



**At a Glance Schedule**  
**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 – 4:00 PM

**Transportation Research Board Technical Session:**

**“Geotechnical Asset Management: Implementation of Programs and Advances in Technology”**

Location: Grand Ballroom

5:00 PM – 8:30 PM

**Highway Geology Symposium Exhibitor Area Open**

5:00 PM – 6:15 PM

**HGS National Steering Committee Meeting**

Location: Somerset Room (Upstairs)

6:30 PM – 8:30 PM

**Ice Breaker Social—Sponsored by BGC Engineering**

Location: Grand Ballroom/Exhibitor Area

***Tuesday, September 11***

6:30 AM – 9:00 AM

**Continental Breakfast**

Location: Grand Ballroom/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**

7:30 AM – 8:10 AM

**Welcome and Opening Remarks**

*Krystle Pelham, HGS Organizing Committee Chair (10 min)*

*Dedication of Proceedings (John Pilipchuk) 10 min*

*David Bernhardt, P.E. Maine Department of Transportation 20 min*

Location: Grand Ballroom

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

9:30 AM – 2:00 PM

**Guest Field trip Transportation**

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

Pick-up Location: Hotel Front Lobby

## Technical Session 1 – Young Authors

**Location: JMW Ballroom**

*Chris Ruppen, Moderator*

8:10 AM – 8:30 AM

**Assessment and Mitigation Process for Bridge Foundation Reuse – Case Study**

Author(s): James Arthurs, Kamis Haramy

8:30 AM – 8:50 AM

**Combined Rock Slope Failure Mode Analysis and Mitigation in Fairlee Vermont**

Author(s): Erik Friede

8:50 AM – 9:10 AM

**Comparison of Portable and Stationary GPS Receiver Integration Within Infrastructure Monitoring**

Author(s): Evan Dalton

9:10 AM – 9:30 AM

**Geotechnical Challenges for Bridge Foundation & Roadway Embankment Design in Peats and Deep Glacial Lake Deposits**

Author(s): Brian Felber

9:30 AM – 9:50 AM

**Slope Stability Analysis for TH53 Relocation, Virginia, MN**

Author(s): Anya Brose, et al

9:50 AM – 10:10 AM

**Innovative Socketed Pile for Accelerated Bridge Construction in Naples, Maine**

Author(s): Andrew Blaisell, Blaine Cardali, Christopher Snow, Laura Krusinski, Garrett Gutafson

10:10 AM – 10:40 AM

**Morning Coffee Break**

Location: Grand Ballroom/Exhibitor Area

10:40 AM – 11:00 AM

**Design and Construction Considerations for Innovative Rockfall Protection Systems**

Author(s): Robert Huber, Martin J. Woodward

11:00 AM – 11:20 AM

**Laboratory Investigations of the Oldest Concrete Pavement in America – Applied Geology in Civil Engineering**

Author(s): Blake Lemcke

11:20 AM – 11:40 AM

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

Author(s): Jesse Greenwald, Colter Schwagler

11:40 PM – 1:00 PM

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

Location: Grand Ballroom/Exhibitor Area

## Technical Session 2

**Location: Ballroom**

*Pete Ingraham, Moderator*

1:00 PM – 1:20 PM

**Rattlesnake Hills Landslide: Overview and Monitoring**

Author(s): George Machan, Charlie Hammond

1:20 PM – 1:40 PM

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

Author(s): Chris, Ruppen, Don Gaffney, Joel Borrelli

1:40PM – 2:00 PM

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

Author(s): Randy Post, Roger Pihl, Alex Brown, Ty Ortiz

2:00PM – 2:20 PM

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

Author(s): Yonathan Admassu

2:20 PM – 2:40 PM

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

Author(s): Angus MacPhail, Dave Gauthier, D. Jean Hutchinson

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**

Location: Grand Ballroom/Exhibitor Area

## Technical Session 3

**Location: JMW Ballroom**

*Bob Henthorne, Moderator*

3:30 PM – 3:50 PM

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

Author(s): 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**

Author: Sarah McInnes, Geoff Stryker, John Pizzi

4:10 PM – 4:30 PM

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

Author(s): Scott Anderson, Cole Christiansen, Dave Gauthier, Sebastian Cohen

4:30 PM – 4:50 PM

**Landslide Applications of the Geotechnical Observational Approach**

Author(s): George Machan, Wade Osborne, Chris Carpenter, Charles M. Hammond, Philip Wurst

4:50 PM – 5:20 PM

**Highway Geology Symposium Field Trip Preview**

Presenters: Bob Marviney

Location: Ballroom

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

***Wednesday, September 12***

6:00 AM – 7:00 AM

**To-Go Continental Breakfast**

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**

**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: Grand Ballroom/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: Ballroom

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

6:30 AM – 9:00 AM

### **Continental Breakfast**

Location: Grand Ballroom/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: Ballroom**

*Steve Sweeney, Moderator*

7:30 AM – 7:50 AM

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

Author: Todd Schlittenhart

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(s): Craig Coolidge

8:30 AM – 8:50 AM

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

Author(s): David Knott, et al

8:50 AM – 9:10 AM

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

Author(s): David J. Scarpato, Matt Murphy

9:10 AM – 9:30 AM

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

Author(s): John Duffy

9:30 AM – 10:00 AM

### **Morning Coffee Break**

Location: Grand Ballroom/Exhibitor Area

10:00 AM – 10:20 AM

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

Author(s): Marc Fish, Jim Struthers, Mike Mullhern

10:20 AM – 10:40 AM

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

Author(s): William CB Gates

10:40 AM – 11:00 AM

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

Author(s): 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**

Author(s): 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**

Author(s): Bryan C. Steinert, Amber Granger, Laura Krusinski, Wayne Chadbourne

11:40 AM – 12:00 PM

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

Author(s): Jeremy Robinson, Andrew Smithmyer

12:00 PM – 12:20 PM

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

Author(s): Mike Koutsourais

12:20 PM

**Closing Remarks and Adjournment**

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