



The Geosynthetic Interest Group of South Africa (GIGSA) is proud to host a workshop on

Fundamentals of Soil Reinforcements

presented by
Professor Martin Ziegler

4 July 2018
Bytes Conference Centre
241 Third Road
Halfway Gardens
Midrand

Prof. Dr. -Ing. Martin Ziegler will present fundamentals with regards to design and analysis of earth structures using geosynthetic reinforcements. This will cover topics such as embankments on soft soils or geosynthetic encased columns, as described in the "Recommendations for Design and Analyses of Earth Structures using Geosynthetic Reinforcements – EBGEO", published by the German Geotechnical Society. The EBGEO is compatible with and based on the limit state design as described in the Eurocode.

The workshop starts with a fundamental consideration of how geosynthetic reinforcements work in the soil. This is shown for the different applications with geogrids. The following is an introduction to the EBGEO rules and regulations, which are also available in English. Various examples for typical applications will also be presented. The workshop will be rounded off by a presentation from Mr. Edoardo Zannoni, chair of the SABS TC98 SC06 WG2 in charge of revising the South African soil reinforcement code SANS 207, giving a South African perspective on the design and construction of soil reinforcement structures (SANS 8006 - Code of practice for strengthened/reinforced soils and other fills and SANS 54475 – Execution of special geotechnical works – reinforced fill) and highlight the upcoming SANS 207 as a national standard to address local issues which are not covered in international standards.

PROGRAMME OUTLINE

07:30 - 08:00	Registration
08:00 - 08:10	Greetings and introductions
08:10 - 09:30	Functioning of geogrids
09:30 - 10:00	Tea and coffee break
10:00 - 11:00	Presentation of EBGEO
11:00 - 12:00	Design aspects and examples Part 1: Retaining wall
12:00 - 13:00	Lunch
13:00 - 15:00	Design aspects and examples Part 2: Embankment on soft soils and MSE Wall structures over point or linear bearing elements
15:00 - 15:30	Tea and coffee break
15:30 - 16:45	South African perspective: SANS 8006 - design, SANS 54475 - construction and National Annex SANS 207 Presented by Edoardo Zannoni (GIGSA President)
16:45 - 17:00	Discussion
17:00	Networking Function



Professor Martin Ziegler

After a 15-year career in a large construction company Prof Ziegler was appointed chair of Geotechnical Engineering at RWTH Aachen University. He is the author of more than 200 publications in journal papers and conference proceedings, 1 book and 4 book chapters. His main research fields are geosynthetic reinforcement, tunnelling, hydraulic failure, groundfreezing and geothermal applications. Prof Ziegler

is engaged in various national and international standardization committees. He has extensive consulting experience in tunnelling and foundation engineering and has acted as court-appointed expert in numerous cases of dispute. In 2015, he was recognized with the award of the Society of the Centre of International Structural and Civil Engineering Law (CBTR). Since July 2004 he has been a member of the advisory board of this Society. Since 2003 he has been chairperson of the board of the Research Association for Tunnels and Transportation Facilities (STUVA) which organizes every 2 years one of the world's largest tunneling conferences with more than 1800 participants from over 25 countries. Since 2006, Prof Ziegler has been a member of the board of the German Geotechnical Society (DGGT) and president of the special section "Geosynthetics in Geotechnics" within this society. He has served as a council member of the IGS since 2008 and as chair of the European Activities Committee since 2010.

GIGSA will also host the Geosynthetic Conference for Young Professionals on Thursday 5 and Friday 6 July 2018 at Irene Country Lodge, Centurion.

For more information please visit GIGSA's website.

To register for the workshop complete the online registration form (www.gigsa.org)

For more information visit GIGSA's website (www.gigsa.org) or send an email to info@selahproductions.co.za.

