This one-day short course introduces the most important theoretical and practical aspects of the multi-channel analysis of surface waves (MASW) method by the lead research group at Kansas Geological Survey, where the method was originally developed. Attendees will be exposed to the most current approaches for using Rayleigh, Scholte, and Love surface waves for the estimations of 1D shear-wave velocity (Vs) vertical profiles to depths of a few tens of meters, extendable to 2D and 3D volumes.

Technical Topics
Various practical topics related to MASW data acquisition and analysis will be covered, including:

- The use of active and passive sources
- Optimum source distance and spread-size determination
- Dispersion-curve imaging using conventional and high-resolution methods (e.g., HRLRT)
- Fundamental- and higher-mode evaluations
- Inversion of fundamental- and multi-mode Rayleigh, Scholte, and Love-wave dispersion curves with the incorporation of 2D compressional-wave velocity (Vp) and density a-priori information
- Construction of 2D Vs images with topography and variable depth, etc.

Attendees are provided software during the short course for a hands-on experience and to evaluate the MASW method in class as well as the option for practice back at their office. The goal of the short course is to develop an understanding and skill set for participants to confidently incorporate the MASW method in their work.

Course Date: 19 October 2019 | 08:00 to 17:00
Venue: Khalifa University, Abu Dhabi
Registration: braj@seg.org
COURSE FEE: US $295 (Members)
US $395 (Non-Members)

Short Course Instructor
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