

# ONE-DIMENSIONAL NONLINEAR AND EQUIVALENT LINEAR SITE RESPONSE ANALYSIS IN RSSEISMIC

THURSDAY, MARCH 19 | 8:00 AM - 5:00 PM PACIFIC | VIRTUAL

**REGISTER**

**Members** \$300  
**Nonmembers** \$450

The first step in evaluating the impact of an earthquake on our physical infrastructure is evaluating the response of the ground to seismic shaking. In engineering practice this is often performed using one-dimensional site (1-D) response analysis. Increasingly, it is necessary to go beyond equivalent linear approaches to perform total and sometime effective stress nonlinear analyses as part of this evaluation. This day long short course will introduce the use of the widely used 1-D site response analysis platform RSSeismic. The course will provide a step-by-step introduction to the modules available for analysis and describe the input required for performing such analyses. Hands-on examples will be given throughout the day to facilitate greater understanding by the participants of the introduced concepts. Lastly, a brief overview of recent developments in site response analysis including 2-D and 3-D applications will be presented.

## Attend This Course to Learn:

- Introduction to RSSeismic & Historical Background (DEEPSOIL)
- Ground Motion Processing Tools
- Linear and Equivalent Linear Analyses
- Hands-On Examples (EL) & Q&A
- Time Domain (Nonlinear) Analyses
- Hands-On Examples (NL) & Q&A
- Porewater Pressure Generation and Dissipation
- RSLog: Links to RSSeismic
- Additional Features and Future Developments



**YOUSSEF HASHASH,  
PHD, PE, NAE**  
PROFESSOR  
*UNIVERSITY OF ILLINOIS  
URBANA-CHAMPAIGN*