

## Registration

<i>Sign up for:</i>	<i>Price</i>
<input type="checkbox"/> Geotechnical Aspects of Earthquake Engineering (Two licenses of SHAKE2000 included) February 20-22, 2007	\$995.00
<input type="checkbox"/> Nonlinear Site Response Analysis (One license of D-MOD2000 included) February 23, 2007	\$500.00
<b>Total:</b>	_____

(Please write legibly. Use one form for each registrant. Use a photocopy for additional registrants)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
E-mail

**Method of Payment (Payment due on/or before February 9, 2007)**

- Check enclosed
- Bill Me

**Lodging:** A list of nearby hotels will be sent to registered participants prior to the short course. Please contact the hotels directly to make your reservations.

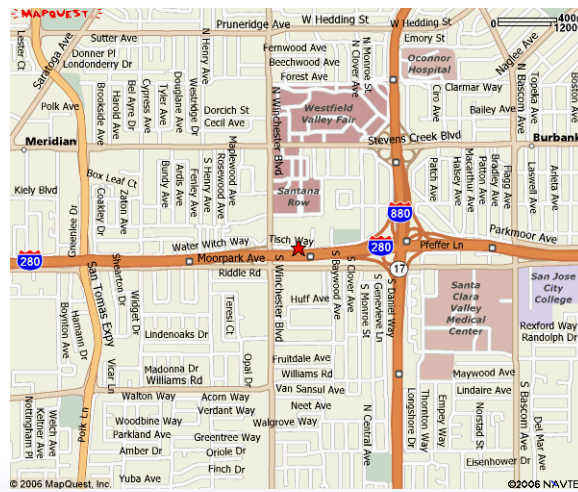
Please complete the above sign-up form and mail form and payment to:

**GeoMotions, LLC  
Attn. Gustavo A. Ordonez  
3640 Arbor Dr. SE  
Lacey, WA 98503**

Advanced registration and payment are required.  
Enrollment cutoff date: February 9, 2007  
Minimum enrollment: 20  
Maximum enrollment: 30  
A Waiting list will be developed

The short course will be held at

**National University  
San Jose Campus  
3031 Tisch Way, 100 Plaza East  
San Jose, CA 95128-2541**



Address Correction Required

**GeoMotions, LLC**  
3640 Arbor Dr. SE  
Lacey, WA 98503

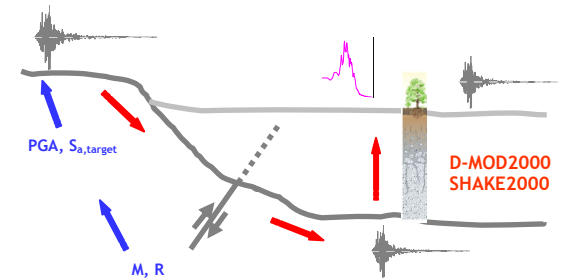
# Geotechnical Aspects of Earthquake Engineering

A three-day short course  
February 20-22, 2007

## Nonlinear Effective-Stress Site Response Analysis

An optional one-day short course  
February 23, 2007

San Jose, California



Presented by

**AmeriTech Engineering, Inc.  
Corvallis, OR  
GeoMotions, LLC  
Lacey, WA**

Telephone: (360) 491-5397  
E-mail: [training@geomotions.com](mailto:training@geomotions.com)  
Website: <http://www.geomotions.com>

## Geotechnical Aspects of Earthquake Engineering

### Why you should attend

Past Loma Prieta (M 6.9), Petrolia (M 7.2) and Northridge (M 6.7) earthquakes heightened public awareness of the seismicity of California. Our rapidly evolving understanding of the regional seismic environment is of particular concern to Civil Engineers who will be required to estimate ground motions for design earthquake events and address potential soil instability problems. Over the past 25 years the geotechnical engineering profession has made significant advances to develop methods to predict the likelihood of liquefaction and site-specific response spectra under earthquake loading conditions. In recognition of the need for the California Civil Engineering community to become familiar with the well-documented procedures that presently exist, AmeriTech Engineering and GeoMotions are pleased to present a Short Course entitled *Geotechnical Aspects of Earthquake Engineering*.

### Who needs to attend?

Our rapidly evolving understanding of the California seismic environment is of particular concern to project managers and engineers, particularly civil engineers, geotechnical engineers, geologists and geological engineers, who will be required to estimate ground motions for design earthquake events and address potential soil instability problems.

### What you'll learn in class

In the three-day short course you will learn about:

- Earthquakes: Causes, Magnitude and intensity, characterization of seismic environment, design earthquake, sources-zones, estimating rock motions for design purposes.
- Regional Seismicity: Principal sources, acceleration time histories associated with various source zones, and attenuation relations.
- Ground Motions During Earthquakes: Ground motion, response spectra, and influence of soil conditions.
- Dynamic Properties of Soils: Dynamic soil behavior, dynamic strength, determination of soil properties for ground response analysis.
- Modeling Philosophy: 1D→2D, SHAKE.
- Liquefaction: Laboratory investigation, analysis of soil liquefaction, liquefaction susceptibility maps.
- Seismic Slope Stability.
- Displacement: Newmark and Makdisi & Seed methods of displacement analysis.
- Design Spectrum based on Codes.

In the optional one-day short course on Nonlinear Effective-Stress Site Response Analysis you will learn about:

- When and how to use nonlinear effective stress analysis.
- How to conduct nonlinear and effective stress analyses using generic material parameters.
- How to evaluate nonlinear material parameters from published information.
- How to interpret and document the results of nonlinear and effective stress analyses.
- How to obtain regulatory approval for advanced analyses.

### Computer Software – Hands-on Training

The short courses include hands-on training on the use of **SHAKE2000** and **D-MOD2000**. These computer programs are Windows® based user-friendly versions of SHAKE and D-MOD\_2, respectively. These computer programs assist engineers, geologists and researchers with the analysis of site-specific response and the evaluation of earthquake effects on soil deposits. Registered participants in the three-day short course will receive two licenses of SHAKE2000. Registered participants in the one-day short course will receive one license of D-MOD2000. Computer facilities are available for the course. However, you may bring your own laptop for the hands-on software training sessions.

### Instructors

**Ted S. Vinson, Ph.D., P.E., G.E.**, is Professor Emeritus of Civil, Construction and Environmental Engineering at Oregon State University. Dr. Vinson holds B.S., M.S. and Ph.D. degrees from the University of California at Berkeley in Civil Engineering and has been a faculty member at OSU since 1976. He has served as a geotechnical, earthquake, cold regions, and environmental engineering consultant to a number of federal and state agencies and private consulting firms.

**Neven Matasovic, Ph.D., P.E., G.E.**, is an Associate with GeoSyntec Consultants, holds a Ph.D. degree in Geotechnical Engineering from the University of California, Los Angeles. He is a recipient of the 2001 Prakash Foundation Award for Excellence in Practice of Geotechnical Earthquake Engineering, co-author of the Federal Highway Administration (FHWA) guidance document on geotechnical earthquake engineering for highway facilities, and co-author of the Environmental Protection Agency guidance

document for seismic design of landfills.

**Gustavo A. Ordonez, P.E.**, received his B.S. in Civil Engineering from the University of San Carlos of Guatemala and his M.S. degree in Civil Engineering from Oregon State University. He has 16 years of professional experience with emphasis on the field of inspection of existing dams and on the evaluation of their static and seismic adequacy under current engineering standards.

### Registration:

1. The registration fee includes continental breakfast, break refreshments, box lunch, a binder with course materials, and software license.
2. Advance registration is required. Registration will be on a first-come/first-served basis. Space is limited to 30 participants.
3. Please e-mail your intention to enroll in the three-day and/or one-day course to **training@geomotions.com**. This will reserve you a place for two weeks, during which time we must receive your payment or your place will be opened up for someone else.
4. A \$100.00 handling fee will be deducted from refunds. If you are unable to attend, you may send another person in your place.
5. Fifteen PDHs will be given for completion of the three-day course. Five PHDs will be given for completion of the one-day short course.