



# Geosynthetics

Conference: **CASE STUDIES**

Attendee Brochure

## *Sharing* **PRACTICAL Applications**

March 8–10, 2020

North Charleston, SC USA

Charleston Area Convention Center

[GeosyntheticsConference.com](http://GeosyntheticsConference.com)

save up to  
**\$100**

*on a full registration  
by Feb. 7, 2020*



Charleston Area Convention Center

SUPPORTED BY



Geosynthetics  
Magazine

# Sharing PRACTICAL Applications and Best Practices

**Discover** a perfect mix of education focusing on actual projects across the geotechnical industry.

**Locate** the latest products and services from top industry companies and organizations through exhibits and interactive experiences on the show floor.

**Participate** in new conversations and valuable networking with industry leaders and peers.

## Industries Represented

Agriculture  
Construction  
Quality Assurance  
Earthquake Engineering  
Erosion Control  
Field and  
Laboratory Testing  
Foundations and  
Slope Stability  
Geophysics  
Golf Course Construction and  
Maintenance  
Ground Improvement  
Groundskeeping  
Geotechnical, Civil and  
Environmental Engineering  
Horticulture  
Irrigation  
Landscaping  
Mining  
Nondestructive and  
Geophysical Evaluation  
Pit, Pond and  
Reservoir Construction  
Retaining Walls  
Risk Assessment  
Roofing  
Road, Rail and  
Runway Construction  
Seepage and Drainage  
Solid/Liquid  
Waste Containment  
Spill Containment  
Transportation  
Waste Management

Connect with geotechnical professionals representing all facets of the geotechnical industry during **Geosynthetics 2020**. Immerse yourself in a sea of knowledge through in-depth case studies, plenary presentations, and panel discussions presented by experts in the field. Walk the show floor to see the latest developments in geotechnical products and services offered by the industry's top companies and organizations. Plan for plenty of opportunities to network and socialize.

The trade show and all events and education will be held at the Charleston Convention Center, convenient to Charleston International Airport, hotels and a ten-minute drive to historic downtown Charleston.

## Conference Features

- Diverse in-depth case studies
- Three engaging plenary presentations
- Comprehensive short courses offering 4 PDH (Included in Full Registrations)
- Numerous networking opportunities
- Complimentary basic education on the show floor
- Interactive panel and roundtable discussions
- Show floor highlighting geosynthetics products across the industry



**Geosynthetics**  
Conference: **CASE STUDIES**

March 8–10, 2020 | North Charleston, SC USA  
[GeosyntheticsConference.com](http://GeosyntheticsConference.com)

## Special Government Pricing

Government employees are eligible for a 30% discount on all registration types.

Visit [GeosyntheticsConference.com/program/government](http://GeosyntheticsConference.com/program/government) or email [bjconnett@ifai.com](mailto:bjconnett@ifai.com)

## Introduction Series Classes

Get started with this **FREE** series of targeted presentations, designed for beginners, to provide foundation knowledge of what geosynthetics are and how they fit into various projects.

### 30-Minute Topics

Offered twice: Monday, March 9 and Tuesday, March 10 throughout the day.

#### **Introduction to: Environmental Applications**

TBD

#### **Introduction to: Pavement/ Transportation Applications**

Jie Han, Ph.D., P.E., F.ASCE, University of Kansas

#### **Introduction to: Testing/Material Properties/Quality Assurance**

Robert Mackey, P.E., S2Li

## Good to Know

### **Venue Address**

5055 International Boulevard  
North Charleston, South Carolina 29418 USA

### **Conference Dress**

Business casual attire is appropriate for all Geosynthetics 2020 events.

### **Travel Documents**

A valid passport and visa are required of most visitors to the United States. Check with local consulate or embassy well in advance. Email [events@ifai.com](mailto:events@ifai.com) for a letter of invitation. Be sure to include:

- full name
- address
- fax number

Letters cannot be e-mailed or sent directly to the embassy or U.S. consulate. Geosynthetics 2020 cannot intervene on behalf of the invitees with the embassy or U.S. consulate via fax, phone, surface mail, or email.

*Get Credit*

Earn up to

**14 PDH**

Comprehensive Short Courses  
Engaging Plenaries  
Diverse Case Studies

# Schedule

Sunday, March 8

7 am–5 pm

## Registration Open

1–5 pm

## IGS-NA Workshop: Professional Issues in Geosynthetics Engineering

additional fee required

### Ethics in Geosynthetics and Civil Engineering

Boyd Ramsey, Boyd Ramsey Consulting LLC

### Geopipes

Michael Pluimer, Ph.D., University of Minnesota Duluth

### Geosynthetic Installation Issues for Designers

Chris Eichelberger, Agru America, Inc.

1–5 pm

## Short Courses

included in full registration

### Geosynthetic Barriers in Relevant Applications

Kent Von Maubeuge, NAUE GmbH & Co. KG

### Geosynthetics in Erosion and Sediment Control

C. Joel Sprague, P.E., TRI Environmental

### Improving Roadway Performance with Geosynthetics

Jie Han, Ph.D., The University of Kansas

5–7 pm

## Exhibit Hall Reception

Monday, March 9

7 am–5 pm

## Registration Open

8:30–10 am

## Welcome Plenary

### Volo Interchange Case Study

Sarah Gaffney, SC-DOT-District 6

### Using Geosynthetics to Help Solve Geotechnical Challenges in the High-Seismic, Soft-Ground Environment of the Port Access Road Design-Build Project

Michael S. Ulmer, P.E., S&ME Inc.

### Clouter Creek Placement Area—Before and After Geotextiles

Hanna Gervais, PE and Jason Inskeep, EIT, US Army Corp of Engineers

9 am–5 pm

## Exhibits Open and Learning Zone

10:15–11:30 am

## Barriers 1

### Use of Geosynthetic Clay Liners (GCLs) as Groundwater Protection in Infrastructure Constructions

Kent Von Maubeuge, NAUE GmbH & Co. KG

### Eagle Gold Spillway Lining

Phill Greer, BEng, Concrete Canvas Ltd

### Environmental Containment Using Reinforced Composite Geomembranes: Qualitative and Quantitative Efficiencies in Installation and Performance

Richelle Delia, Owens Corning Geosynthetics

## Drainage

### One of the Largest Prefabricated Vertical Drains Installations in US Accelerates Port of Charleston Expansion

Aaron Goldberg, P.E., D.GE, Soil & Material Engineers (S&ME); Marty Taube, P.E., Menard USA; Richard Goodrum, Milliken Infrastructure Solutions

### Behavior of a Drainage Geosynthetic and Reinforced Geomat for the Remediation of a Dismissed Industrial Site in Milano City Area

Piergiorgio Recalcati, TENAX SpA

### Use of Wicking Fabric to Dehydrate Road Embankment Under Unsaturated Conditions

Xiong Zhang, Missouri University of Science and Technology

## Quality Assurance

### Chemical Resistance of a 24-Year Old HDPE Liner Exposed to Industrial Solids and Fluids

Rutuparna Joshi, P.E., Geosyntec Consultants

### A Continued Report on an Exposed Green Geomembrane Cover in Polk County, Florida

Boyd Ramsey, Boyd Ramsey Consulting LLC

### Almost Three Decades of Leak Location Data Compiled

Matthew Kemnitz, Leak Location Services, Inc.

## SPECIAL SESSION

Organized by Geosynthetics Institute (GSI)

### Three Case Histories Illustrating How Geosynthetics Were Used Effectively for Soft Soil Stabilization Project Near Pigeon Point, Delaware

11:30 am–1:30 pm

## Lunch in Exhibit Hall

1:30–2:45 pm

## Barriers 2

### Construction of Columbus Water Reservoir Geosynthetic Liner System

Timothy Stark, Ph.D., P.E., University of Illinois at Urbana-Champaign

### Guidance for Today's Lagoon Liners

Gary Arndt, P.E., PMP, Stantec

### Prefabricated Geomembrane Liner System—North Alamo Reservoir

Martyn Waltner, Intertape Polymer Group

## Reinforced Walls

### Geogrid-Reinforced Segmented Block Retaining Wall

Meera Govender, Fibertex South Africa

### GRS IBS—Cost Analysis and Comparison

Daniel Alzamora, P.E., and Jennifer Nicks, Ph.D., P.E., Federal Highway Administration

### Investigation and Rehabilitation of Bridge Abutment MSE Wall Instability

Marshall Addison, Ph.D., P.E.

## Protection 1

### Soil Bioengineering Design for Highly Steepened Waterway Banks

Robbin Sotir, Robbin B. Sotir & Associates, Inc.

### Conductive Multi-Linear Drainage Geocomposites for Improved QA/QC of Leachate Double-Lined Ponds

Stephan Fourmont, Afitec-Textel

### GCCM Installed as a Shroud Over Wire Baskets for Containment

Richard Goodrum, Milliken Infrastructure Solutions

## SPECIAL SESSION

Organized by ASTM

### How ASTM Standards Are Impacted by Case Histories

3:15–4:30 pm

## Vegetation

### The Skeleton Keys of Turf Reinforcement

Lisa Simms, P.E., CPESC, East Coast Erosion Control

### Norton Branch Vegetated Reinforced Soil Slope Revisited After 25 years

Mark Wayne, Ph.D., P.E., Tensar International; Robbin Sotir, Robbin B. Sotir & Associates Inc.

### Maurice River and Johnson Creek Soil Bioengineering Stabilization and Restoration

Robbin Sotir, Robbin B. Sotir & Associates Inc.

## Reinforced Slopes

### Realignment of County Road with One of the Largest Geogrid Reinforced Slopes Constructed in the State of Minnesota

Stephan Gale, P.E., D.GE, F.ASCE, Gale-Tec Engineering Inc.

### A Geogrid Reinforced Steep Slope 60.0 m High for the Stabilisation of a Landslide in Northern Italy

Daniele Cazzuffi, CESI SpA

### Performance of High Strength Geogrid in Reinforced Soil Slope and the Yeager Airport

Robert Bachus, P.E., D.GE, Geosyntec Consultants

## Transportation

### Field Verified Benefits of Geogrids to Reduce Risk and Improve Performance of Flexible Pavements

Garrett Fountain, Tensar International Corp. Inc.

### Recyclable Paving Fabric Protects Indiana Interstate

David Andrews, P.E., and Mark Marienfeld, P.E., Propex GeoSolutions

### Bituminous Geomembranes (BGM), Over 20 Years of Presence in USA in Transport Applications

Natalie Daly, Axter Coletanche Inc

## SPECIAL SESSION

Organized by Fabricated Geomembrane Institute (FGI)

### Panel: Construction with Fabricated Geosynthetics

Tuesday, March 10

7 am–5 pm

## Registration Open

9–10:15 am

## Column Supported Embankments

### Load Transfer Platform With Pva Uniaxial Geogrids—Costa Verde Project

Wilfredo Rodríguez, Freyssinet Tierra Armada

### Expedited Repair of Railroad Track Subgrade Failure Using a Column Supported Geosynthetic Reinforced Load Transfer Platform

Scot Mackiewicz, Braun Intertec

## Reinforced Foundations 1

### A Case Study of the Construction of a Roadway Fill Over a Large Water Body Utilizing a Geotextile Reinforced Earth Foundation with Challenging Soil and Construction Conditions

Brent Marjerison, M.Sc., P.Eng., FEC, WSP Canada Inc.

## Student Opportunities

Full-time students are invited to expand their horizons at **Geosynthetics 2020: CASE STUDIES**. Students receive a 70% discount on all registration types and may participate in the student volunteer program.

Visit [GeosyntheticsConference.com/student](https://GeosyntheticsConference.com/student) or email [bjconnett@ifai.com](mailto:bjconnett@ifai.com).

Topics are subject to change.  
Visit [GeosyntheticsConference.com](https://GeosyntheticsConference.com)  
for up-to-date information.

**Geosynthetics Reinforced Railway Twinning Project—Canadian National Railway, Aurora, ON**  
Rene Laprade, P. Eng., TenCate Geosynthetics Americas

## Landfill Covers

**Case Studies of Extreme Weather Performance of Engineered Turf Final Cover System**  
Ming Zhu, P.E., Brad Cooley, and Mike Ayers, Watershed Geosynthetics

**Guam ORDOT Vegetated Landfill Cap**  
Al Florez, Geo Products, LLC

## SPECIAL SESSION

Organized by  
Association for Mechanically Stabilized Earth (AMSE)

**Vertical and Near-Vertical Geosynthetic-Reinforced MSE Structures—Case Studies on the Influence of Backfill on Alignment of Concrete and Wire Facings**

9 am–5 pm

## Exhibits Open and Learning Zone

10:30–11:45 am

## Airfield Pavements

**Use of Geosynthetics in Airport Pavements**  
Jeffrey Gagnon, F.P.E., Federal Aviation Administration

**Mechanical Stabilization of Foundation Soils for Airfield Pavements in the Mid-Atlantic Coastal Region**

Bryan Gee, Geopier Foundation Company;  
Andrew Isenhour, P.E., Tensar International Corporation

## Reinforced Foundations 2

**A Case History of Geogrid Versus Stone Columns for Settlement Mitigation**  
Djan Chandra, Leighton and Associates Inc.

**Geogrid Stabilized Working Platform for Ringer Crane in Southern US**  
Lois Schwarz, Tensar International

## Protection 2

**Innovative Geosynthetic Technology Saves 100-Year-Old Panama Canal Locks**  
Tom Stephens, TenCate Geosynthetics

**Scour and River Bank Protection in the United Kingdom**  
Christopher Quirk, Bsc.,(Hons). MSc., C.Geol.,  
NAUE Geosynthetics Ltd.

## SPECIAL SESSION

Organized by Fabricated Geomembrane Institute (FGI)

**Roundtable Discussion—Women in Geosynthetics**

11:45 am–1:30 pm

## Lunch in Exhibit Hall

1:30–2:45 pm

## Barriers 3

**Underwater Lining for Cofferdam at Druid Hill Reservoir**  
Bill Shehane, P.E., Seaman Corp.

**The Capabilities and Limitations of Electrical Leak Location**  
Abigail Gilson, TRI Environmental Inc.

## Environmental 1

**Salt Gradient Solar Pond Containment Liner for Distilling Large Ponds of Brine Water to Fresh Potable Water**  
John Heap, Raven Engineered Films

**A Geosynthetics No-Soil Solution for Closure**  
Robert Wallace, AECOM

## Innovative Backfill

**Rebuilding Mountains with Expanded Polystyrene**  
Brendan Stepek, EIT, and Gary Brill, P.E.,  
Schnabel Engineering LLC

**Reconstruction of Failed Roadway Embankments Using Tire-Derived Aggregate MSE Walls**  
Chris Sneddon, Santa Barbara County Public Works

## SPECIAL SESSION

Organized by  
Geosynthetic Materials Association (GMA)

**20+ Years of GMA:  
What Your Industry Has Done for You**

3–4:15 pm

## Barriers 4

**Inverted Liner System Provides Unique Solution to Contaminated Site Problem**  
Alan Strecker, Seaman Corp.

**Sanitary Sewer Overflow Management—Two Cities' Successes and Challenges**  
Felon Wilson, P.E., Seaman Corp.

## Environmental 2

**Double Lined Tailings Impoundment Upstream Expansion**  
Kristof Fabian, Ph.D., DGE P.E., MIEAust, Retired

**Use of Geosynthetics in Remediation of Bauxite Residue Disposal Area**  
Bill Smith, P.E., Tetra Tech, Tech.; Ron Morosky,  
Alcoa Corp.; John Gardner, P.E., Smith Gardner, Inc

# Join GMA Today!

IFAI.com/Membership

## Registration is Open

Visit [GeosyntheticsConference.com](http://GeosyntheticsConference.com) to register today. Save when you register by Feb. 7, 2020.

	Member* BEFORE FEB. 7	Member* STANDARD	Nonmember BEFORE FEB. 7	Nonmember STANDARD
<b>Full Registration</b> Includes all scheduled education, activities, trade show, lunches and one short course. Does not include IGS-NA Workshop.	\$700	\$800	\$800	\$900
<b>One Day Only</b> Includes all scheduled education, activities, trade show and lunch on selected day. Does not include short courses or IGS-NA Workshop.	\$375	\$425	\$425	\$475
<b>Trade Show Only</b> Includes access to the trade show, welcome reception and Introduction Series education only. Does not include classroom education, lunches, short courses or IGS-NA Workshop.	\$45	\$45	\$50	\$50
<b>Short Course</b> This is an add-on session for One Day and Trade Show Only registrations. One of three half day short courses on Sunday, March 8.	\$250	\$250	\$250	\$250
<b>IGS - NA WORKSHOP</b> This is an add-on session for all registration types. IGS members may register at the member price. All others must pay the non-member price which includes the fee to become a member of IGS-NA.	\$20	\$20	\$120	\$120

**Not an IFAI member?** Join today at [IFAI.com/Membership](http://IFAI.com/Membership) or 800 486 3947.

\*Member rate available for members of IFAI, GMA, IGS-NA or any supporting organizations (See back panel for full list).

### Students and Government Employees

Students and government employees may receive additional registration discounts with valid identification. Contact [bjconnett@ifai.com](mailto:bjconnett@ifai.com) for further details.

### Registration Questions?

Call 1 651 222 2508 or 1 800 225 4324 (US and Canada).

## Hotel Information

The convention center and contracted hotels are conveniently located 5 miles from the Charleston International Airport and 10 minutes from historic downtown Charleston. Conference hotels are within walking distance of the convention center and feature complimentary shuttle service to the airport, convention center, local shopping and dining options.

### Contracted Hotels Include

**Embassy Suites by Hilton Charleston Airport Hotel and Convention Center (Headquarters Hotel)**

5055 International Boulevard  
North Charleston, South Carolina 29418 USA

**DoubleTree North Charleston Convention Center**

5264 International Blvd  
North Charleston, South Carolina 29418 USA

**Hyatt Place Charleston Airport/Convention Center**

3234 West Montague Avenue  
North Charleston, South Carolina 29418 USA



**Book Your Room Now**

Book by Friday, Feb. 14, 2020, to receive a discounted room rate of \$179 per night + tax.

[GeosyntheticsConference.com](http://GeosyntheticsConference.com)



# Geosynthetics

## Conference: CASE STUDIES

Geosynthetics 2020: Case Studies is organized by the Industrial Fabrics Association International (IFAI) and supported by the Geosynthetic Materials Association, the *Geosynthetics* magazine and the North American Chapter of the International Geosynthetics Society (IGS-NA), under the auspices of the International Geosynthetics Society (IGS).

### ORGANIZING COMMITTEE

#### Program Committee Chair

Robert Lozano, The Reinforced Earth Company

#### General Committee Members

Melissa Beauregard, Ph.D.,  
United States Air Force Academy

Todd Berger, *Geosynthetics* magazine

Jon Curry, Geosynthetic Materials Association

Jennifer E. Nicks, Ph.D., P.E., FHWA

Michael R. Simac, P.E., EARTH Improvement Technologies

#### IGS – NA Representative

John M Allen, P.E., CETCO Environmental Products

#### Technical Program Project Manager

Megan Firl, Industrial Fabrics Association International

#### Secretary General

Barbara Connett, Industrial Fabrics Association International

### SUPPORTING ORGANIZATIONS

Association for Mechanically Stabilized Earth (AMSE)

ASTM International (ASTM)

Carolinas Chapter of Geo-Institute

Canadian Geotechnical Society (CGS)

China Nonwovens & Industrial Textiles Association (CNITA)

Deep Foundations Institute (DFI)

Erosion Control Technology Council (ECTC)

Fabricated Geomembrane Institute (FGI)

Federal Highway Administration (FHWA)

Geosynthetic Institute (GSI)

Geo-Institute of ASCE (G-I)

International Association of Geosynthetic Installers (IAGI)

North American Chapter of the International Geosynthetics Society (IGS-NA)

Transportation Research Board (TRB)

US Universities Council for Geotechnical Education and Research (USUCGER)

University of South Carolina, Civil and Environmental Engineering (U of SC)

### SUPPORTING MEDIA

*Geosynthetics* magazine

*Geosynthetic News Alerts (GNA)*

*Informed Infrastructure*

*Civil + Environmental*

### EXHIBITORS

AGRU America Inc.

American Excelsior Company  
Atarfil S.L.

Axter Coletanche Inc.

Chesapeake Containment Systems Inc.

City Sewing Machine LLC

Cooley/Engineered Membranes

CTT GROUP

DEMTECH Services Inc.

East Coast Erosion Blankets  
Environmental Specialties International Inc.

EPI

e2 / formerly Engineered Polymer Technologies

Fabinno Co. Ltd.

Geo Products LLC

HUESKER Inc.

Hydrogeophysics Inc.

Intertape Polymer Group

Leak Location Services Inc.

Leister Technologies LLC

Low and Bonar

Midwest Canvas Corp.

Milliken Infrastructure Solutions

Nedia Enterprises Inc.

Owens Corning

Plastatech Engineering Ltd.

Polyweld USA Inc.

Presto Geosystems

Propex GeoSolutions

Raven Engineered Films

Seaman Corp.

Solmax

Strata Systems Inc.

Tenax Corp.

TenCate Geosynthetics Americas

Tensar International Corp.

The DrainGreat Company LLC

The Reinforced Earth Co.

Thrace-LINQ Inc.

Titan Environmental

Watershed Geo

Western Excelsior Corp.

Wind Defender LLC