crawl, reach and work above shoulders, sort and file paperwork or parts.
- Rarely climb, scrub, sweep, mop, chop and mix or operate hand and foot controls.
- Must have correctible vision to perform duties of the job.
- Ability to bend, squat, kneel, stand, reach above shoulder level, and move on hard surfaces for up to eight hours.
- Ability to lift heavy objects weighing up to 50 pounds.
- Ability to work in a dusty, dirty, and odorous environment.

* - Consistent with its obligations under the law, the University will provide reasonable accommodation to any employee with a disability who requires accommodation to perform the essential functions of his or her job.

This is a one-year position, with an intention to renew, subject to the availability of funding.

ADDITIONAL INFORMATION

Cover letter and resume are required for consideration.

Full-time
Grade: H
Job Code: 4972

Tetra Tech Job Opportunities
Associate Geophysicists - Bothell, WA - 19400000244

Tetra Tech Inc. is a leading provider of consulting, engineering, and technical services worldwide. Our reputation rests on the technical expertise and dedication of our employees—16,000 people working together across disciplines and time zones to provide smart, sustainable solutions for challenging projects. We are proud to be home to leading technical experts in water, environment, infrastructure, resource management, energy, and international development. Tetra Tech combines the resources of a global, multibillion dollar company with local, client-focused delivery in 400 locations around the world. We offer competitive compensation and benefits and are searching for innovative people to join our teams.

Tetra Tech, Inc. is currently seeking a part-time / seasonal Associate Geophysicists for the Bothell, WA location to support our growing marine geophysical business. Our geophysics group specializes in state-of-the-art marine magnetic and electromagnetic surveying for near-surface targets such as unexploded ordnance (UXO) and infrastructure (pipelines), as well as hydrographic survey and detailed assessments of dams or other subsurface features of interest. Position may transition to full-time, workload dependent.
ESSENTIAL DUTIES AND RESPONSIBILITIES:
Perform and assist with geophysical survey planning, as well as geophysical data collection and analysis. Work closely with other geoscientists and hydrographers to complete projects. Typical projects use MBE, SSS, Magnetometer, TDEMI, GPR, seismic methods (subbottom profiling, seismic reflection and refraction), and laser scanner to characterize underwater and subsurface environs for engineering and environmental applications.

EDUCATION, EXPERIENCE AND QUALIFICATION:
A Bachelor's or Master's degree in Geophysics, Geology, Engineering Geology or related field is required. The ideal candidate will have 0-3 years' experience, with knowledge in near surface marine and terrestrial geophysics. Demonstrated competence in Microsoft Office and experience with geophysical/technical software packages including Geosoft Oasis Montaj, HyPack, CARIS HIPS/SIPS, Matlab, ArcGIS, and related utilities/scripts is preferred. Must have strong analytical and communication skills and be able to work both independently and on a team. Experience working on and operating small boats and/or ATVs is preferred. Willingness to travel for domestic and foreign work assignments is required. Willingness and ability to work offshore for weeks at a time is required. Some physical requirements apply (lifting 50 lbs.).

If you are interested in joining our dynamic team, for immediate consideration please submit your resume to Tetra Tech, Inc., at www.tetratech.com. Please mention the position you are applying for in your cover letter and include salary requirements. A Pre-employment drug screen is required.

If you are disabled and need assistance with your job application process, please fax the position you are applying for to: (973) 630-8111. Tetra Tech is an EOE AA/M/F/Vets/Disability employer. Tetra Tech is a VEVRAA federal contractor and we request priority referral of veterans for available positions.

Job: Geophysicist
Primary Location: United States-WA-US-Bothell
Organization: 194 CES
Schedule: Part-time
Job Posting: Feb 15, 2017, 8:29:54 AM
Job Closing Date: Ongoing

AECOM: Geophysicist
Apply HERE

Nottingham, United Kingdom

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We provide professional services in areas such as aviation, transit, freight rail, highways and bridges, planning, and ports and marine. Our global network of top-tier specialists delivers comprehensive services over the full life cycle of a project to benefit clients in government and private industries.

An expanding geophysics team comprising 25 full time staff, are seeking candidates who are able to support an ambitious growth strategy.

The role will require the delivery of civil engineering projects throughout the project life cycle, including consultation with clients to develop a well-defined scope and integration of deliverables within a civil engineering context tailored for the end user. In additional to technical delivery, the successful candidate will be expected to support our business development...
Job postings

initiatives with a strong focus on continuous improvement, innovation and collaboration with other engineering disciplines to expand current and new service offerings in existing and new markets

Duties will include, but not be limited to:

- Acting as the Technical Lead/Task Lead on projects ranging in complexity, both to the project team and to clients. This will include managing and leading site investigations (UK and abroad), analysis and interpretation of data in accordance with the scope and technical standards and/or statutory requirements
- Production of well written, technically sound reports and other technical deliverables
- Performing independent Technical Reviews and authorising issue of deliverables
- Developing, negotiating, approving and proactively monitoring scopes, budgets and schedules throughout the project life cycle
- Supervision and mentoring of junior staff
- Active involvement with clients, marketing and business development

A minimum of 5 years geophysics experience within a civil engineering consultancy
Specialist knowledge and experience in shallow geophysical techniques, including GPR, electrical resistivity imaging, seismic refraction and MASW, microgravity, electromagnetic conductivity and magnetometry
Full technical capability for developing, organising, executing and co-ordinating projects and protect team members
Application of geophysical techniques in an engineering context
Line management experience
Desirable: specialist knowledge in quantifying geotechnical parameters from geophysical data for engineering value
Desirable: programming skills

Relevant Degree/MSc in geophysics or other geophysics related discipline and a minimum of 5 years experience within a civil engineering consultancy.

Proactively working towards professional registration or certificate

AECOM is a place where you can put your innovative thinking and business skills into high gear and work alongside other highly intelligent and motivated people. It’s a place where you can apply your skills to some of the world’s most challenging, interesting, and meaningful projects worldwide. It’s a place that values the diversity of our areas of practice and our people. It’s what makes AECOM a great place to work and grow. AECOM is an Equal Opportunity Employer.
To contribute material to the NS views send an Email to

Anja Klotzsche (a.klotzsche@fz-juelich.de)

All members are welcome to submit content of interest to the Near Surface community. Note, that we also have a new section “What’s hot” where new methods, new developments, new technology, new equipment, or new NS event can be presented. Feel free to send articles to this new section. Please keep messages brief, provide contact information, and (if available) a web address for additional information.