



**NEAR-SURFACE GEOPHYSICS FOCUS GROUP  
NEWSLETTER: APRIL 2014**

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Recent announcements of interest to the NS community (conferences, academic positions, graduate student opportunities etc.) can be found at the AGU NS Focus Group Web

Page: <http://sites.agu.org/nsg/>

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**1. 2014 AGU Fall Meeting Session Proposals (from Xavier Comas)**

The deadline for session proposals for the 2014 AGU Fall Meeting is quickly approaching (9 April 2014). Submission of session proposals will be officially opening soon at:

<http://fallmeeting.agu.org/2014/scientific-program/session-proposal-guideline/>

The Near Surface Geophysics Focus Group is planning on several sessions and is looking for students interested in getting involved with helping convening some of these sessions. Any students interested please email Xavier Comas ([xcomas@fau.edu](mailto:xcomas@fau.edu)).

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**2. Early Career – *The Postdoc Experience: Taking a Long Term View* (from Nedra Bonal)**

Check out the short article titled "*The Postdoc Experience: Taking a Long Term View*"

([http://sciencecareers.sciencemag.org/career\\_magazine/previous\\_issues/articles/2010\\_08\\_27/science.opms.r1000093](http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2010_08_27/science.opms.r1000093)). The article contains information that is relevant to all Early Career scientists including: mentoring, funding, networking, and having a back-up plan.

Please contact Nedra Bonal at [nbonal@sandia.gov](mailto:nbonal@sandia.gov) for comments or questions about Early Career topics.

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**3. INTERPRETATION Special Issue: Geophysical Imaging and Interpretation of Outcrops**  
(from Remke van Dam)

See next page for more information!

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#### 4. Editor in Chief Needed for Geophysical Research Letters

AGU is looking for a dynamic, well-organized scientist with high editorial standards and strong leadership skills to serve a 4-year term as the editor in chief for this journal.

The Editor-in-Chief is the principal architect of the scientific content of the journal. The EIC is an active scientist, well-known and well-regarded in his/her discipline. The EIC must be active in soliciting the best science from the best scientists to be published in the journal. Working with the other editors and AGU staff, the EIC is the arbiter of the content of the journal. Among other functions, the EIC is responsible for:

- **Act as an ambassador to the author/editor/reviewer/scientist community.**
- **Set the strategy for the journal.**
- **Lead the editor selection process.**
- **Assign and balance review work load.**
- **Decisions of ethics.**
- **Review and contribute to periodic monitoring reports.**
- **Conduct and attend meetings.**

**Journal Scope:** *Geophysical Research Letters* publishes short, concise research letters that present scientific advances that are likely to have immediate influence on the research of other investigators. GRL letters can focus on a specific discipline or apply broadly to the geophysical science community.

GRL is a Letters journal; limiting manuscript size expedites the review and publication process. GRL also publishes a limited number of frontier articles, by invitation from Editors. GRL's mission is to disseminate concisely written, high-impact research reports on major scientific advances in AGU disciplines. With this goal, the Editorial Board evaluates manuscripts submitted to GRL according to the following criteria:

- High impact innovative results with broad geophysical implications at the forefront of one or several AGU disciplines.
- Results with immediate impact on the research of others and requiring rapid publication.
- Instrument or methods manuscript introducing an innovative technique that makes new science advance possible, with immediate applications to AGU disciplines.

GRL has been in publication since 1974. The Editors are adapting GRL to the evolving needs of the Earth science community. GRL Editors are topical: the subject of the paper determines which Editor handles the review and decision process.

If you would like to be considered for the Editor in Chief position of *Geophysical Research Letters*, send your curriculum vitae with a letter of interest via email to [pubmatters@agu.org](mailto:pubmatters@agu.org). If you would like to nominate a highly qualified colleague, send a letter of recommendation to the same email address.

**Please make sure that you specify *Geophysical Research Letters* in the subject line of the email.**

**Deadline for applications is 15 April 2014**

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## 5. Upcoming Conferences and Workshops

### 5.1 Joint SEG/AGU Summer Research Workshop: Advances in Active + Passive “Full Wavefield” Seismic Imaging: from Reservoirs to Plate Tectonics (from Louise Pellerin)

**Workshop Dates:** 21-24 July 2014

**Abstract Deadline:** 1 May 2014

**Website:** [click here to follow link](#)

Rapid developments are occurring in advanced seismic imaging and inversion research, using “full wavefield” approaches, and very large broadband sensor arrays. These advances are happening at detailed reservoir scales (hydrocarbons, geothermal, groundwater, CO<sub>2</sub> sequestration...), up to much larger earthquake seismology and global plate tectonics scales. The purpose of this joint SEG-AGU summer research workshop is to bring together leading scientists in full wavefield seismic imaging/inversion research from across a broad spectrum to share their knowledge and challenges, compare notes and find synergies that may lead to new collaborations and breakthroughs in imaging the Earth.

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### 5.2 Multichannel Analysis of Surface Wave (MASW) Workshop (from Mary Brohammer)

**Conference Date:** 19-20 June 2014

**Location:** Kansas Geological Survey (KGS), Lawrence, Kansas

**Conference Website:** <http://www.kgs.ku.edu/software/surfseis/workshops.html>

The two-day MASW workshop will provide opportunity for geo-professionals, geoscientists, and graduate students to gain knowledge about acquisition, analysis, and interpretation of the seismic Rayleigh surface waves. The learning process will be facilitated by the use of SurfSeis software (<http://www.kgs.ku.edu/software/surfseis/index.html>). The workshop is designed to address the current approaches for analyzing seismic data from both active and passive sources for obtaining shear-wave velocity ( $V_s$ ) estimates for the near-surface.

On Day 1 a theoretical overview of the MASW method (active and passive) will be presented, participants will be familiarized with the SurfSeis software package, and field data acquisition from both active and passive sources is scheduled take place (weather permitting).

Day 2 will continue with the theoretical MASW overview covering surface-wave inversion, multi-mode interpretation and inversion, inversion sensitivity, use of a-priori information and quality of inversion results, latest advancements for dispersion-curve imaging—such as the high-resolution linear Radon transform (HRLRT), challenging dispersion-curve patterns, and more. Day-1 acquired seismic data will be analyzed. Participants are encouraged to bring samples of their own data for discussion as time permits. Attendees are expected to bring their own laptops.

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### 5.3 Near Surface Geoscience 2014: 20<sup>th</sup> Meeting of Env. & Eng. Geophysics (from George Tsoflias)

**Conference Date:** 14-18 September 2014

**Location:** Athens, Greece

**Conf. Website:** <http://www.eage.org/events/index.php?evp=10580&ActiveMenu=2&Opendivs=s3>

**Extended Abstract Deadline:** 15 April 2014

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#### **5.4 First Applied Shallow Marine Geophysics Conference (from Mark Vardy)**

**Conference Date:** 14-18 September 2014

**Location:** Athens, Greece

**Conf. Website:** <http://www.eage.org/events/index.php?evp=12577&ActiveMenu=2&Opendivs=s3>

**Extended Abstract Deadline:** 15 April 2014

Sponsored by EAGE, the conference aims to bring together practitioners and researchers from industry and academia who develop and apply geophysical methods to the seafloor and shallow overburden. While major recent advances have been made in reservoir geophysics, the shallow overburden has traditionally received significantly less attention, despite having a heavy influence on wave propagation to deeper reservoir targets and being host to a number of geohazards. These include shallow water flows, shallow gas, hydrates, landslides, glaciotectonics, and sediment flows, along with geomorphological features such as pockmarks, pipes, diapirs, channels, canyons, boulders, ploughmarks, faults, and seepage mounds.

The technical committee strongly encourage papers that demonstrate the current state-of-the-art and present lessons learned from case studies. This will set the scene to identify new trends and technologies required to help in geophysical site characterisation and geohazard assessments: from survey design and acquisition to quantitative and integrated data interpretation techniques. For the full conference announcement see:

[www.eage.org/images/cms/files/Conferences/NSG14%20SMG%20first%20announcement.pdf](http://www.eage.org/images/cms/files/Conferences/NSG14%20SMG%20first%20announcement.pdf)

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#### **5.5 GEM Chengdu 2015: Gravity, Electrical and Magnetic Methods and Their Applications**

**Conference Date:** 19-22 April 2015

**Location:** Chengdu, China

**Conf. Website:** [www.seg.org/events/upcoming-seg-meetings/gem-chengdu-2015](http://www.seg.org/events/upcoming-seg-meetings/gem-chengdu-2015)

The Workshop will focus on electrical, electromagnetic, gravity, magnetic, and nuclear magnetic resonance methods. You are invited to submit abstracts and attend the workshop. An online submission system will be open in the first week of October 2014.

## 6. Position Announcements

### 6.1 Faculty Position in Computational Modeling and Inversion Algorithms, University of Houston

Applications are invited for a faculty position at any level (Assistant/Associate/Full Professor) in computational multi-physics modeling and inversion algorithms. We are interested in attracting an individual with expertise in geophysical applications of interest to the oil and gas industry, especially well logging, and measuring the properties of rock samples.

**Qualifications:** Applicants must have an earned doctorate in electrical engineering, physics, or a closely related field.

**University and Department:** The University of Houston is located in a park-like campus close to major oil and gas companies. The Carnegie Foundation recognized UH as a public research university with very high research activity. The department has embarked on an exciting period of research growth driven by committed leadership. Houston is a thriving city with an internationally diverse population, first-rate recreational opportunities, excellent schools, and affordable housing.

**Time Frame:** The preferred start date of this appointment is 1 September 1 2014. Applications will be reviewed until the position is filled.

**How to Apply:** Please send a cover letter, curriculum vitae, a research statement, a teaching statement, and contact information for three or more references to: Prof. Badri Roysam, Department of Electrical and Computer Engineering, University of Houston, N325, Engineering Bldg. 1, Houston, Texas 77204-4005. Electronic copies of these documents should be sent as a single PDF file labeled "LastName-FirstName.PDF" to [ECefacultysearch@EE.UH.EDU](mailto:ECefacultysearch@EE.UH.EDU). Pre-application enquiries and visits are welcome.

*The University of Houston is an equal opportunity/affirmative action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.*

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### 6.2 Electromagnetic Geophysicist, GroundMetrics

See attached advertisement.

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### 6.3 Geotech Field Specialist Intern, GroundMetrics

See attached advertisement.

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**TO CONTRIBUTE MATERIAL TO THE NSFG NEWSLETTER SEND AN E-MAIL TO:**

Stephen Moysey ([smoysey@clemsn.edu](mailto:smoysey@clemsn.edu))

DEADLINE: Material must be received 5 full business days prior to the first of each month.

GUIDELINES FOR SUBMISSIONS: All members are welcome to submit content of interest to the NS community. Please keep messages brief and provide contact information and (if available) a web address for additional information.

**GET YOUR MESSAGE OUT NS MEMBERS FASTER:**

You will no longer need to wait until the end of the month to share an important or time-sensitive contribution to the newsletter. Appropriate contributions to the newsletter will also be shared ASAP via Twitter. Please note that only NSFG members that follow [@NS\\_AGU](#) will receive Twitter announcements, so make sure that you sign up!