

NEWSLETTER

Serving the Petroleum and Geothermal Community

Nevada Petroleum and Geothermal Society; P. O. Box 11526; Reno, NV 89510 Visit our NPS Homepage: http://www.nbmg.unr.edu/nps/

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Dinner Meeting: Thursday, Feb 04, 2016

SPEAKER: Ileana Tibuleac, PhD

Research Seismologist, Assistant Professor, UNR

TOPIC: Development of a Low Cost Method to Estimate

the Seismic Signature of a Geothermal Field from

Ambient Seismic Noise Analysis

Place: Ramada Reno Hotel

1000 East 6th Street, Reno, Nevada

Cocktail Reception 6:30, Skyline Bar, 14th Floor Hosted by:





Dinner Served at 7:00 PM
NPGS Members \$20; Non-Members \$23; Students \$10

PLEASE RSVP WITH THE FOLLOWING LINK:

https://docs.google.com/forms/d/1ahTxXXoE4WA5tIxhmpsQn10-VZ8x6iJyDcJUIreWT7E/viewform

If you must cancel, please notify NPGS as soon as you are able as NPGS will be charged for all no-shows. Thank you for your consideration.

SEE CALENDAR Page 11 for upcoming meetings

► NPGS Monthly Dinner Meeting – Feb 04, 2016

Development of a Low Cost Method to Estimate the Seismic Signature of a Geothermal Field from Ambient Seismic Noise Analysis

Ileana Tibuleac, PhD

Abstract:

A new, cost effective and non-invasive exploration method using ambient seismic noise has been tested at Soda Lake, NV. It was demonstrated that, with the advantage of S-velocity models, a passive seismic reflection survey, although with lower resolution, reproduces the results of the active survey when the ambient seismic noise is not contaminated by cultural noise. Ambient noise resolution is less at depth (below 1500m) compared to the active survey. In general, the results are very promising and useful information can be recovered from ambient seismic noise, including dipping features.

A 2D shear wave velocity model has been obtained for the first time in Soda Lake using surface waves extracted from ambient seismic noise at depth higher than the depth of a typical reflection survey. Through innovative signal processing techniques, periods not typically recorded with high frequency sensors were analyzed in this study to obtain seismic velocity model information.

New seismic parameters such as entropy, stochastic parameters (Correlation Length and Hurst number) and spectral features extracted from active and passive surveys have high potential to indicate geothermal favorability through their correlation with high temperature anomalies and are indicators of faults, thus reducing the uncertainty in fault identification.

Biography:

Ileana is a research seismologist, with a faculty position at assistant professor level, at the Nevada Seismological Laboratory, University of Nevada, Reno (UNR). Ileana received a Ph. D. in Geophysics from Southern Methodist University in May, 1999, with a dissertation entitled: "Array Measurements of P and PcP Slowness Residuals with Implications for Lateral Heterogeneity in the Lower Mantle beneath the Caribbean Sea and Other Geophysical Studies". Ileana's graduate adviser was Dr. Eugene Herrin. An article with the same title, one of the three in my thesis, was published in the journal Science.

Ileana recently (2014) finished work on a Master in Business Administration (MBA) in the part time program at the University of Nevada Reno.

https://sites.google.com/site/tibuleacileana/

▶ Thank You to our Hosts for the Cocktail Reception, Feb 04, 2016:





info@paulgrahamdrilling.com
Paul Graham Drilling and Service Company
2500 Airport Rd., Rio Vista, CA 94571
(707) 374-5123 (800) 336-7285

geodf@geodf.com GEO Drilling Fluids, Inc. 1431 Union Ave., Bakersfield, CA 93305 (800) GETS-GEO; (800) 438-7436

► Resolution passed to Amend Bylaws – Vote taken Jan 7, 2016

Nevada Petroleum and Geothermal Society, Inc. Amendment to the Bylaws Approved January 7, 2016

An Amendment to the Bylaws, Article I, Section 4, to include high school Students as a new Class of Student Members was approved at the NPGS dinner meeting January 7 by more than a two-thirds affirmative vote of the Active members present and voting. A discussion was followed by the motion to vote by Bill Ehni, seconded by Terri Garside and Jon Price. The Amendment is as follows:

SECTION 4. Student Members

Any student majoring in geology, engineering or other oil and gas or geothermal related curriculum may apply for Student membership.

Any high school student participating in geology, engineering, oil, gas or geothermal related curriculum may apply for Student membership. High school Student members are not charged membership fees.

The relevant authority for amendment to the NPGS Bylaws is included here.

ARTICLE VI - Amendments

SECTION 1. Proposal of Amendments

Amendments to these Bylaws may be proposed by one of the following means:

- (a) Resolution by the Board of Directors. (Passed at Board Meeting October 14, 2015)
- (b) Written proposal signed by fifteen (15) members of the Society.

SECTION 2. Consideration of Amendments

Proposed amendments shall be published in the newsletter and considered at the next meeting more than 30 days after publication. The proposed amendment shall be passed upon receipt of a two-thirds (2/3) affirmative vote of the Active members present and voting. (*Passed January 7, 2016*)

► NPGS Carson Sink Geothermal Field Trip, Saturday April 9, 2016:

Save the Date, Saturday, April 9, Brown Bag Field Trip

Planned Agenda; Details will follow soon.

Meet in Sparks, Van transportation, 7:30 AM Patua (Fernley), Tour well field Grimes Point, Archaeology Fallon, Forge Project Stillwater, ENEL

There will be a small per person charge for the trip, which will accommodate 35-40 people, on a first come first served basis. More information will follow as available. Stay tuned......

► <u>Commemorative Medallion Celebrating 30 Years of Geothermal Production in Nevada:</u>

The NPGS has had bronze ingots (medallions) minted to commemorate the 30th year of geothermal production in Nevada. The medallions were designed and illustrated by David Evans, 509 Creative, and minted at the Marshall Mint in Virginia City. The medallions are available for sale at the monthly dinner meetings and online on the NBMG website.

Price and distribution for the "Celebrating 30 Years of Geothermal Production" ingots

The Board of Directors unanimously voted to charge the following prices for sale of ingots:

For NPGS Members: A one-time opportunity to buy from one to five ingots at a price of \$10 each at each monthly Dinner Meeting for the period of time ending at the March Dinner Meeting. Thereafter the price to Members will be \$15 per ingot.

For non-members the price will be \$20 per ingot, to be sold at the Monthly Dinner Meetings, or online with additional charges of shipping and handling, if applicable.

It was voted to present one ingot to each speaker(s) following their presentation at each monthly Dinner Meeting of the NPGS.

It was voted to raffle one ingot at no cost to Dinner Guests at each Monthly Dinner Meeting. The method of raffle and presentation of winning ingot will be decided by an Officer of the NPGS.

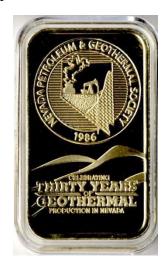
The medallion is now on the NBMG shopping cart: Thank you Charlotte!!

http://pubs.nbmg.unr.edu/product-p/nps25.htm

Celebrating thirty years of geothermal production in Nevada: 1885-2015

The Nevada Petroleum and Geothermal Society is pleased to offer this beautiful medallion commemorating the thirtieth year of geothermal production in Nevada. The medallion was designed and illustrated by David Evans at 509 Creative, and is made of golden bronze. Only 500 medallions were struck at the Marshall Mint in Virginia City, so be sure to order yours now. The dimensions are 1.25 x 2 inches.

NPGS member discount: To get the NPGS member discounted price of \$15, please type this message in "Order Comments" box: "I am an NPGS member" and we will deduct \$5 per medallion from your total. The deduction will not appear on your shopping cart checkout page, but we will deduct the amount before submitting your charge to Authorize.net at the end of the day. The reduced amount will appear on your cash register receipt which will be mailed with your order.





► Ralph Roberts Distinguished Lecture, Feb 4, 3:30 PM:

Ralph J. Roberts Distinguished Lecture in Economic Geology Peter Vikre—February 4 at 3:30 p.m. Diverse Mineral Deposits in the Humboldt Range, Pershing County, Nevada: A 250 m.y. Record of Magmatism, Metasomatism, and Tectonism

The CREG program invites you to attend on Thursday February 4th the **22st annual Ralph J.** Roberts Distinguished Lecture in Economic Geology.

The speaker is **Peter Vikre** from the U.S. Geological Survey, whose talk is entitled "**Diverse Mineral Deposits in the Humboldt Range**, **Pershing County**, **Nevada: A 250 m.y. Record of Magmatism**, **Metasomatism**, and **Tectonism**."

The lecture is at 3:30 in the Theater on the third floor of the Joe Crowley Student Union on the UNR campus: http://www.unr.edu/around-campus/facilities/crowley

Please attend and learn the latest and greatest on the metallogeny of the Humboldt Range, which has been a hotbed for exploration in recent years.

Parking is available in the West Stadium Parking Complex, on the 16th Street exit, located off of North Virginia St. Here is a PDF map identifying the West Stadium Parking Complex, this is the only complex that you can use this parking code.

http://www.unr.edu/Documents/administration-finance/Parking/2015-2016%20campus%20zone%20map%20FINAL.pdf

You will need a receipt from one of the two kiosks located within the parking complex. The code for the event is #2016001.

As a reminder, your will need to follow these steps:

- 1) Press the B button at the top screen
- 2) Press the # sign along with the 2016001 on the bottom keypad
- 3) Press OK (D button) at the top screen

The machine will then dispense the permit that needs to be placed face up on your dashboard. You may need to reach up under the door flap as the paper may roll up.

Again, many thanks for your support of the CREG program. We look forward to seeing you on the 4th!

John Muntean, Ph.D Director, Ralph J. Roberts Center for Research in Economic Geology (CREG) http://www.nbmg.unr.edu/CREG/

► <u>UNR College of Science's Discover Science Lecture Series:</u>

David Quammen—February 4 at 7:00 p.m. Ebola and Beyond: Scary Viruses in a Globalized World

"Science author and journalist David Quammen will give a lecture about the problems and dangers surrounding new viruses such as MERS, SARS, and Ebola that threaten global civilization. Quammen will discuss his travels for research for his book "Spillover," and his other travels when he was investigating the outbreak of Ebola for 'National Geographic.' He will also introduce common themes between the new viruses and other discussions of the impact from these recent outbreaks." (from UNR Events Calendar, please see link below)

http://events.unr.edu/event/discover_science_lecture_series_david_quammen#.VqudtU32ZaQhttp://www.unr.edu/nevada-today/news/2016/david-quammen-discover-science-lecturehttp://www.unr.edu/dsls

Paul Alan Cox, ethnomedicine expert, March 10

Bob Williams, Hubble Space Telescope project leader, April 21

The lectures will be held at 7 p.m. in the Redfield Auditorium in the Davidson Mathematics and Science Center on the University campus.

http://www.unr.edu/around-campus/facilities/davidson

Parking is reserved for the event on the top level of the Brian J. Whalen Parking Complex on North Virginia Street. Admission is free. For more information, call 775-784-4591 or visit the College of Science website at http://www.unr.edu/science."

AAPG Pacific + Rocky Mountain Joint Meeting

2-5 October 2016 | Paris Hotel | Las Vegas

CALL FOR PAPERS

- ✓ RMAG's Hot Plays of the Rockies
- √ New Insights in Pacific Exploration
- √ Frontier Exploration in the Rockies
- ✓ Redevelopment of Old Fields: Finding the Green in Brownfields
- ✓ Unconventionals: West of the Mississippi River
- ✓ Sedimentology and Stratigraphy: Lacustrine to Deep-Water Reservoirs
- √ Geophysics and Petrophysics: From Basins to Pores
- ✓ Structure and Tectonics: New Perspectives and Challenges
- ✓ Energy and the Environment: Regulations and Water Issues
- ✓ Geothermal, Hydrothermal and Uranium Resources

Submission Deadline 1 June 2016

Abstract Limit 250 words | Find more submission instructions at Section websites

For additional information contact:

Jon Allen

PS Technical Program Co-Chair (661) 654-7516 jonathan.allen@chevron.com www.psaapg.org

Steve Veal

RMS Technical Program Co-Chair (303) 945-2630 sveal@palomarnr.com www.aaparms.org



► Scheduled Nevada BLM Lease Sales:

Nevada Geothermal Upcoming Lease Sale (Tentative)

Sale Date	Nominations Due	Sale Posting Date	Protest Deadline
October 25, 2016	January 29, 2016	July 27, 2016	August 26, 2016

Nevada's Competitive Oil & Gas Lease Sale Schedule (Tentative)

Sale Date	Parcels Offered for District Office at Sale	*EOIs Due	Sale Posting Date	Protest Deadline
March 8, 2016	Elko	June 12, 2015	December 9, 2015	January 8, 2016
June 14, 2016	Battle Mountain	September 18, 2015	March 16, 2016	April 15, 2016
September 13, 2016	Winnemucca/Carson City	December 18, 2015	June 15, 2016	July 15, 2016
December 13, 2016	Ely	March 18, 2016	September 14, 2016	October 14, 2016

^{*}EOI = Expression of Interest

Parcel listing for March 2016 Lease Sale:

http://www.blm.gov/style/medialib/blm/nv/minerals/oil gas/2016_lease_sales.Par.87462.File.dat/201603_Elko_Parcels.pdf

http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil gas/oil and gas_leasing/upcoming_sales.html

► <u>News from Nevada Bureau of Mines & Geology:</u>

From: Charlotte Stock

The following information is taken directly from emails provided by Charlotte Stock, Nevada Bureau of Mines & Geology

Stay Informed about NBMG

Subscribe to our email list by sending an email to webmaster@nbmg.unr.edu with "subscribe to Publications mailing list" in the subject line

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Job Announcements from BLM

We are pleased to announce new, exciting positions available at BLM - BUREAU OF LAND MANAGEMENT. It is our hope that qualified, career oriented individuals at your organization or other professionals known to you will actively consider this position and apply accordingly. Efforts on your part to disseminate this information are greatly appreciated.

Position Information:

Job Description: **Geologist**;

Announcement Number: NV-DEU-2016-0050; Location(s) of position: Las Vegas, NV, US;

Salary: \$49,054 - \$77,154;

Applications will be accepted until: 02/05/2016.

For additional information on this job posting, please go to:

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114196[jobs. mgsapps.monster.com

Position Information:

Job Description: Planning and Environmental Specialist;

Announcement Number: OR-DEU-2016-0049; Location(s) of position: Lakeview, OR, US;

Salary: \$48,403 - \$62,920;

Applications will be accepted until: 02/10/2016.

For additional information on this job posting, please go to:

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114094[jobs.

mgsapps.monster.com]

Position Information:

Job Description: Environmental Protection Specialist;

Announcement Number: OR-DEU-2016-0048; Location(s) of position: Medford, OR, US;

Salary: \$71,012 - \$92,316;

Applications will be accepted until: 02/09/2016.

For additional information on this job posting, please go to:

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114092[jobs. mgsapps.monster.com]

Position Information:

Job Description: Project Manager (Burning Man); Announcement Number: NV Merit-2016-0109; Location(s) of position: Winnemucca, NV, US;

Salary: \$69,497 - \$90,344;

Applications will be accepted until: 02/08/2016.

For additional information on this job posting, please go to:

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114035[jobs.

mgsapps.monster.com

Position Information:

Job Description: Project Manager (Burning Man);

Announcement Number: NV-DEU-2016-0039; Location(s) of position: Winnemucca, NV, US;

Salary: \$69,497 - \$90,344;

Applications will be accepted until: 02/08/2016.

For additional information on this job posting, please go to:

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114097[jobs.

mgsapps.monster.com

Position Information:

Job Description: Natural Resources Specialist Announcement Number: NV-DEU-2016-0046 Location(s) of position: Las Vegas, NV, US

Salary: \$49,054 - \$77,154

Applications will be accepted until: 02/05/2016.

For additional information on this job posting, please go to:

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114166[jobs.mgsapps.monster.com]

Position Information:

Job Description: Engineering Technician (Petroleum)

Announcement Number: MT-DEU-2016-0036; Location(s) of position: Great Falls, MT, US;

Salary: \$35,328 - \$62,999;

Applications will be accepted until: 02/18/2016.

For additional information on this job posting, please go to:

 $https://jobs.\underline{mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3\&jnum=114246$

Charlotte Stock, Publication Sales Nevada Bureau of Mines and Geology Great Basin Science Sample and Records Library 2175 Raggio Parkway, Reno, NV 89512 phone (775) 682-8766, fax (775) 784-6690, www.nbmg.unr.edu

Nevada Petrol	Nevada Petroleum and Geothermal Society Calendar: Year 2015-2016		
Feb 4, 2016	NPGS Monthly Dinner Meeting – Thursday Feb 4, 6:30 PM Details on Page 1 SPEAKER: Ileana Tibuleac, Research Associate Professor, Nevada Seismological Laboratory, UNR TOPIC: Development of a low cost method to estimate the seismic signature of a geothermal field from ambient seismic noise analysis		
Mar 3, 2016	NPGS Monthly Dinner Meeting – Thursday Mar 3, 6:30 PM		
	SPEAKER: Dr. Robert Abbott, Sandia National Laboratories, Albuquerque, New Mexico TOPIC: Geologic Characterization of Yucca Flat, Nevada, Using the Seismic Hammer™		
Mar 8, 2016	Nevada BLM Oil & Gas Lease Sale, Reno NV Elko NV District, posting date: Dec 09, 2015 http://www.blm.gov/style/medialib/blm/nv/minerals/oil gas/2016 lease s ales.Par.87462.File.dat/201603 Elko Parcels.pdf		
	http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html		
Apr 7, 2016	NPGS Monthly Dinner Meeting – Thursday Apr 7, 6:30 PM SPEAKER: Dr. Greg Pohll, Research Professor, Desert Research Institute TOPIC: Interim Final Report, Hydraulic Fracturing in The Upper Humboldt River Basin, Aquifer Quality Assessment Program Publication No. 41263		
Apr 9, 2016	NPGS Carson Sink Geothermal Field Trip Saturday, April 9, Brown bag lunch, Details TBA Patua, Grimes Point, Stillwater		
May 5, 2016	NPGS Monthly Dinner Meeting – Thursday May 5, 6:30 PM SPEAKER: Dr. Catherine Hickson, Research Scientist (volcanology) President at Tuya Terra Geo Corp., Vancouver, Canada Author, Mt. St. Helens: Surviving The Stone Wind TOPIC: Mt. St Helens Eruption From an Extremely Close Point of VIEW		
Jun 14, 2016	Nevada BLM Oil & Gas Lease Sale, Reno NV, Jun 14, 2016 Battle Mtn NV District, posting date: March 6, 2016 http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html		
Jun 19-22, 2016	AAPG Annual Convention & Exhibition, 2016: Redefining Reservoir BMO Centre @ Stampede Park, Calgary AB http://ace.aapg.org/2016		

Sep 1, 2016	NPGS Monthly Dinner Meeting – Thursday Sep 1, 6:30 PM SPEAKER: Rod Prosceno, Grant Canyon Oil & Gas, LLC TOPIC: Nevada – EOR projects – Grant Canyon and Blackburn Fields
Sep 13, 206	Nevada BLM Oil & Gas Lease Sale, Reno NV, Sep 13, 2016 Winnemucca/Carson City District, posting date: June 16, 2016 http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html
Oct 2-5, 2016	Rocky Mountain Section/Pacific Section Meeting – AAPG 2016 2016 joint RMS-AAPG/PS-AAPG annual meeting Paris Hotel, Las Vegas, Nevada. Host societies: Idaho Association of Professional Geologists and the Nevada Petroleum & Geothermal Society.
Oct 25, 2016	Nevada BLM Geothermal Lease Sale, Reno NV, Oct 25, 2016 Sale posting date: July 27, 2016
Dec 13, 2016	Nevada BLM Oil & Gas Lease Sale, Reno NV, Dec 13, 2016 Ely District, posting date: Sep 14, 2016 http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html

The NPGS Newsletter is provided to members of the Nevada Petroleum and Geothermal Society. For information about membership and events, see the NPGS website at http://www.nbmg.unr.edu/nps/ To submit articles, corrections or suggestions for the newsletter; Contact Vicki Ehni 775-883-1107, cell 775-720-6387; email webni@aol.com.