

GEOTHERMAL RESOURCES COUNCIL

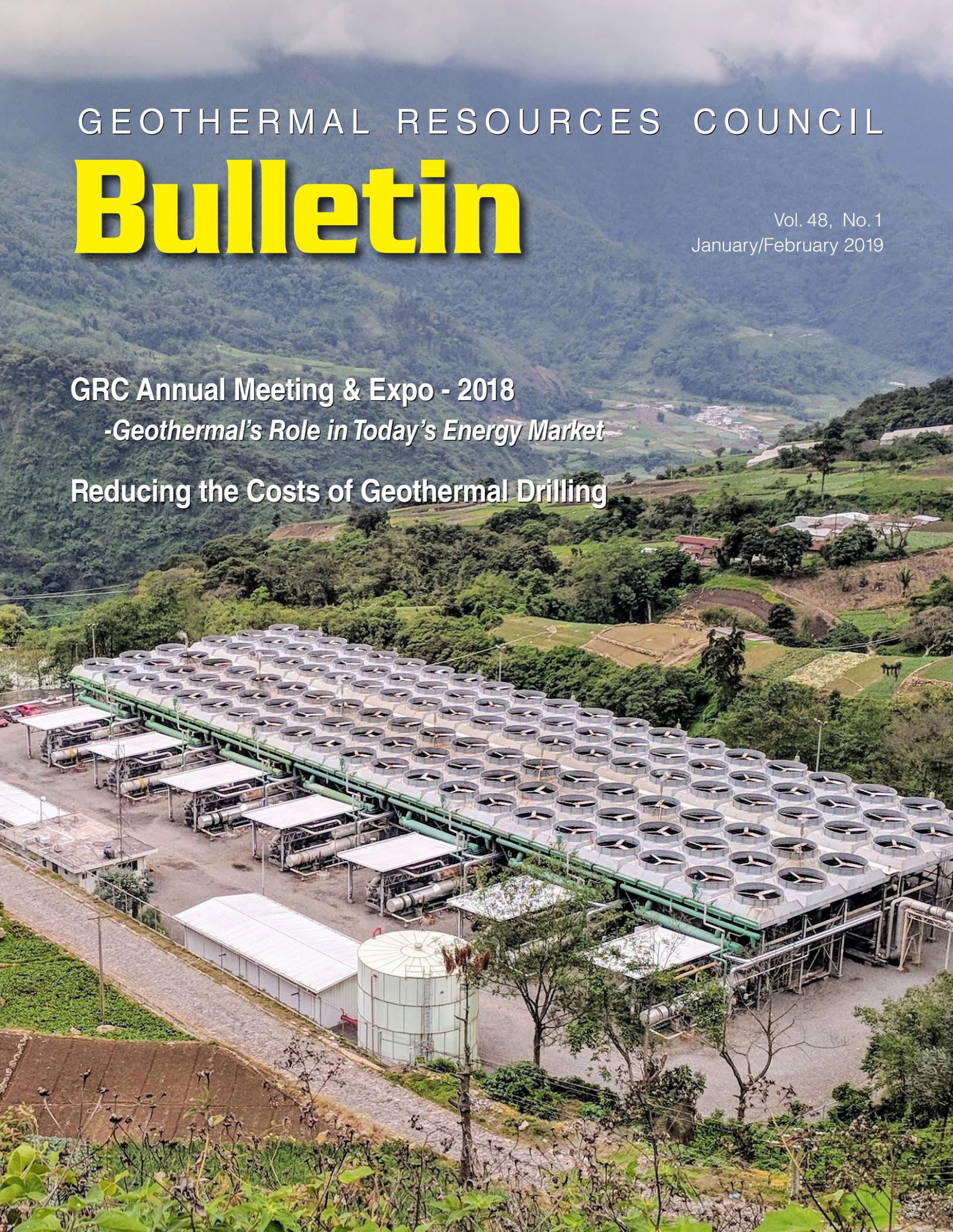
Bulletin

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GRC Annual Meeting & Expo - 2018

-Geothermal's Role in Today's Energy Market

Reducing the Costs of Geothermal Drilling



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COVER: Zunil Geothermal Plant (Guatemala), by **Steven Fercho**, Reno, Nevada, USA. Third Place in the 2018 GRC Geothermal Photo Contest.

Corporate Focus

The GRC would like to highlight our partners in the industry with a regular series of articles featuring our company colleagues. We thank our friends in the corporate sector for their ongoing support.



Thermochem (TCI) is the world leader in testing, engineering, consulting services, specialty instrumentation and equipment supply for the geothermal power industry. This includes chemical engineering, laboratory analysis, geochemistry, field testing services and products. From base operations in the Western USA and South-East Asia, Thermochem has served geothermal energy companies for more than 30 years. The Thermochem brand is known for strong technical competence, global experience, innovation and quality. Thermochem is the only vertically-integrated geothermal service company.

Thermochem, Inc. (USA) was founded in 1983 by Paul von Hirtz as a geothermal laboratory and consulting company, primarily serving The Geysers geothermal projects in Northern California (the largest geothermal development in the world). Thermochem rapidly grew, serving all geothermal energy projects in the USA, and expanded into The Philippines and Indonesia in 1990. Thermochem, Inc. now provides services in 35 countries and employs over 25 chemists, engineers, geoscientists and technicians. Thermochem designs and builds the equipment and instrumentation they use to provide their testing services, including TFT[®], steam purity/quality instruments, PTS and DHS wellbore logging tools, well test mufflers and pilot test units. They also sell this same equipment and instrumentation to its customers, plus pH-mod and acid neutralization systems for wellfields and power plants.

PT. Thermochem Indonesia was founded during the geothermal energy boom in Indonesia in the 1990's when many foreign companies were actively developing projects. Not long after the founding of PT. Thermochem Indonesia the Asian Financial Crisis hit the region and most foreign developers and service

companies left Indonesia. PT. Thermochem Indonesia maintained its operations and won the respect of Indonesian governmental agencies and remaining private developers, which solidified their position within the country when the economy strengthened and geothermal development resumed. PT. Thermochem Indonesia provides services to virtually all geothermal projects within Indonesia and helps supports TCI world-wide operations in Malaysia, the Philippines, and Africa. Currently PT. Thermochem Indonesia employs 35 full-time chemists, engineers, geoscientists and technicians.

The Thermochem, Inc. headquarters is the TCI Geothermal Energy Research Center, based in Northern California near The Geysers. The 20,000 ft² Research Center houses the state-of-the-art analytical laboratories. This Center provides a base for field testing activities and includes manufacturing, machining, welding and electronic assembly capabilities for chemical process equipment, specialized instrumentation, wellbore logging tools and electronics. Flow calibration loops are used to support testing of flowmeters, new TFT[®] instruments and wellbore velocity sensors. A high-temperature test loop with 400°C oven provides hot simulated brine and saturated or superheated steam for calibration and testing of wellbore tools, power plant monitors and corrosion and scale inhibitor testing. ■

Elizabeth Easley performing training in Kenya.



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Paul von Hirtz and Russ Kunzman working on new instrumentation in Thermochem's Santa Rosa, CA, Geothermal Research Facility.