

Wednesday, December 10, 2014

Black Lab Pub, Churchill Room • 4100 Montrose Blvd.

Social 5:30 p.m., Dinner 6:30 p.m.

Cost: \$30 Preregistered members; \$35 non-members/walk-ups

To guarantee a seat, pre-register on the HGS website & pre-pay by credit card.

Pre-registration without payment will not be accepted.

Walk-ups may pay at the door if extra seats are available.

HGS Environmental & Engineering Dinner Meeting

Chi Dong

Seismo Electronics LLC

Seismoelectric Ground-Flow DC-4500 Locators

This talk describes a seismic wave-generated electrokinetic potential method and geophysical technology for directly locating a groundwater aquifer to deduce the associated petroleum hydrocarbon reservoir fluids with high accuracy, low cost, site access, portability, and simple operational procedures in the field.

The DC-4500 Seismoelectric Ground-Flow Locator receives both a seismic signal and a seismoelectric signal generated by the same seismic source. The seismoelectric survey depth of investigation depends on the power of seismic source. We have obtained reservoir seismoelectric data up to 7000 feet deep in Louisiana with a Buffalo gun seismic source.

Over the past 3 years, more than 300 commercial ground-flow projects have been performed using the DC-4500 system around the world. The success rate of groundwater location is 90%.

After data processing and interpretation, 2D and 3D models of seismoelectric ground-flow have been constructed for the accurate mapping of ground-flow distribution. ■

Biographical Sketch



DONG CHI, President of Seismo Electronics LLC, received his B.S. degree in geophysics from the East China Petroleum Institute, his M.S. degree in geophysics from the Colorado School of Mines and is a Ph. D. candidate at the Colorado School of Mines. Prior to forming Seismo Electronics LLC in 2011, Mr. Dong worked as a consulting geophysicist for several companies, both domestically and internationally, during his 40-plus year career.