

GeoMO 2011



Use of Waves for Soil Properties

May 6, 2011 | Butler-Carlton Hall

Join us May 6, 2011, for GeoMO 2011, as we discuss **Practical Applications of Waves to Measure Soil Properties; and Professional Issues Associated with Engineering Licensure** with guest lecturer, Dr. Vince Drnevich.

Guest Lecturer



Dr. Vince Drnevich received his B.S. and M.S. degrees in civil engineering from the University of Notre Dame and completed the Ph.D. degree at the University of Michigan. He was on the faculty at the University of Kentucky for 24 years where he progressed through the academic ranks, did a four-year term as Department Chairman, and served as acting Dean of Engineering for a year. In 1991, he was recruited by Purdue University as the Head of the School of Civil Engineering, a position he held until June 2000.

Dr. Vince Drnevich His research focuses on the engineering properties of soils and concrete, especially as measured by stress wave propagation and electromagnetic wave propagation. His earlier research focused on the development and use of the resonant column test and quasi-static torsional shear test to accurately measure soil properties. His work is the basis of an ASTM Standard D 4015-07 and he holds a patent on this technology. Since 1974, he has been president of Soil Dynamics Instruments, Inc., a firm which manufactures resonant column and torsional simple shear testing equipment.

Dr. Drnevich's recent research developed the Purdue TDR Method for water content and density determination of soil (ASTM Standard D 6780-05). Purdue holds five patents on this technology. Durham Geo/Slope Indicator Company has licensed the technology, which is now commercially available. He also has developed a vibratory hammer device for compacting granular soils. This allows for obtaining maximum densities and water contents for effective compaction from a single test (ASTM Standard D 7382-07).

Dr. Drnevich has been recognized for both his teaching and research by a number of national awards from the American Society of Civil Engineers, American Society for Testing and Materials, American Society for Engineering Education, and Chi Epsilon. In 2009, he was awarded the Diplomate of Geotechnical Engineering (D.GE) by the Academy of Geo-Professionals. He is a licensed professional engineer in Kentucky and Indiana.

Register online at
<http://geommo.mst.edu>

Who Should Attend?
Geotechnical Engineers,
GeoEnvironmental
Engineers and Civil
Engineers working in
roadway and pavement
engineering and
foundation design.

Registration Fee: \$150
Fee includes course notes and a luncheon.

Professional Development
Hours (PDHs)
Attendees will receive a certificate
awarding six PDHs.

Cancellation Policy
Missouri S&T reserves the right to cancel its programs in the event of insufficient registrations, instructor illness, severe weather, or natural disaster. In the event of cancellation, registrants will be notified immediately and all fees will be returned in full. Persons wishing to cancel their registrations must do so by close of business on April 29, 2011. Refunds will not be made after this date. Substitutions may be made at anytime.

Registration Contact
Distance and Continuing Education
Missouri University of
Science and Technology
216 Centennial Hall
300 W. 12th Street
Rolla, MO 65409
Phone: (573) 341-4200
Fax: (573) 341-4992
Email: dce@mst.edu

GeoMO 2011



Use of Waves for Soil Properties

May 6, 2011 | Butler-Carlton Hall

Register online at <http://geomo.mst.edu>

This year's GeoMO conference is an exceptional opportunity for you to network with fellow practicing engineers as well as geotechnical graduate students and faculty.

In addition, the conference provides:

- A Missouri forum for nationally recognized geotechnical experts
- Practical information designed to enhance the capabilities of practicing engineers
- Valuable Professional Development Hours (PDHs) at a reasonable cost
- A convenient venue maximizing interaction between practicing engineers

Conference Topics

Practical Applications of Waves to Measure Soil Properties

The sessions will include the use of vibratory hammer compaction method for granular soils, use of laboratory and field stress wave propagation methods to determine modulus of all soil types, and use of electromagnetic waves to assess water content and density of soils for compaction quality control. There are ASTM Standards for all of these methods and we will discuss how ASTM Standards are developed and maintained.

Professional Issues Associated with Engineering Licensure

Most practicing geotechnical engineers are licensed professional engineers and many states, including Missouri, require continuing education before PE Licenses can be renewed. In the last session, we will discuss engineering licensing laws and rules and will compare the continuing education rules of Missouri with those of surrounding states, each of which have slightly different rules.

Conference Sponsorship and Exhibit Opportunities

If your company or business is interested in helping sponsor this conference, please visit <http://geomo.mst.edu> for more details. Your firm's contribution will help ensure the financial success and perpetuation of this outstanding forum. In addition, your company's name will be displayed with the other sponsors at the conference. If you would like to exhibit, please contact dce@mst.edu or call (573) 341-4278, or go online for more information.

Conference Schedule

120 Butler-Carlton Civil Engineering Hall

8:30 – 9:00 a.m.
Arrival and Check-In
(120 Butler-Carlton Hall)

9:00 – 9:15 a.m.
Introduction and Overview

9:15 – 10:00 a.m.
Session I – Vibratory
hammer compaction
for granular soils

10:00 – 10:15 a.m.
Break

10:15 a.m. – 12:00 p.m.
Session II – Laboratory
and field stress wave
propagation methods to
determine modulus of soil

12:00 (Noon) – 1 p.m.
Lunch in Atrium

1:00 – 2:30 p.m.
Session III – Use of
electromagnetic wave
technologies to assess
water content and density
of soils for compaction
quality control

2:30 – 2:45 p.m.
Break

2:45 – 3:15 p.m.
Session IV – Development
and use of ASTM Standards
for geotechnical testing

3:15 – 4:30 p.m.
Session V – Professional
Engineering licensing laws
and rules for continuing
education

Civil, Architectural & Environmental Engineering

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY