

68th Annual Highway Geology Symposium (HGS 2017)

Better Highways Through Applied Geology

Marietta, Georgia, USA
1-4 May 2017

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At-A-Glance Schedule of Events

Monday, May 1 – Thursday, May 4, 2017

Monday, May 1

11:00 AM – 5:00 PM

Highway Geology Symposium Registration Open in front of Meeting Room

1:00 PM – 4:00 PM

**Transportation Research Board Technical Session:
“State-of-the-Art Practices in Subsurface Investigations”**

Location: Cole Room (Downstairs)

5:00 PM – 8:30 PM

Highway Geology Symposium Exhibitor Area Open

6:30 PM – 8:30 PM

Ice Breaker Social—Sponsored by BGC Engineering

Location: Joe Mack Wilson (JMW) Foyer and Exhibitor Area

Tuesday, May 2

6:30 AM – 9:00 AM

Breakfast

Location: JMW Foyer

6:30 AM – 5:00 PM

Highway Geology Symposium Registration Open in JMW Foyer

8:00 AM – 5:00 PM

Highway Geology Symposium Exhibitor Area Open

7:30 AM – 8:30 AM

Welcome and Opening Remarks

Deana Sneyd, HGS Organizing Committee Chair

Dedication of Proceedings (Pete Ingraham)

Monica Flourney, Georgia Department of Transportation State Materials and Testing Engineer

Dr. Tim Chowns, PG, Professor Emeritus, University of West Georgia

Location: JMW Ballroom

Highway Geology Symposium Guest Field Trip to Helen and Winery

8:30 AM – 4:30 PM

Field trip transportation sponsored by Maccaferri

Pick-up Location: Hotel Front Lobby

Tuesday, May 2 cont.

Technical Session 1 – Young Authors

Location: JMW Ballroom

Chris Ruppen, Moderator

8:30 AM – 8:50 AM

Flexible Rockfall Mitigation Design for Varying Site Conditions

Author(s): Mallory A. Jones, James Roth, and Kevin Wiesman

8:50 AM – 9:10 AM

Results of Tests to Evaluate the Tensile Strength and the Load Bearing Capacity of Rockfall Nets According to New ISO Standards

Author(s): Luca Gobbin, Giorgio Giachetti, Alberto Grimod, and Ghislain Brunet

9:10 AM – 9:30 AM

Construction of Transportation Infrastructure in Weathered Volcanic Ash Soils

Author(s): James M. Arthurs, Devin Dixon, and Khamis Y. Haramy

9:30 AM – 9:50 AM

Application and Cost Analysis of TDA for Slope Stability

Author(s): Matthew Kraus

9:50 AM – 10:10 AM

Design-Build Success: A Multi-Use Recreational Trail with Minimal Subsurface Investigation

Author(s): Sara E. Hansen

10:10 AM – 10:40 AM

Morning Coffee Break—Sponsored by Hayward Baker

Location: JMW Foyer and Exhibitor Area

10:40 AM – 11:00 AM

Geosynthetically Confined Soil Walls for Roadway Reclamation

Author(s): Walter Turnbull

11:00 AM – 11:20 AM

Emergency Landslide Stabilization and Roadway Repair, Otsego Co. NY

Author(s): Eric List

11:20 AM – 11:40 AM

Seismic Refraction Tomography for Post-Flooding Roadway Reconstruction Design

Author(s): Miriam Moller and Todd Schlittenhart

11:40 AM – 12:00 PM

Marina Fire Rockfall Protection: A Rapid, Practical Response

Author(s): Simon P. Boone and John D. Duffy

12:00 PM – 1:00 PM

Lunch—Sponsored by Ameritech Slope Constructors

Location: JMW Foyer and Exhibitor Area

Tuesday, May 2 cont.

Technical Session 2

Location: JMW Ballroom

Pete Ingraham, Moderator

1:00 PM – 1:20 PM

Advances in Highway Petrography

Author(s): Steven Stokowski, Stephen Lane, and Brian Wolfe

1:20 PM – 1:40 PM

Low Deflection Kevlar®-Reinforced Gabion Rockfall Protection Embankments

Author(s): Dave Cheer and Adrian Koe

1:40 PM – 2:00 PM

Design and Construction of a Temporary Rockfall Mitigation System at the Bellwood Quarry Reservoir Tunnel, Phase 1 Water Supply Program, Atlanta GA

Author(s): David J. Scarpato, Nick Strater, and Brandon Manahan

2:00 PM – 2:20 PM

Rockfall Mitigation at the Pillar Mountain Slide, Kodiak, Alaska

Author(s): Eric C. Cannon, Wesley Ashwood, Paul Schlotfeldt, and John Thornley

2:20 PM – 2:50 PM

Afternoon Break—Sponsored by IDS Corporation

Location: Exhibitor Area

Technical Session 3

Location: JMW Ballroom

Bob Henthorne, Moderator

2:50 PM – 3:10 PM

Rockfall Forecasting: A Reliability-Based Approach

Author(s): Michael F. George, Cole Christiansen, Ryan Kromer, and Jean Hutchinson

3:10 PM – 3:30 PM

Coal Mine Subsidence Below Streets, Highways and Public Buildings: A Special Concern for Southwest Indiana

Author(s): Terry R. West

3:30 PM – 3:50 PM

A Legacy of Value Added – Long-Term Contributions of the Highway Geology Symposium

Authors: Pete Ingraham, Harry Moore, Jeff Dean, and John D. Duffy

3:50 PM – 4:10 PM

Emergency Response: Fossil Cut Rockslide Investigation and Repair, BNSF Spokane Subdivision, WA

Author(s): Dale Moore and Thomas Pallua

Tuesday, May 2 cont.

4:15 PM – 4:45 PM

Highway Geology Symposium Field Trip Preview

Presenters: Randy Kath

Location: JMW Ballroom

ITINERARY- REPURPOSING AN AGGREGATE QUARRY FOR RAW WATER STORAGE IN METRO-ATLANTA & THE ORIGIN OF BARITE AT THE EMERSON MINE, CARTERSVILLE MINING DISTRICT

STOP 1. BELLWOOD QUARRY. RANDY KATH, ADAM BEDELL, WAYNE WARBURTON, AND DAVID SCARPATO

STOP 2. BUZZI UNICEM USA MARQUETTE CEMENT PLANT. RANDY KATH AND JOE STIKA

STOP 3. COOPER FURNACE, OCOEE SUPERGROUP, AND ALLATOONA DAM. RANDY KATH AND RUSTY SIMMONS

STOP 4. NEW RIVERSIDE OCHRE'S EMERSON, GEORGIA, BARITE MINE. STAN BEARDEN AND RANDY KATH

FIELD TRIP OVERVIEW

by: Deana S. Sneyd and Randy L. Kath

FIELD TRIP PHYSIOGRAPHY

by: Randy L. Kath and Deana S. Sneyd

GENERAL HISTORY OF METROPOLITAN ATLANTA: HUB OF THE SOUTH

by: Deana S. Sneyd and Randy L. Kath

FIELD TRIP SPONSORS

Enjoy the trip!

GEOLOGIC CHARACTERIZATION ALONG THE CITY OF ATLANTA RAW WATER TUNNEL ALIGNMENT, FULTON COUNTY, GEORGIA

by: Randy L. Kath

ATLANTA'S LATEST MEGA-TUNNEL

by: Adam Bedell, Tao Jiang, Wayne Warburton, Konner Horton, Don DelNero, and Brian Jones

DESIGN AND CONSTRUCTION OF A TEMPORARY ROCKFALL MITIGATION SYSTEM AT THE BELLWOOD QUARRY RESERVOIR TUNNEL, PHASE I WATER SUPPLY PROGRAM, ATLANTA, GEORGIA

by: David J. Scarpato, Nick H. Strater, and Brandon Manahan

A REVIEW OF ORE DEPOSITS IN THE CARTERSVILLE DISTRICT, BARTOW COUNTY, GEORGIA, INCLUDING RELATED DEPOSITS IN POLK AND FLOYD COUNTIES

by: Timothy Chowns and Randy Kath

5:00 PM – 6:30 PM

HGS Steering Committee Meeting

Location: Cole Room (Downstairs)

Free evening to explore and dine in Marietta

Wednesday, May 3

6:00 AM – 7:00 AM

To-Go Continental Breakfast—Sponsored by Vulcan

Location: Hotel Front Lobby

Highway Geology Symposium Field Trip

6:45 AM – 7:15 AM

Load buses for Field Trip

Pick-up Location: Meet in Hotel Front Lobby

7:15 AM – 5:00 PM

Field Trip

Coffee and Pastries—Sponsored by Scarptec

Lunch—Sponsored by GeoBrugg

Afternoon Beverages—Sponsored by Golder Associates

(NO GLASS ALLOWED INSIDE BUSES)

5:30 PM – 6:30 PM

Highway Geology Symposium Social Hour—Sponsored by Access Limited Construction

Location: JMW Ballroom

Highway Geology Symposium Banquet Dinner

6:30 PM – 9:30 PM

Keynote Address by Dr. Scott Hippensteel:

Geoarchaeology and the Secrets of the Civil War Submarine “H.L. Hunley”

Location: JMW Ballroom

Thursday, May 4

6:30 AM – 9:00 AM

Breakfast

Location: JMW Foyer and Exhibitor Area

8:00 AM – 2:00 PM

Highway Geology Symposium Exhibitor Area Open

Exhibitors can break down after morning coffee break

Technical Session 4

Location: JMW Ballroom

Steve Sweeney, Moderator

7:30 AM – 7:50 AM

Investigation, Design and Mitigation of a Highwall Rock Slope in Southwest, Virginia

Author(s): Jay Smerekanicz, Pete Ingraham, Stuart Gitchell, Andrew Salmaso, and Bob Lyne

7:50 AM – 8:10 AM

Development of Design Method for Rockfall Attenuators

Author(s): Duncan Wyllie, Tim Shevlin, James Glover, and Corinna Wendeler

8:10 AM – 8:30 AM

Design-Built Semi-Rigid Rockfall Barrier on U.S. Routes 11/15 in Perry County, Pennsylvania

Author(s): William K Petersen, Giorgio Giacchetti, Ghislain Brunet, and Lucas Maben

8:30 AM – 8:50 AM

Augercast Landslide Stabilization in Potomac Clays

Author(s): Thomas Monaco and Erik Schuller

8:50 AM – 9:10 AM

Improved Geophysical Imaging for Engineering and Infrastructure Projects Using Multi-Electrode Resistivity Implant Technique (MERIT) Case Studies in Florida

Author(s): David Harro

9:10 AM – 9:30 AM

Atlanta's Latest Mega-Tunnel

Author(s): Adam Bedell, Tao Jiang, Wayne Warburton, Konner Horton, Don Del Nero, and Brian Jones

9:30 AM – 10:00 AM

Morning Coffee Break—Sponsored by S&ME

Location: JMW Foyer and Exhibitor Area

Thursday, May 4 cont.

10:00 AM – 10:20 AM

An Example of Risk-Based Geotechnical Asset Management

Author(s): Scott Anderson, Mark Vessely, and Ty Ortiz

10:20 AM – 10:40 AM

Montana's Rock Slope Asset Management Program (RAMP)

Author(s): Darren Beckstrand, Aine Mines, Brent Black, Jeff Jackson, Bret Boundy, Scott Helm, David A. Stanley, and Paul D. Thompson

10:40 AM – 11:00 AM

Foothills Parkway: Micropiles Support Closing the Missing Link

Author(s): Anthony Sak

11:00 AM – 11:20 AM

"Stub Pier" Stabilization Performance

Author(s): Swaminathan Srinivasan and Jess A. Schroeder

11:20 AM – 11:40 AM

Information Modeling Workflows for Using Geotechnical Data in Civil Engineering

Author(s): Nicolas Loubier and Katie Aguilar

11:40 AM – 12:00 PM

Road Widening in Creep-prone Bituminous Sandstone

Author(s): Gresham D. Eckrich and Jerko Kocijan

12:00 PM

Closing Remarks and Adjournment

Travel safely; we'll see you next year in Maine



