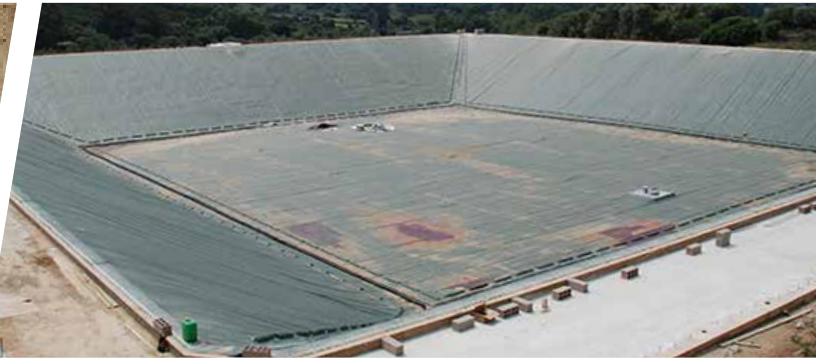




International Geosynthetic Society

IGS GEOREINFORCEMENT & GEOBARRIERS WORKSHOPS

4 - 7 June 2018 | Munich Workstyle | Munich, Germany



PRESENTED BY IGS TECHNICAL
COMMITTEE ON REINFORCEMENT
(IGS TC-R)
4 – 5 June 2018



PRESENTED BY IGS TECHNICAL
COMMITTEE ON BARRIERS
(IGS TC-B)
6 – 7 June 2018

The **International Geosynthetic Society** will host two high-level, two-day geotechnical engineering workshops 4 – 7 June 2018 in Munich, Germany. These events, with their international speakers, attendees, and engineering issues, will provide the most advanced IGS Technical Committee-led workshops to date.

INTERACTIVE FORMAT: AUDIENCE PRESENTATIONS/DISCUSSION

Each workshop will be divided into major topics and will focus on very recent technical developments and emerging technical issues. This format means that presenters will not prepare written contributions to be compiled in proceedings; instead they will share presentation slides with attendees. Time may be allocated in each section for attendees to share short statements (single-slide presentations) from the floor. An emphasis is placed on discussion. This interactivity will help propel conversation among colleagues, enhance the topical depth of the gathering, and ensure that region-specific concerns can be addressed. The format will make the overall workshops' knowledge more ready to implement and foster stronger connections for attendees.

Attendees interested in contributing to the open forum portion should consult the workshop details for applicable deadlines for supplying a slide (optional) and informing a session's moderator or a workshop organizer of your interest in contributing.

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The IGS welcomes the world's civil and geotechnical engineers to this unique gathering. Share your project experience, learn from some of the most-renowned researchers and engineers in the global geosynthetics field, and network with colleagues who influence diverse sectors such as mining, coal ash, transportation engineering, MSE design, waste management, and more.

Workshop Location: Munich Workstyle,
Landwehrstraße 61, 80336 München, Germany
(400m from Munich's central train station)

**Hotel Room Block: Best Western Atrium
Hotel,** Landwehrstraße 59, 80336 München,
Germany (directly next to Munich Workstyle)

GeoReinforcement Workshop

Cost: 180€/person

GeoBarrier Workshop

Cost: 180€/person

Hotel Cost: 114€/night (includes
breakfast) when reserved by 3 April 2018.
*Reservations for the IGS allotment can only
be made by **Phone: +49 (0) 89 51 41 90**, or
by **Email: info@atrium-hotel.de**. Mention
"IGS" when booking.*

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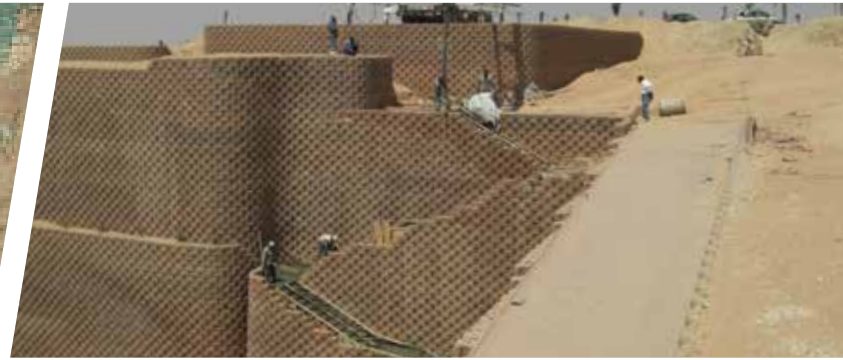




International Geosynthetic Society

IGS TC-R GEOREINFORCEMENT WORKSHOP

4 - 5 June 2018 | Munich Workstyle | Munich, Germany



CLICK TO LEARN MORE & REGISTER ONLINE!

Workshop Location: Munich Workstyle, Landwehrstraße 61, 80336 München, Germany (400m from Munich's central train station)

Hotel Room Block: Best Western Atrium Hotel, Landwehrstraße 59, 80336 München, Germany (directly next to Munich Workstyle)

GeoReinforcement Workshop

Cost: 180€/person

Hotel Cost: 114€/night (includes breakfast) when reserved by 3 April 2018. *Reservations for the IGS allotment can only be made by Phone: +49 (0) 89 51 41 90, or by Email: info@atrium-hotel.de. Mention "IGS" when booking.*

Workshop Chair: Gerhard Bräu gerhard.braeu@tum.de

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1ST GEOREINFORCEMENT WORKSHOP



PRESENTED BY IGS TECHNICAL COMMITTEE ON REINFORCEMENT (IGS TC-R)
Munich Workstyle | Munich, Germany | 4 – 5 June 2018

The **International Geosynthetic Society Technical Committee on Reinforcement (TC-R)** will welcome civil and geotechnical engineering professionals from around the world to the **1st GeoReinforcement Workshop 4 – 5 June 2018 in Munich, Germany**. This unique gathering combines high-level presentations from leading practitioners in the field with significant audience discussion time, enabling participants to share project experience, exchange technical concerns and solutions, and network with colleagues who influence diverse applications such as MSE walls, steep slopes, veneer stability, embankments, bridge abutments, and more.

The two-day GeoReinforcement Workshop is co-located with the **GeoBarrier Workshop, which takes place 6 – 7 June 2018**. Note: Each workshop requires a separate registration fee. Both can be paid for at the same time via the online registration page.

LEARN MORE ABOUT THE IGS AND JOIN TODAY!

www.GeosyntheticSociety.org

Learn more about the IGS TC-R:

www.GeosyntheticSociety.org/committees/technical-soil-reinforcement/

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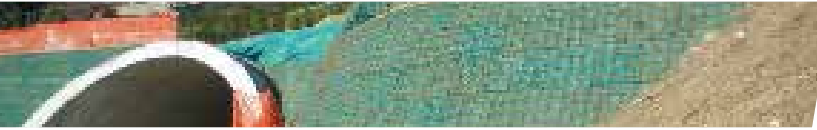




International Geosynthetic Society

IGS TC-R GEOREINFORCEMENT WORKSHOP

4 - 5 June 2018 | Munich Workstyle | Munich, Germany



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GEOREINFORCEMENT WORKSHOP PROGRAM Schedule is subject to change

4 June 2018

Welcome and Introduction | 08:30

Workshop Chair: Gerhard Bräu (Technical University Munich)

Morning Session | 08:30 – 12:30

Facings of Walls and Steep Slopes

Chair: Ian Fraser (United Kingdom), ianfraser@tcs-geotechnics.co.uk

- Richard Bathurst (RMC-Queen's University) – *Reinforcement loads and facing connection capacity in reinforced soil walls: Measured vs Predicted*
- Lars Vollmert (BBG Bauberatung Geokunststoffe) – *Stress conditions and connection requirements of reinforced soil block walls including the German EBGeo perspective*
- Mike Dobie (Tensar International) – *Incorporation of connection strength in design of reinforced soil block walls including seismic considerations*
- Philippe Delmas (Conservatoire National des Arts et Métiers) – *Flexible reinforced soil structure facings and associated design considerations*
- Yassine Bennani Braouli (Terre Armee) – *Facing and connection considerations for concrete panel wall systems*
- Coffee Break
- Audience presentations and discussion

Lunch | 12:30 – 13:30

Afternoon Session | 13:30 – 17:30

Use of Recycled and Amended Marginal Backfills in MSE and Reinforced Embankments/Slopes

Chair: John Sankey (USA), jsankey@reinforcedearth.com

- John Sankey (Terre Armee) – *Overview of Reinforced Structure Design, Applications and Uses with Recycled and Amended Backfill*
- (Yuli) ChaidoDoulala Rigby (Tensar) – *Use of Polymeric Geogrids in Structures with Non-Standard Reinforced Fills*
- Robert Lozano (The Reinforced Earth Company) – *Treated Marginal Soils in MSE Structures*
- Oliver Detert (Huesker) – *Construction and Long Term Experiences with Marginal Fill in GRS Walls*
- Castorina Silva Vieira (University of Porto) – *Use of Mixed Construction & Demolition Recycled Materials in Geosynthetic Reinforced Structures*
- Coffee Break
- Audience presentations and discussion

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REGISTER ONLINE:

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5 June 2018

Morning Session | 08:30 – 12:30

Design of Load-carrying MSE Bridge Abutments

Chair: Jorge Zornberg (USA), zornberg@mail.utexas.edu

- Jorge G. Zornberg (The University of Texas at Austin) – *Growing worldwide emphasis on load-carrying MSE bridge abutments*
- John Lostumbo (TenCate Geosynthetics) – *Design of load-carrying geosynthetic reinforced soil abutments following US guidelines*
- Dimiter Alexiew (Consultant Geosynthetics & Geotechnics) – *Design of load-carrying MSE abutments following some of the European codes*
- Andre Ferreira da Silva (Huesker) – *Experience on load-carrying MSE abutments in South America*
- Masayuki Koda (Railway Technical Research Institute) and Antoine Duttine (Integrated Geotechnology Institute) – *Design of load-carrying MSE abutments following Japanese guidelines*
- Nicolas Freitag (Terre Armee) – *MSE bridge abutments: Only one part of a bridge system – examples with steel and geosynthetic reinforcement*
- Coffee Break
- Audience presentations and discussion

Lunch | 12:30 – 13:30

Afternoon Session | 13:30 – 17:30

Reinforced Veneer Stability

Chair: Pietro Rimoldi (Italy), pietro.rimoldi@gmail.com

- George Koerner (Geosynthetic Institute) – *General approach to veneer stability, testing and monitoring*
- Jorge G. Zornberg (The University of Texas at Austin) – *Selection of design alternatives for water and seismic actions on reinforced veneer stability*
- Jay McKelvey (Earth Engineering Inc.) – *Effects of equipment on veneer stability*
- Pietro Rimoldi (Consultant) – *Semi-probabilistic approach to veneer stability according to EuroCodes*
- Felix Jacobs (IGB IngenieurgesellschaftmbH) – *EBGeo approach to veneer stability*
- Coffee Break
- Audience presentations and discussion

Summary and Closing | 17:30

Workshop Chair: Gerhard Bräu (Technical University Munich)

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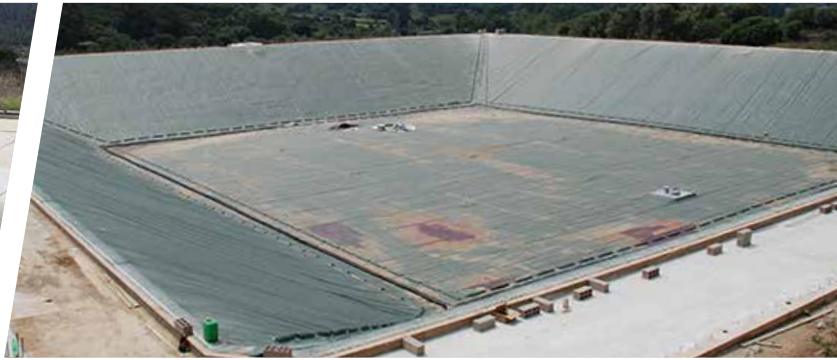




International Geosynthetics Society

IGS TC-B GEOBARRIER WORKSHOP

6 - 7 June 2018 | Munich Workstyle | Munich, Germany



CLICK TO LEARN MORE
& REGISTER ONLINE!

Workshop Location: Munich Workstyle,
Landwehrstraße 61, 80336 München, Germany
(400m from Munich's central train station)

**Hotel Room Block: Best Western Atrium
Hotel,** Landwehrstraße 59, 80336 München,
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GeoBarrier Workshop

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by Email: info@atrium-hotel.de. Mention
"IGS" when booking.*

Workshop Chair: Kent von Maubeuge
kvmaubeuge@naue.com

REGISTER ONLINE:

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1ST GEOBARRIER WORKSHOP



PRESENTED BY IGS TECHNICAL COMMITTEE ON BARRIER SYSTEMS (TC-B)
Munich Workstyle | Munich, Germany | 6 – 7 June 2018

The **International Geosynthetics Society Technical Committee on Barrier Systems (TC-B)** will welcome civil and geotechnical engineering professionals from around the world to the **1st GeoBarrier Workshop 6 – 7 June 2018 in Munich, Germany**. This unique gathering combines high-level presentations from leading practitioners in the field with significant audience discussion time, enabling participants to share project experience, exchange technical concerns and solutions, and network with colleagues who influence diverse infrastructure sectors such as mining, coal ash, waste management, environmental protection, oil and gas, and more.

The two-day GeoBarrier Workshop is co-located with the **GeoReinforcement Workshop, which takes place 4 – 5 June 2018**. Note: Each workshop requires a separate registration fee. Both can be paid for at the same time via the online registration page.



LEARN MORE ABOUT THE IGS AND JOIN TODAY!

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International Geosynthetic Society

IGS TC-B GEOBARRIER WORKSHOP

6 - 7 June 2018 | Munich Workstyle | Munich, Germany



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GEOBARRIER WORKSHOP PROGRAM Schedule is subject to change

6 June 2018

Welcome and Introduction | 08:30

Workshop Chair: Kent von Maubeuge (NAUE GmbH & Co.KG)

Morning Session | 08:30 – 12:30

Geomembrane Durability

Chair: George Koerner (USA)

- Andreas Woehlecke (BAM) – Agency perspectives on geomembrane durability, service life and end of life
- Helmut Zanzinger (SKZ) – Autoclave exposure to accelerate incubation for Arrhenius modeling
- Sam Allen (TRI) – Exposed Multi-component (layered) geomembrane durability
- Kerry Rowe (Queen's University) – Antioxidant depletion: Is higher HP-OIT the answer?
- Coffee break
- 90-minute discussion

Lunch | 12:30 – 13:30

Afternoon Session | 13:30 – 17:30

Geomembrane Protection

Chair: Richard Brachman (Canada)

- Kerry Rowe (Queen's U) – Why we need to limit long-term strains
- George Koerner – Preventing puncture: A US Approach
- Uli Sehrbrock: Limiting strain – The German Approach
- Richard Brachman (Queen's U) – Why allowable strain depends on how its measured and calculated
- Coffee break
- 90-minute discussion

7 June 2018

Morning Session | 08:30 – 12:30

GCL Hydration and Controlling Factors

Chair: Malek Bouazza (Australia)

- Malek Bouazza – Myths and facts about GCL hydration: what you need to know
- Kerry Rowe – How well do GCLs hydrate and self-heal: factors and effects
- Craig Benson – Hydration, Swelling, and Hydraulic Conductivity of Bentonite-Polymer Composite GCLs for Aggressive Leachates
- Gemmina Di Emidio – Wet and dry ageing of modified bentonites for GCLs under aggressive conditions
- Coffee break
- 90-minute discussion

Lunch | 12:30 – 13:30

Afternoon Session | 13:30 – 17:30

Standard Protocols for Construction/Installation Quality Assurance and Quality Control

Chair: Boyd Ramsey (USA) and Kerry Rowe (Canada)

- Boyd Ramsey – Statistical likelihood of leakage with various levels of CQA and inspection surveys
- Sam Allen – Historical leakage rates with various levels of CQA and inspection survey(s): the benefits of advanced preparation
- Piet Meyer – Case Histories of successful and unsuccessful project's, inspection surveys and introduction to digital CQC data management
- Kerry Rowe – Field observation and implications for leakage
- Coffee break
- 90-minute discussion

Summary and Closing | 17:30

Workshop Chair: Kent von Maubeuge (NAUE GmbH & Co.KG)

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