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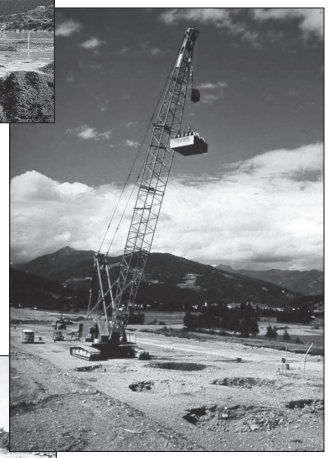
Soil Improvement: Technologies, Design, and Performance
December 11-12, 2006
www.cpe.vt.edu/sitdp/

Soil Improvement: Technologies, Design, and Performance

December 11-12, 2006

The Inn at Virginia Tech and Skelton Conference Center Blacksburg, VA

Vibro-Compaction



Deep Dynamic Compaction

Deep Soil Mixing

VirginiaTech

Sponsored by:
Virginia Tech
The Center for Geotechnical Practice and Research
Continuing and Professional Education

Soil Improvement: Technologies, Design, and Performance is a practical short course that covers a wide range of soil improvement technologies, including blast densification, compaction piles, deep dynamic compaction, vibro-compaction, vibro-stone columns, deep soil mixing, permeation grouting, compaction grouting, jet grouting, gravel drains, electro-osmosis, freezing, and heating. Technology applicability, degree of improvement, design, performance, and QA/QC are all addressed. Seismic applications are emphasized.

This course is designed to answer common questions about soil improvement such as:

- Is ground improvement necessary?
- If ground improvement is necessary, what methods are available?
- How is ground improvement designed?
- What are QA/QC requirements for improved ground?
- What has been the performance of improved ground?
- How effective is soil improvement for seismic mitigation?
- How can soil improvement modify NEHRP/IBC Site Classification?

Who should attend? Engineering staff from project level engineers through senior level managers who wish to expand and refresh their knowledge of a wide range of soil improvement technologies, including technology selection and design.

What you'll receive: 14 hours of instruction, course handouts, refreshments, lunch, 1.4 CEUs.

For More Information

For further technical information about the short course, contact Lisha Farrier at phone (540) 231-5052, or e-mail: *lfarrier@vt.edu*. For all other information, please contact Holly McCall Williams (540) 231-2188.

About the Speakers

James K. Mitchell

Jim Mitchell obtained his B.S. in Civil Engineering from Rensselaer Polytechnic Institute and M.S. and Sc.D. degrees, also in C.E., from Massachusetts Institute of Technology. He served on the faculty in Civil Engineering at the University of California, Berkeley from 1958 to 1993, and was Chairman of the Department there from 1979-1984. He joined the faculty at Virginia Tech in 1994 and retired as University Distinguished Professor, Emeritus in 1999. He remains active in research and consulting, with a focus on soil stabilization and ground improvement, soil properties and behavior, geotechnical earthquake engineering, and environmental geotechnics.

George M. Filz

George Filz obtained B.S. and M.S. degrees in Civil Engineering from Oregon State University and his Ph.D. degree, also in Civil Engineering, from Virginia Tech. Dr. Filz worked in private engineering practice for eight years, and he has been a member of the geotechnical engineering faculty at Virginia Tech for the last 14 years. He conducts research and provides consulting services in soil improvement, foundation engineering, and environmental geotechnics. Recent work has focused on the deep mixing method and geosynthetic-reinforced, column-supported embankments.

James R. Martin, II

James Martin has B.S. degree from The Citadel, and M.S. and Ph.D. degrees from Virginia Tech. Dr. Martin specializes in the area of geotechnical earthquake and foundation engineering, and soil and site improvement. Areas of expertise include site response analysis and soil effects on ground motions, liquefaction, probabilistic seismic hazard assessment, ground treatment for mitigation of seismic damages, and numerical modeling. He is active in earthquake hazard assessment studies in the eastern and central US, and has been closely involved with the transfer of seismic engineering technology to the region and development of building codes. Martin is an active civil engineering consultant, and has worked on more than 65 major civil projects for more than 50 different private and public organizations.

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Agenda

Day One (8AM – 5PM)

- Introduction and overview of methods
- Explosive compaction
- Blast densification
- Compaction piles
- Deep dynamic compaction
- Vibro-compaction
- Vibro-stone columns
- Deep soil mixing

Day Two (8AM – 3PM)

- Permeation grouting
- Compaction grouting
- Jet grouting
- Gravel drains
- Electo-osmosis
- Freezing and heating

Visit *www.cpe.vt.edu/sitdp/* for a detailed course agenda

Location and Lodging

The short course will be held at The Inn at Virginia Tech and Skelton Conference Center on the Virginia Tech Campus. A block of discounted lodging rooms is being held at The Inn at Virginia Tech at a special rate of $99 plus tax for a single or $119 plus tax for a double lodging room. The rooms are reserved and available at this rate until **November 10, 2006**. To reserve please call (540) 231-8000 or 1-877-200-3360 and mention the name of the short course. Free parking will be provided.

Registration Information

The registration fee is $950 ($475 for employees of CGPR member firms). Please complete the attached form and return to the Conference Registrar by **November 10, 2006**. You may also register online at: *www.cpe.vt.edu/sitdp/*.

Note: Payment of registration fees is required prior to program attendance. Registration will be processed when payment is received. **Refund Policy:** Requests for refunds will be honored when received seven calendar days prior to the program. However, another person may be substituted at any time for this program. A $75 administrative fee will be deducted for cancellations. In the unlikely event that this program is cancelled or postponed due to insufficient enrollments or unforeseen circumstances, the university will fully refund registration fees but cannot be held responsible for any other expenses, including cancellation or change charges assessed by airlines, hotels, travel agencies, or other organizations.

For weather or disaster-related program cancellation or postponement information, please call 540-231-9489.

Registration

Soil Improvement: Technologies, Design, and Performance

December 11-12, 2006 ■ Blacksburg, VA

Please print or type—complete a separate form for each participant or register online at: **www.cpe.vt.edu/sitdp/.**

Name _____

Title _____

Company _____

Company's FID No.* _____

Address _____

City _____

State _____ Zip _____

Daytime Phone No. _____

Fax No. _____

E-mail _____

Signature _____

Registration Fee: Registration will be processed when payment is received.

☐ Non-member–$950

☐ CGPR Member–$475

Method of Payment:

☐ Check enclosed. Make checks payable to:
Treasurer, Virginia Tech, CE

☐ MasterCard ☐ VISA ☐ Amex Exp. Date _____

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Return by **November 10, 2006** (no staples, tape, or paper clips, please) to:

Conference Registrar
Continuing and Professional Education
Virginia Tech, Mail Code 0272
702 University City Boulevard
Blacksburg, VA 24061
Phone (540) 231-5182
Fax (540)231-3306 (for credit card registrations only)

*FID number necessary to process a refund payable to a company, agency, or government agency.

The information you provide is subject to the Freedom of Information Act guidelines.

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