



## Surface Geophysical Methods for Hydrological Assessment

Instructor: Dr. Dale Rucker, hydroGEOPHYSICS Inc.

Time: 8AM – 12PM | Date: Wed, Sept 14 | Room: Ballroom E

### Description

Geophysical technologies are proven and cost effective, allowing the targeted, large-scale holistic assessment of near-surface hydrological features. However, they are often poorly understood among those who assess hydrological systems and often overlooked in favor of more traditional, yet limited, exploratory techniques such as drilling. Surface geophysics is used as a noninvasive target recognition tool for...

- Assessing depth to the water table for unconfined aquifers
- Characterizing aquifer storage and monitoring recovery
- Characterizing the depth, thickness, and lateral dimensions of groundwater aquifers
- Exploring new groundwater sources and investigating groundwater/surface water interactions
- Characterizing the distribution of soil moisture in unsaturated zones and delineating plumes
- Mapping fractures and investigating karst features
- Registration link: <https://ahs9.wildapricot.org/event-4692212>

### About Dr. Dale Rucker

*Dale Rucker is the Chief Technical Officer for hydroGEOPHYSICS, Inc (HGI) and holds a doctorate in hydrology and water resources from the UA. As CTO, he is responsible for the technical direction of the company, including the development of new hardware, software tools, and interpretation for geophysical methods aimed at solving hydrological and engineering problems. Dale's main areas of research focus on rapid monitoring of dynamic subsurface processes, such as subsurface injections, focused recharge, and remediation. He is a member of SEG, EEGS, AGU, SME, and EAGE. He was also the editor of the Journal of Environmental and Engineering Geophysics.*



Instructor Dr. Dale Rucker

