



## At a Glance Schedule of Events

**69<sup>th</sup> Highway Geology Symposium**  
**Portland, Maine**  
**September 10-13, 2018**

### *Monday, September 10*

11:00 AM – 5:00 PM

**Highway Geology Symposium Registration Open in Hotel Lobby**

1:00 PM – 5:00 PM

**Transportation Research Board Technical Session: “Geotechnical Asset Management: Implementation of Programs and Advances in Technology”**

Location: Massachusetts

5:00 PM – 8:30 PM

**Highway Geology Symposium Exhibitor Area Open**

Location: Vermont/Connecticut/Rhode Island

5:00 PM – 6:15 PM

**HGS National Steering Committee Meeting**

Location: New Hampshire

6:30 PM – 8:30 PM

**Ice Breaker Social—Sponsored by BGC Engineering and Hager-Richter Geoscience, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

### *Tuesday, September 11*

6:30 AM – 9:00 AM

**Continental Breakfast —Sponsored by Terracon Consultants, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

6:30 AM – 5:00 PM

**Highway Geology Symposium Registration Open in Hotel Lobby**

8:00 AM – 5:00 PM

**Highway Geology Symposium Exhibitor Area Open**

## ***Tuesday, September 11(continued)***

7:30 AM – 8:10 AM

### **Welcome and Opening Remarks**

*Krystle Pelham, HGS Organizing Committee Chair*

*Dedication of Proceedings - John Pilipchuk*

*Joyce Taylor, P.E., Chief Engineer, Maine Department of Transportation*

Location: Massachusetts/New Hampshire

## **Highway Geology Symposium Guest Field Trip “Experience Portland History”**

9:30 AM – 2:00 PM

**Guest Field trip Lunch sponsored by Atlas Pipe Piles**

Pick-up Location: Hotel Front Lobby

## **Technical Session 1**

**Location: Massachusetts/New Hampshire**

*Chris Ruppen, Moderator*

8:10 AM – 8:30 AM

### **Young Author Presentation: Assessment and Mitigation Process for Bridge Foundation Reuse – Case Study**

Authors: James Arthurs, Khamis Haramy

8:30 AM – 8:50 AM

### **Young Author Presentation: Combined Rock Slope Failure Mode Analysis and Mitigation in Fairlee Vermont**

Author: Erik Friede

8:50 AM – 9:10 AM

### **Young Author Presentation: Geotechnical Challenges for Bridge Foundation & Roadway Embankment Design in Peats and Deep Glacial Lake Deposits**

Author: Brian Felber

9:10 AM – 9:30 AM

### **Young Author Presentation: Slope Stability Analysis for TH53 Relocation, Virginia, MN**

Authors: Anya Brose, Gary Person, Lee Petersen, Andrew Shinnfield, Ryan Peterson, Luigi Cotesta, Derrick Dasenbrock

9:30 AM – 9:50 AM

### **Young Author Presentation: Innovative Socketed Pile for Accelerated Bridge Construction in Naples, Maine**

Authors: Blaine Cardali, Andrew Blaisdell, Christopher Snow, Laura Krusinski, Garrett Gutafson

9:50 AM – 10:10 AM

### **Young Author Presentation: Design and Construction Considerations for Innovative Rockfall Protection Systems**

Authors: Robert Huber, Martin J. Woodward

## ***Tuesday, September 11(continued)***

10:10 AM – 10:40 AM

**Morning Coffee Break—Sponsored by Haley and Aldrich, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

10:40 AM – 11:00 AM

**Young Author Presentation: Laboratory Investigations of the Oldest Concrete Pavement in America – Applied Geology in Civil Engineering**

Author: Blake Lemcke

11:00 AM – 11:20 AM

**Young Author Presentation: From Field Data Collection to Soils Analysis in A Few Mouse Clicks – Going (Even More) Digital at North Dakota DOT**

Authors: Jesse Greenwald, Colter Schwagler

11:20 AM – 11:40 AM

**PhotoMonitoring of Landslides**

Authors: Paolo Caprossi, Paolo Mazzanti

11:40 PM – 1:00 PM

**Lunch—Sponsored by Ameritech Slope Constructors, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

## **Technical Session 2**

**Location: Massachusetts/New Hampshire**

*Pete Ingraham, Moderator*

1:00 PM – 1:20 PM

**Rattlesnake Hills Landslide: Overview and Monitoring**

Authors: George Machan, Charlie Hammond

1:20 PM – 1:40 PM

**Adding Another Dimension to Rock Cut Slope Evaluations: Looking Out as Well as Up**

Authors: Chris, Ruppen, Don Gaffney, Joel Borrelli

1:40 PM – 2:00 PM

**Practical Aspects of Using Structure from Motion Photogrammetry Techniques for Characterizing and Monitoring of Rock Slopes**

Authors: Randy Post, Roger Pihl, Alex Brown, Ty Ortiz

2:00 PM – 2:20 PM

**The use of Google Earth/ Google Street View Combined with High Resolution Digital Surface Models (DSMs) for Rockfall Hazard Rating**

Author: Yonathan Admassu

2:20 PM – 2:40 PM

**Application of High-Speed Photogrammetry for Rock Cut Assessment**

Authors: Angus MacPhail, Dave Gauthier, D. Jean Hutchinson

***Tuesday, September 11(continued)***

2:40 PM – 3:00 PM

**3-D Geo-View of Subsurface Conditions for Rapid Roadway Stability Assessment**

Author: Joel Daniel

3:00 PM – 3:30 PM

**Afternoon Break—Sponsored by Hager-Richter Geoscience, Inc. and Gilson Company, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

**Technical Session 3**

**Location: Massachusetts/New Hampshire**

*Bob Henthorne, Moderator*

3:30 PM – 3:50 PM

**What are the Benefits of Geotechnical Data Interchange?**

Author: Scott L. Deaton

3:50 PM – 4:10 PM

**Geotechnical Solutions for the I-95 Betsy Ross Bridge Interchange Structure Alternatives over Soft Soils in Spaghetti Junction**

Authors: Sarah McInnes, Geoff Stryker, John Pizzi

4:10 PM – 4:30 PM

**Risk Assessment for Landslides on the Last Chance Grade, Crescent City, California**

Authors: Scott Anderson, Cole Christiansen, Dave Gauthier, Sebastian Cohen

4:30 PM – 4:50 PM

**Landslide Applications of the Geotechnical Observational Approach**

Authors: George Machan, Wade Osborne, Chris Carpenter, Charles M. Hammond, Philip Wurst

4:50 PM – 5:20 PM

**Highway Geology Symposium Field Trip Preview**

Presenter: Bob Marvinney

Location: Massachusetts/New Hampshire

***Free evening to explore and dine in the Old Port***

## ***Wednesday, September 12***

6:00 AM – 7:00 AM

**To-Go Continental Breakfast—Sponsored by Maccaferri, Inc. and Precision Blasting Services**

Location: Highway Geology Symposium Registration Area

### **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**

**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: Vermont/Connecticut/Rhode Island (Exhibitor Area)

### **Highway Geology Symposium Banquet Dinner**

6:30 PM – 9:30 PM

**Highway Geology Symposium Banquet Keynote Speaker —Sponsored by IDS GeoRadar  
Entertainment by Tim Sample:**

Location: Massachusetts/New Hampshire

## ***Thursday, September 13***

6:30 AM – 9:00 AM

**Continental Breakfast—Sponsored by Scarpotec, Inc. and Rocscience, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

8:00 AM – 10:00 AM

**Highway Geology Symposium Exhibitor Area Open**

*Exhibitors can break down after morning coffee break*

### **Technical Session 4**

**Location: Massachusetts/New Hampshire**

*Steve Sweeney, Moderator*

7:30 AM – 7:50 AM

**Soil Mixing: An Innovative Solution for Resiliency in a Flood-Prone Canyon**

Author: Todd Schlittenhart

***Thursday, September 13 (continued)***

7:50 AM – 8:10 AM

**Innovative Use of Horizontal Directional Continuous Rock Coring For The Design of The LSIORB East End Tunnels**

Author: Craig S. Lee

8:10 AM – 8:30 AM

**Geotechnical Seismic Design in New England**

Author: Craig Coolidge

8:30 AM – 8:50 AM

**Geotechnical risks from abandoned coal mines to transportation infrastructure and mitigation – an overview**

Authors: David Knott, Athena Livesey, Robert Kingsland, Thomas Lefchik, Elizabeth Dwyre

8:50 AM – 9:10 AM

**Icefall Hazard Predictive Indicators + Mitigation Techniques – Results Of A 3-YR. Research Study In Alaska**

Authors: David J. Scarpato, Matt Murphy

9:10 AM – 9:30 AM

**Rock Slope Scaling Investigative Approach and Volume Estimation Method**

Author: John Duffy

9:30 AM – 10:00 AM

**Morning Coffee Break—Sponsored by HI-TECH Rockfall Construction, Inc.**

Location: Vermont/Connecticut/Rhode Island (Exhibitor Area)

10:00 AM – 10:20 AM

**What Were We Thinking A case History of Extreme Slope Scaling in Washington**

Authors: Marc Fish, Jim Struthers, Mike Mullhern

10:20 AM – 10:40 AM

**Slope Access Safety Evaluation (SASE) Form**

Author: William CB Gates

10:40 AM – 11:00 AM

**Rockfall in New Jersey: A Proactive and Collaborative Approach**

Authors: Amber B. Granger, John Jamerson, Scott J. Deeck, Edward M. Zamiskie Jr.

11:00 AM – 11:20 AM

**Development of a Modular Rockfall Protection Wall to Mitigate Earthquake-Induced Slope Hazards Along a Coastal Transportation Corridor**

Authors: Rori Green, Cedric Lambert, Charlie Watts, Daniel Kennett, Eric Ewe, Emerson Ryder, Michal Tutko

11:20 AM – 11:40 AM

**Rock Slope Remediation at the Penobscot Narrows Bridge**

Authors: Bryan C. Steinert, Amber Granger, Laura Krusinski, Wayne Chadbourne

***Thursday, September 13 (continued)***

11:40 AM – 12:00 PM

**Advantages of Using A Downhole Optical Televiewer For Rock Cut Slope Design—An Example In Central Pennsylvania**

Authors: Jeremy Robinson, Andrew Smithmyer

12:00 PM – 12:20 PM

**Design of Pinned Drapery Systems for Rockfall Protection**

Author: Mike Koutsourais

12:20 PM

**Closing Remarks and Adjournment**

*Travel safely; we'll see you next year in Oregon*