

Name _____ Title _____
Organization _____
Address _____
Day Phone _____ Fax _____ Email _____
Attendee Type: _____ Professional (\$100) _____ Professional (\$125) _____ Exhibitor (\$300) _____ Full-time Student (Free)
by June 15th After June 15, Cash or check only

Payment information

_____ Check or money order made payable to RTI is enclosed.

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5th Annual Technical Forum

GEOHAZARDS IN TRANSPORTATION IN THE APPALACHIAN REGION

Sponsored by:



Nick J. Rahall, II

&

Center for Environmental, Geotechnical and Applied Sciences

August 3-4, 2005
Charleston, WV

www.marshall.edu/rti
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Appalachian Coalition

Chair: Dr. Tony Szwilski, P.E.

Co-Chair: Kirk Beach

Geohazards in Transportation Focused in the Appalachian Region

The 5th Annual Technical Forum, an activity of the Appalachian States Coalition for Geohazards in Transportation, is sponsored by the Nick J. Rahall, II Appalachian Transportation Institute (RTI) and the Marshall University Center for Environmental, Geotechnical and Applied Sciences (CEGAS).

RTI, a United States Department of Transportation University Transportation Center, was established at Marshall University by the United States Congress in the Transportation Equity Act for the 21st Century June 8, 1998. The grant includes four partner schools in southern West Virginia.



CEGAS was established in May 1993 at Marshall University with support from Congressman Nick J. Rahall, II and the United States Army Corps of Engineers.

The goal of the center is to forge close relationships among the business community, higher education institutions, and government agencies, in technology-based endeavors.

CEGAS conducts research, development and science projects in environmental management, geotechnical emergency and information technology.

Registration Information

Please register by Wednesday, June 15, 2005 to receive the discounted rate.

Cost: \$100 - Professionals
FREE - Students
\$125 - on site or after June 15, 2005
\$300 - Exhibitors

Questions? Please contact Barbara Roberts, RTI Program Coordinator:

Phone: (304) 696-7103
Fax: (304) 696-6099
Email: robertsb@marshall.edu
Mail: P.O. Box 5425
Huntington, WV 25703

To register online, visit www.marshall.edu/rti.

To register by phone, contact Sandra Jones at (304) 696-7098

A block of rooms is reserved at Embassy Suites Hotel, 300 Court Street, Charleston, W.Va., under Geohazards in Transportation for the special rate of \$99 per night. Please call 1-304-347-8700 to reserve a room at this special rate by **July 11th**. The conference will take place in this facility.



Exhibitor Information

Exhibiting is an excellent opportunity for your organization to display its recent achievements and network with transportation professionals. It also provides an unprecedented source of advertisement. Many companies have capitalized on this opportunity and attribute this conference for increasing their business.

The exhibitor registration fee is \$300.

This fee includes:

- (2) Full registrations
- (1) 2 X 8' skirted table display
- (1) Lunch
- (2) Continental Breakfasts



Interested exhibitors should contact Teresa Buckland at (304) 696-5453 or buckland@marshall.edu.



The Appalachian states are tied by common geographical and geological challenges.

Multi-modal transportation in the Appalachian Region is essential for economic development. The coalition includes members from Kentucky, Ohio, West Virginia, Pennsylvania, Virginia, Maryland, Tennessee, Florida and North Carolina, U.S. Geological Survey, the United States Army Corps of Engineers, CSXT and Norfolk Southern Corporation.

This grassroots organization's objectives include sharing of resources and information, exchange of methodologies and experiences, and collaboration on geologic projects and research activities.

It is an exciting prospect to work with federal, state and private entities faced with prevention, correction or remediation of similar geologic problems in the Appalachian region.



Tentative Agenda

DAY ONE

Opening Session 9:45 a.m. Room A

Managing the Engineering Challenges of a State Highway System: Keeping the Emphasis Where It Needs to Be.

Sam Beverage, State Highway Engineer, Kentucky Transportation Cabinet

1. GIS: A Versatile Planning Tool

Chair: Jane McColloch (WVGS)

2. GIS-Based Coal Resource Maps as Infrastructure Development Planning Tools

Nick Fedorko, West Virginia Geological and Economic Survey

3. Using GPS and GIS for Erosion Abatement Control, Lambert Run Mine Site, WV

John Ferguson, USACE

4. Surficial Geologic Maps for Geotechnical Audiences

William M. Andrews, Kentucky Geological Survey

Lunch 12 p.m.

Session 1: Blasting Techniques and Geohazard Implications 1 p.m. Room A

Chair: Steve Brewster (USACE)

1. Wall Control Procedures in Weak Sedimentary Rock

Calvin J. Konya, Precision Blasting Services

2. Difficulties and Suggestions When Drilling and Blasting in a Karst Environment

James T. Ludwiczak, Blasting and Mining Consultants

3. A New Era of Tunnel Blasting: Electronic Initiators and Geohazard Reduction

Douglas A. Anderson, Parsons Brinkerhoff, Philadelphia

Coffee Break 3 p.m.

Session 2: Geohazard Inventories and Assessment 3:30 p.m. Room A

Chair: John Stanton (USACE)

1. Geotechnical Management Systems: Data Standards

Thomas Leftchik, FHWA, Kirk Beach, ODOT

2. Geohazard Assessment for Highway Planning: The Karst Factor

Dominick Amari, AGE Designs, Inc.; Daniel Hurst, AMEC Earth and Environmental, Inc.; Harry Moore, TDOT

3. Rockfall Hazard Inventory Development and Maintenance: A 20 Year Perspective

Michael Vierling, New York State Thruway Authority; Richard Cross, & Peter Ingram, Golder Associates, Inc.

4. Development of Landslide Susceptibility Map for the County of Summit, OH

Joseph Troxell, Michael Krokonko, Gannett Fleming; David Gilbert, Geodecisions

Session 3: Seismic Issues and Tunneling Challenges 1 p.m. Room B

Chair: John Kiefer (KGS)

1. Seismology Research at KGS: Ground Motion Issues for Design Purposes

John Kiefer, Kentucky Geological Survey

2. Soft Ground Tunneling Through Contaminated Groundwater

Nasri Munfah, Parsons Brinckerhoff, New York

3. Applies Seismology and Implications on Highway Planning.

Earnest C. Hauser, Wright State University

Coffee Break 3 p.m.

Session 4: Innovations 3:30 p.m. Room B

Chair: John Bargo (FHWA)

1. Glenwood Canyon Rockfall

Barry D. Siel, FHWA

2. Public-Private Partnerships: The West Virginia Experience

YuVonne Cantrell, Henry Compton & Ron Krofcheck, FHWA

3. Old Mines Require New Thinking

Tomas E. Leftchik, FHWA

Adjourn 5:30 p.m.

DAY 2

Session 5: Rock and Soil Reinforcement 8 a.m. Room A

Chair: Steve Brewster (USACE)

1. Use of Launched Soil Nails to Stabilize Landslides in Summitt County, OH
Mitchell Weber, Gannett Fleming Engineers and Architects; Greg Bachman, Summit County; Robert Barrett, Soil Nail Launcher, Inc.

2. Landslide Stabilization Using Micropiles, State Route 837 in Washington County, PA.

James R. James, Gannett Fleming, Inc.

3. A Design Model for Pile Walls Used to Stabilize Landslides

Tia Maria Richardson, Fairmont State University, WV

Coffee Break 10 a.m.

Session 6: Geotechnical Design and Construction 10:30 a.m. Room A

Chair: Kirk Beach, ODOT

1. The Industrial Parkway: So You Want to Build a Road in Mine Spoils

Scott Murray & Mark Litkenhus, Foster, Mossbarger, Scott & May Engineers, Inc.

2. Geotechnical Design and Construction of the Pittsburgh Interchange: Ancient Landslides, Rock Bolts, Soil Nails and Geogrids, Oh My!

Paul Hale, Brian Heinzl, Gannett Fleming, Inc.

3. Drilled Shafts for Bridge Foundation Stability Improvement, Ohio 833 Bridge Over the Ohio River.

Stan Harris, Eric Kistner, Foster, Mossbarger, Scott and May Engineers, Inc.

4. Abutment Site Evaluation for Proposed Corridor H Bridge

Kamal Shaar, Bob Barclay, Doug Voegelé, James Wang, H.C. Nutting Company

Closing Remarks 12:30 p.m.