

Welcome to the SMU Geothermal Lab newsletter for February. There is now a section for Geothermal Heat Pump News, which will be included as we have news to share. Other items this month are links on the North Texas earthquakes, a job opening, and funding opportunities including student scholarships. Speakers – submit your abstracts for our upcoming conference due February 16, 2015.

SMU Geothermal Laboratory Notes

Sponsors, speakers and attendees are all welcome for our next conference, *Power Plays*: Geothermal Energy in Oil and Gas Fields, which will be held on the SMU Campus on May 18-20, 2015.

- **Speakers.** Less than 2 weeks left to submit an abstract for an oral or poster presentation. Abstracts are due by **February 16, 2015**. Guidelines are available at http://www.smu.edu/Dedman/Academics/Programs/GeothermalLab/Conference/CallForAbstracts.
- **Sponsorship.** Levels begin at \$1000 or become to Gold at \$7500. More information: http://www.smu.edu/Dedman/Academics/Programs/GeothermalLab/Conference/Sponsorship.
- **Attendees.** Registration is open for the two-day conference and the half-day pre-conference workshop at http://www.smu.edu/Dedman/Academics/Programs/GeothermalLab/Conference/2015Registration.

Presentations from our previous conferences are reorganized by topic on our website at http://www.smu.edu/Dedman/Academics/Programs/GeothermalLab/Conference/PastPresentations. You can also search for presentations by author, company or title via a searchable spreadsheet.

The SMU Geothermal Lab is four months into a year-long project sponsored by the Department of Energy for **Play Fairway Analysis** of the **Appalachian Basin**. Working with colleagues from Cornell University and West Virginia University, the team is defining levels of uncertainty with respect to the presence and utility of geothermal system elements, and translating them into maps of the geographic area over which the most favorable combinations of heat, permeability, and fluid are thought to extend. The SMU Team is focusing on parameters such as temperature, thermal conductivity, well logs such as velocity and gamma ray, and seismic reflection to determine where within the Appalachian Basin are the most likely geothermal play resources. Stay tuned for more details.

Dr. Brian Stump and **Dr. Heather DeShon** from the SMU Huffington Department of Earth Sciences, along with their team, are working to better understand the recent **earthquakes in North Texas**. Read an article in the Dallas Morning News at http://www.dallasnews.com/news/metro/20150110-whats-at-fault-scientists-seek-cause-of-irving-quakes.ece and listen to KERA's Think program at http://www.kera.org/2015/01/13/why-earthquakes-in-dallas/. Brian will present at this year's May Power Plays conference with up-to-date details.

<u>Congratulations</u>

Congratulations and Thank You to **Russel Smith** on his many years as Executive Director of the Texas Renewable Energy Industries Association. Good luck on your next endeavors. More information: http://www.treia.org/assets/2015/treiaresignationletter-steppingasideafter35years-rsmith-jan.2015.pdf.

Congratulations to Geothermal Technologies Office Director **Doug Hollett** on his promotion to Deputy Assistant Secretary for Renewable Power. More information:

http://energy.gov/eere/geothermal/articles/hollett-takes-renewable-power.

Congratulations to **Helidyne** on the sale of their first off-shore power generation equipment to Pemex http://helidynepower.com/images/Helidyne-Press-Release-8-25-14.pdf and for completion of their test stand at the St. George City Red Rock generating facility http://helidynepower.com/images/Helidyne-Press-Release-10-7-14.pdf.

Congratulations to Roland Horne, Kewen Li, and Joleen Palacios Castro and the Stanford Geothermal Program students on an exceptional Stanford Geothermal Workshop – the 40th one! Presentations from past events are at https://pangea.stanford.edu/researchgroups/geothermal/stanford-geothermal-workshop.

Job Opening

The Nevada Bureau of Mines and Geology at the University of Nevada, Reno has a **job opening** for a **geothermal specialist.** They are looking for a mid-career person at the Associate Professor level for this tenure-track position. Applications are due by **March 1, 2015**. More information: https://www.unrsearch.com/postings/16685.

Opportunities for Grant Money

New York State Energy Research and Development Authority (NYSERDA) released a **request for proposals** to demonstrate market-ready technologies that reduce greenhouse gas emissions from the power sector. **Waste heat recovery projects** that reduce the annual emissions rate, measured as tons CO2/MWh, at New York electric generating units with a nameplate capacity of at least 25 MW can receive funding up to **\$2 million** per demonstration project. Proposals are due **March 5, 2015** by 5pm ET. More information: <a href="https://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/RFP-2857-Competitive-Greenhouse-Gas-Reduction-Pilot-Program?utm source=Interested+non-members&utm campaign=deb906fd39-Funding+Opp+for+WHP+Projects+in+New+York&utm medium=email&utm term=0 4a04a803c5-deb906fd39-182723897.

Southwest Energy Efficiency Project is looking for potential **Waste Heat to Power** (WHP) projects in Colorado to take advantage of new **incentives** offered by Xcel Energy, the largest utility in Colorado. Contact Christine Brinker at 720-939-8333or cbrinker@swenergy.org for more information.

The Geothermal Resources Council (GRC) has announced the availability of the **2015 GRC Scholarship Awards**. There are two undergraduate awards, three graduate awards and one project award. Applications must be received by **May 4, 2015**. More information: http://www.geothermal.org/students.html.

Wish List Reply

In response to our wish list item asking for more reservoir data from depleted fields, we were referred to the **Energy Data Exchange** (EDX) from the National Energy Technology Laboratory (NETL). Visit their

site at https://edx.netl.doe.gov/ or watch a video to learn about the program at https://edx.netl.doe.gov/about. Thanks for the suggestion.

Looking for an unused, if not exactly new, turbine? A WWII Destroyer era **CL55 Low Pressure Turbine** manufactured by GE is immediately available, preferably as a donation to a non-profit organization, but other options will be entertained. The unit is approximately 8' x 12'. Shipping from the Houston area to the new site is not included. Interested parties may inquire through Robert Kropacek at 775-284-2461.

Email <u>geothermal@smu.edu</u> if you have an item you would like added to the wish list, or a response to a previous wish list item.

Geothermal Heat Pump News

Geothermal Exchange Organization (GEO) has details on a study comparing the efficiency of Geothermal Heat Pumps versus Variable Refrigerant Flow heating and cooling systems. More information: https://www.geoexchange.org/news/scientific-research-shows-geothermal-heat-pumps-outperform-vrf-heating-cooling/.

Visit the updated **Heat Pumps** section of the SMU Geothermal Lab website at http://www.smu.edu/Dedman/Academics/Programs/GeothermalLab/HeatPumps.

Send your Geothermal Heat Pump news items to <u>geothermal@smu.edu</u> for inclusion in our next newsletter.

Event Details

The **Geothermal Resources Council** has issued a **Call for Papers** for their 2015 Meeting to be held in Reno, Nevada on September 20-23, 2015. Draft papers are due **April 10, 2015.** More information: http://www.geothermal.org/Annual Meeting/call for papers.html.

Registration is open for the **2015 Southwest Section of the AAPG Annual Convention** being help in Wichita Falls, Texas on April 11-14, 2015. More information: http://www.ntgeologicalsociety.org/2015-southwest-section-of-aapg-convention/.

Calendar

February 24, 2015 – Geothermal Energy Association **State of the Geothermal Industry Briefing**, Washington, DC. More information: http://www.geo-energy.org/events/2015/Geothermal Industry Briefing 2015.aspx.

February 25-27, 2015 - GeoProc 2015, Salt Lake City, Utah. More information: https://secureweb.inl.gov/geoproc2015/Default.aspx.

February 25-27, 2015 - The Energy and Materials Research Conference - EMR2015, Madrid, Spain. More information: http://www.emr2015.org/.

March 16-18, 2015 - Third Annual Conference for the Development and Utilization of Geothermal Energy, Beijing, China. For more details contact Kewen Li at kewenli@stanford.edu.

April 11-14, 2015 - 2015 Southwest Section of the AAPG Annual Convention, Wichita Falls, Texas. More information: http://www.ntgeologicalsociety.org/2015-southwest-section-of-aapg-convention/.

April 19-24, 2015 – World Geothermal Congress, Melbourne, Australia. More information: http://wgc2015.com.au/

May 11-15, 2015 - Geothermal Technologies Office Peer Review, Westminster, Colorado. More information: http://www.energy.gov/eere/geothermal/events/2015-gto-peer-review.

May 18 – 20, 2015 - SMU Geothermal Lab *Power Plays*: Geothermal Energy in Oil and Gas Fields, SMU Campus, Dallas, Texas. Registration is open. Become a sponsor and speaker! More information: http://www.smu.edu/Dedman/Academics/Programs/GeothermalLab/Conference.