

**GeoAfrica 2009: Detailed Programme**

Day 1: Wednesday 2 September			
09:00 - 10:30	Session Chair: Peter Legg Opening Function Announcements Welcome by Conference Chair, GIGSA President, IGS President Anchor Sponsor Keynote Address: R. K. ROWE Long-term performance of leachate collection systems and geomembrane liners for MSW landfills		
10:30 - 10:55	<i>Refreshments</i>		
11:00 - 13:00	Session 1A Topic: Barriers: CCLs, GMs and composites Session Chair: Riva Nortjé G. HEERTEN and R.M. KOERNER 220 Clay Sealing Layer in Landfills and Brownfields - Lessons to Learn B. MAKGEKGENENE and F. SCHEELE 324 Considerations of Mineralogy and Permeability of Selected Sand/ Bentonite Mixes I.D. PEGGS 144 Determining the Remaining Lifetime of Exposed HDPE Geomembrane Liners B.L. DEOPURA and B.R. CHAHAR 310 Water Seepage Control through a New Class of Geomembrane M. ABRAMENTO, P.M. VIANA and E.M. PALMEIRA 258 Fresh Concrete - Geomembrane Interface Friction Tests with Ramp Equipment I.D. PEGGS 147 Conditions Required for the Successful Performance of Geoelectric Liner Integrity and Leak Location Surveys C. TARNOWSKI and E. SOST 236 Composite Liner Systems - Experience with the Classic Barrier System (HDPE-Liner over CCL-Liner) and Alternative Geosynthetic Solutions	Session 1B Topic: Soil Reinforcement: Railways and roads Session Chair: Ian Fraser C. HALL 171 A New Generation of Geogrid for Railway Ballast Stabilisation to Reduce Trackbed Maintenance Costs P.K. WOODWARD, J.H. KENNEDY and G. MEDERO 294 Reinforcing Railway Tracks using Insitu Polymer Geocomposites M.B. JAROS, G.M. JAMES and C. GELANLAL 336 Multi-layer Geosynthetic Reinforced Embankment over Potential Sinkholes for a Rapid Rail Link in South Africa Z. RAKOWSKI, L. TURINIC and R. BASLUK 254 Foundations with Controlled Settlement J.H. KENNEDY, P.K. WOODWARD and G. MEDERO 248 Validation of the new full-scale geopavement and railway testing facility at Heriot-Watt University, UK A. CHIRICA, L.TALOS and A. BARARIU 333 From Theory To Practice In Testing Of Geosynthetics J. BELTON, C. HALL, M. HUMPHREYS and E. GALLAGHER 203 Potential Savings in Carbon Dioxide Emissions by using Geogrid Reinforcement in Unbound Roads	
	<i>Lunch</i>		
	Session 2A Topic: Barriers: Case Studies Session Chair: Richard Emery D. CAZZUFFI, A. SCUERO, G. VASCHETTI, R. DJABRI and M. FELLAH 252 Geosynthetics Applications at Boussiaba Dam in Algeria K. BADU-TWENEBOAH, H. MEHTA, T. GOLDSHMID and W. TYNER 155 Design of a Geosynthetic Containment System for the Vertical Expansion of a Previously Closed, Unlined Solid Waste Landfill C. CILLIERS and J. MSIZA 193 Case Studies: The Design and Construction Elements that arise when Hazardous Waste Lagoons incorporate steep sideslopes R. DENIS and M. MARCOTTE 247 1.7 Million Square Meters PVC Heap Leach Pad Case History K. HABTE and P. LEGG 213 Innovative Liner Design for Brine Evaporation Ponds	Session 2B Topic: Soil Reinforcement: Soft Soils Session Chair: Malcolm Jaros D. ALEXIEW, C. MOORMANN and H. JUD 170 Foundation of a Coal/Coke Stock Yard on Soft Soil with Geotextile Encased Columns and Horizontal Reinforcement K. PREMALATHA, G. MANOJ KUMAR, I. ILAVARASI and A. AMALA RAJU ARUL 231 In-Situ Stabilisation of Soft Clay using Geogrid T. TANCHAISAWAT, D. T. BERGADO, G. V. RAMANA, P. VOOTTIPRUEX and S. NONTANANANDH 330 Geogrid Reinforced Lightweight Tire-Chips Sand Geomaterials for Embankment on Soft Ground P. MAHESHWARI and S. CHANDRA 221 Modeling of Reinforced Earth Beds using Lumped Parameter Models: A Review F. AHMAD and F. BATANI 297 Performance of Oil Palm Fibers on Improvement of Soil Strength	
	<i>Refreshments</i>		
	Session 3A Topics: Erosion Protection & Separation Session Chair: Paul Pratt W.P. HORNSEY, S.M. SHELDRICK and J. T. CARLEY 163 Geotextile Sand Containers - Innovative Shoreline Protection Systems J.J. MAASTRECHT 255 The Growth and Development of Geosynthetic Solutions for Coastal Erosion Repairs in South Africa U.W. KOHLER 302 Use of geosynthetics for erosion control as decisive element in retaining construction of steep erosive slopes M. SADLIER 190 Floating Covers for Evaporation Control - An Economic Review	Session 3B Session Chair: Jabulile Msiza Special Lecture: S. ALLEN: Laboratory Testing for Geosynthetic Durability and Reinforcement Design	
	18:00+	Welcome Function in Exhibition Area: C. GUNDLE & G. LAWSON: History of Geosynthetics in SA	

Day 2: Thursday 3 September

09:00 - 10:30	Session Chair: Anton Bain Announcements GIGSA awards IGS corporate awards Anchor sponsor Keynote Address: K.R. LEGGE Geosynthetics for Africa			
10:30 - 10:55	<i>Refreshments</i>			
11:00 - 13:00	Session 4A Topics: Filtration & Drainage Session Chair: Johan Boshoff C.Y. TAN and S.H. CHEW 311 A Centrifuge Experimental Investigation of Strain Development in Geotextile Containers and Tubes M. SCOTTO and M. VICARI 139 The use of a special ballasted geocomposite filter for seabed stabilisation and other coastal engineering applications K.R. LEGGE, G.M. JAMES and I. NYIRENDA 300 Geosynthetic Adjuncts to Critical Filter Applications H.Y. JEON 183 Manufacturing and Assessment of Long-Term Drainage Performance of Hybrid Geotextiles H.J. KOO and G.S. CHANG 259 Lifetime Prediction of Geocomposites through Assessment of Long-Term Compressive Creep using SIM F.J.G. GIBBONS and A. ROBINSON 334 Technical Paper on Mandena Mine Salinity Control Weir Design and Construction P. RIEGL 325 Advanced Products and New Installation Techniques designed to Improve Tunnel Lining	Session 4B Topic: Soil Reinforcement: Embankments Session Chair: Alan Parrock E.J. BRITTON and P.J. NAUGHTON 233 An Experimental Study to Determine the Location of the Critical Height in Piled Embankments B. WAI-CHOO KOK, J. BERENDS and K. H. LOKE 318 Application of High Strength Woven Geotextile in Embankment Stability Control on Soft Soils J.-B. DUQUET, P. GARCIN and A. NANCEY 199 The use of a geosynthetic-reinforced wall in the construction of bridge-access embankments in Dakar (Senegal) P. RIMOLDI and E. INTRA 298 Design and Construction of Tall Reinforced Embankments in Static and Seismic Conditions A. ABDELOUHAB, D. DIAS and N. FREITAG 245 Two-Dimensional Numerical Modelling of Earth Structures Reinforced by Geosynthetic and Metallic Strips J. KLONPMAKER and A. PARTRIDGE 196 Improvement of Long Term Performance of Temporary and Permanent Traffic Areas using Composite Geogrid Reinforcement D. LANGE, M. VICARI and R. RAMBININTSOA 198 Geosynthetic Reinforcement for the Rehabilitation Works of Airport Taxiways and Parking Areas		
	<i>Lunch</i>			
	14:00 - 15:30	Session 5A Topics: Drainage Session Chair: Justin November D.T. BERGADO, J. SAOWAPAKPIBOON, G.V. RAMANA, J.C. CHAI and P. VOOTIPRUEX 214 Comparison of PVDs with Surcharge Preloading and PVDs with Vacuum Preloading E.O. NNADI, A.P. NEWMAN, S.J. COUPE, T. PUEHMEIER and L. DUCKERS 323 Irrigation using Permeable Paving as the Source of Water: Effects of Recycled Water on the Soil: Plant Growth and Development J.O. AVESANI NETO and B.S. BUENO 143 Water Permeability Tests for EPS Blocks used in Geotechnical Engineering J.F. MEADOWS and G. KEMPTON 250 The Purpose of Drainage, Management and Systems Behind Mechanically Stabilized Earth Walls: Case Histories A. BAMFORTH 209 Interpretation of In-Plane Flow Capacity of Geocomposite Drainage by Tests to ISO 12958 with Soft Foam and ASTM D4716 with Various Natural Backfill Materials	Session 5B Topic: Soil Reinforcement: Testing, Monitoring & Theory Session Chair: Marco Pauselli K.H. LOKE and D. MONTRI 156 Contribution of Fibre-optic Geosynthetic Instrumentation for the Monitoring of Rehabilitated Failed Slope A. RUIKEN and M. ZIEGLER 251 Large Scale Laboratory Element Testing of Geogrid Reinforced Soil N. MORACI and G. CARDILE 312 Use of pullout test results in the serviceability limit state design of earth reinforcement structures G.H. NGUYEN, J. KUWANO and J. IZAWA 215 Effects of Unloading-Reloading History on Pullout Resistance Related to Soil Dilatancy and Geogrid Properties A. ABDELOUHAB, D. DIAS and N. FREITAG 191 Pull-out behaviour of geosynthetic strip reinforcements in coarse fill - physical and analytical modelling	
		<i>Refreshments</i>		
		16:00 - 17:30	Session Chair: Garth James   Special Lecture: R. BATHURST: Recent Developments in Reinforced Soil Wall Testing, Analysis and Design: 332   Presentation of paper that is considered to have made the best contribution	
		17:30+	Evening Free in Cape Town	

Day 3: Friday 4 September		
09:00 - 10:00	Session Chair: Peter Davies Announcements Anchor Sponsor Keynote Address: J. ZORNBERG Geosynthetic Capillary Barriers: Principles and Applications	
10:00 - 10:25	<i>Refreshments</i>	
10:30 - 12:30	Session 6A	Session 6B
	Topic: Barriers: GCLs	Topic: Soil Reinforcement: Walls & Embankments
	Session Chair: Danie Brink	Session Chair: Nicolas Freitag
	N. TOUZE-FOLTZ, J. BUESSARD, G. DIDIER, V. NOROTTE, G. MAZZOLENI and J.-L. MAHUET Influence of Prehydration without Load on the Hydraulic Performance of Geosynthetic Clay Liners	P.J. NAUGHTON, G.T. KEMPTON, R. LOZANO, M. SCOTTO and J. MEADOWS Assessment of Hydrolysis in Historic Polyester Yarn Recovered From 20 - 30 Year Old Reinforced Soil Structures
	H. ZANZINGER and N. TOUZE-FOLTZ Clay geosynthetic barriers performance in landfill covers	G. BRAU EBGEO - German Recommendation for Reinforcement with Geosynthetics
	R. EMERY and B. MAKGEKGENENE Performance of GCL in Landfill Applications - Case Study	A. PARROCK Nearly Vertical Retaining Walls Reinforced by High-Stiffness Geosynthetic
	D.J. JOHNS and J.R. SHAMROCK Swell Index Testing of GCL Bentonites with General and Hazardous Waste Leachates	A. HEROLD and P.-A. VON WOLFFERSDORFF The Use of Hardening Soil Model with Small-Strain Stiffness for Serviceability Limit State Analyses of GRE Structures
	W. GATES, W. HORNSEY and J.L. BUCKLEY Geosynthetic Clay Liners - Is the Key Component being overlooked?	M. DECHASAKULSOM, Y. TAESIRI, P. CHUPANIT and P. ANUJORN Evaluation of a Geogrid Reinforced Slope Structure of a Highway Rehabilitation Project: Field Experience in Thailand
P.M. VIANA and E.M. PALMEIRA Evaluation of GCL Internal Shear Strength in Inclined Plane Tests	S. BENMEBAREK and L. BELOUNAR Building road embankment on Algeria Sabkha soils with geosynthetic	
P. AKLIK and T. WURZINGER Laboratory Tests into the Permeability of Bentonite Liners		
12:30 - 13:25	<i>Lunch</i>	
13:30 - 14:30	Session Chair: Garth James  Special Lecture: A. BOUAZZA & J.-P. GOURC: Overview of Geosynthetics Applications in Northern Africa through Case Histories: 335	
14:30 - 15:30	Closing Ceremony	
15:30 - 15:55	<i>Refreshments</i>	
15:55+	Free Period - Lecture hall set up for dinner	
18:30+	Conference Theme Dinner Cape Malay Evening	