



12TH Conference on Asphalt Pavements for southern Africa

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12th Conference on Asphalt Pavements for southern Africa Submitted Papers

First Name	Last Name	Organisation	Paper Title	Theme	Topic
Don	Ross	University of Cape Town	Paving the way to a cost-effective road surfacing policy in South Africa	1. Road asset provision and preservation	1A Road funding and optimal application of financial resources
Tony	Lewis	Vna Consulting	A study into the skidding resistance of roads in the province of Kwa-Zulu Natal - Status Quo and Proposals for further investigation	1. Road asset provision and preservation	1B Deployment of human resources and road provision and maintenance at OWLC
Simon	Tetley	Vna Consulting	Collection and Evaluation of Road Condition Assessment Data – A Comparative Review Towards Unified Methodology	1. Road asset provision and preservation	1B Deployment of human resources and road provision and maintenance at OWLC
Diogo	Prosdocimi	Pardee Rand Graduate School	The employment benefits from sealing gravel roads in South Africa	1. Road asset provision and preservation	1B Deployment of human resources and road provision and maintenance at OWLC
Gerhardt	Van Zyl	Mycube Asset Management Systems	Asset preservation through effective reseal programs in Namibia	1. Road asset provision and preservation	1B Deployment of human resources and road provision and maintenance at OWLC
Greg	White	University Of The Sunshine Coast	How the Airport Pavement Research Program is filling the voids in Australian Airport Pavement Technology and Practice	2. Leadership and proficiency in technology development & implementation	2A National cooperative research programs
Melanie Kemp	Hofmeyr	Western Cape Government	Talent Management a focus in a Transport Infrastructure Department	2. Leadership and proficiency in technology development & implementation	2B Leadership development
Frank	Beer	Shell Deutschland Oil GmbH	Heavy Duty Asphalt Pavements and IMO (International Maritime Organization) 2020 implications)	2. Leadership and proficiency in technology development & implementation	2C Implementation programs

Ane'	Cromhout	JG Afrika	Impact of Probability Density Function on Indicators Relating to Long-Term Pavement Performance for Flexible Pavement Structures	3. Advancing sustainable practice	3A Pavement design
Anton	Hartman	Aurecon	A cost effective way to extend pavement service life through the use of asphalt geogrids – a case study	3. Advancing sustainable practice	3A Pavement design
Michael	Mshali	University Of Pretoria	Sensitivity of flexible pavement system response to truck speed: The case of thin surfaced granular base, cemented base and bitumen treated base pavement structures	3. Advancing sustainable practice	3A Pavement design
Phillip	Blankenship		Fatigue assessment of conventional and highly modified asphalt materials with ASTM and AASHTO standard specifications	3. Advancing sustainable practice	3B Materials testing and standards
Francois	Engelbrecht	Smec South Africa	The effect of ageing on bituminous seal binder rheology	3. Advancing sustainable practice	3B Materials testing and standards
Johan	Gerber	Royal Haskoningdhv	Formulating a Master Curve with one DSR Isotherm and BBR Data	3. Advancing sustainable practice	3B Materials testing and standards
Elaine	Goosen	Stellenbosch University	Extraction and Recovery of Bituminous Binders from Chip Seal Samples	3. Advancing sustainable practice	3B Materials testing and standards
David	Jones	University Of California, Davis	Development and Implementation of Performance Grade Specifications for Asphalt Rubber Binder	3. Advancing sustainable practice	3B Materials testing and standards
Gerrit	Jordaan	University Of Pretoria	Testing of granular/soil characteristics for the optimisation of pavement designs using reactive stabilising agents including new age nano-technologies	3. Advancing sustainable practice	3B Materials testing and standards
Naweed	Kahaar	Gibb (pty) Ltd	Storage Stability Evaluation of Homogeneous Polymer Modified Binders	3. Advancing sustainable practice	3B Materials testing and standards
Julius Joseph	Komba	University of Pretoria/CSIR	Distribution of air voids in compacted Hot-Mix Asphalt samples – laboratory vs field	3. Advancing sustainable practice	3B Materials testing and standards
Andre	Molenaar	JG Afrika	Fatigue Testing unfortunately a time consuming and costly affair	3. Advancing sustainable practice	3B Materials testing and standards
Estimé	Mukandila	iX engineers	Possibility of using Q-SUN Weatherometer as an aging calibration tool for bitumen binder	3. Advancing sustainable practice	3B Materials testing and standards
Joanne	Muller	Much Asphalt	A potential QC/QA method for evaluating adhesion promoter dosage level and effectiveness in asphalt applications	3. Advancing sustainable practice	3B Materials testing and standards
Martin	Murphy	Geonano Technologies	The influence of the characteristics of emulsifying agents on the stabilisation of granular materials using nano-silane modified bitumen emulsions	3. Advancing sustainable practice	3B Materials testing and standards
Amukelani	Nkuna	Bidvest Tank Terminals	Elongational Rheology of Bitumen Film Samples as a Fingerprinting Technique	3. Advancing sustainable practice	3B Materials testing and standards
Barry	Pearce	Learning Matters etc	Does a national proficiency testing scheme assist in improving the confidence in laboratory test results?	3. Advancing sustainable practice	3B Materials testing and standards
Ashiel	Rampersad	Council for Scientific and Industrial Research (csir)	A proposed national protocol for performing frequency sweeps on bituminous binder	3. Advancing sustainable practice	3B Materials testing and standards
Geoffrey	Rowe	Abatech Inc.	The change in the physical properties of asphalt binders with conditioning	3. Advancing sustainable practice	3B Materials testing and standards
Geoffrey	Rowe	Abatech Inc.	The development of the Delta Tc and Glover-Rowe parameters for the control of non-load associated cracking	3. Advancing sustainable practice	3B Materials testing and standards

Runhua	Zhang	University of New Hampshire	Overview of Rheological, Fatigue, and Fracture Properties to Evaluate Fatigue and Thermal Cracking of Asphalt Mixtures in Northern United States	3. Advancing sustainable practice	3B Materials testing and standards
Hechter	Theyse	Pavement Modelling Corporation	A grading-based, performance-related classification of unbound granular material	3. Advancing sustainable practice	3B Materials testing and standards
Jacques	Van Heerden	Tosas (pty) Ltd.	Evaluation of different rheological tests related to the manufacture, handling and application of bitumen emulsions	3. Advancing sustainable practice	3B Materials testing and standards
Nicol	Botha	Netherlands Airport Consultants (NACO)	Enhanced asphalt performance for airfield pavements	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Herculaas	Du Preez	Wsp	Design and Construction for state of the Art Durable Asphalt Surface and Ensuring Predictable Handling Characteristics on Kyalami Race Circuit	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Theresa	George	Council For Scientific And Industrial Research (csir)	Evaluating the Moisture Susceptibility of Hot-Mix Asphalt with Recycled Crushed Glass	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Emile	Horak	JG Afrika Pty Ltd	Collective experience with forensic investigations due to permeability of asphalt surfacings	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Kim	Jenkins	Sun	TG2 (2019) removes barriers and elevates the performance of bitumen stabilised materials (BSMs)	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Joanne	Muller	Much Asphalt	The use of Superpave N300 gyrations minimum void specification as rut resistance measure: A critical appraisal	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Christiaan	Nel	BVi Consulting Engineers Western Cape (Pty) Ltd	Towards the development of grey water resistant asphalt	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Hechter	Theyse	Pavement Modelling Corporation	Case studies on the performance of stabilized base layers	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Michael	Thomas		Performance Testing of Enrobé à Module Elevé Asphalt	3. Advancing sustainable practice	3C Design of asphalt and bitumen stabilised materials
Wynand	Steyn	University Of Pretoria	Evaluation of novel winter-seal applications	3. Advancing sustainable practice	3D Chip seal design
Gerhardt	Van Zyl	Mycube Asset Management Systems	Main reasons for stripping of surfacing seals in South Africa	3. Advancing sustainable practice	3D Chip seal design
Greg	White	University Of The Sunshine Coast	A Standardised Sprayed Sealing Specification for Australian Airports	3. Advancing sustainable practice	3D Chip seal design
Petrina T.	Johannes	University of Namibia	Evaluating the Suitability of the Automated Mixing Test in Determining the Workability of Slurry Surfacing Mixes	3. Advancing sustainable practice	3E Construction and maintenance

Dean	Swanepoel	Gauff Engineering	Gussasphalt (GA) as steel deck pavement for Africa's longest suspension bridge in Maputo (MZ)	3. Advancing sustainable practice	3E Construction and maintenance
FC	Rust	Pavement Engineering Research Consultancy	Evaluation of a nano-silane-modified emulsion stabilised base and subbase under HVS traffic	3. Advancing sustainable practice	3F Innovation in pavement materials
Dimiter	Alexiew	Geokunststoffe & Geotechnik	Cellular Confinement System Reinforcement – Innovation at the Base of Sustainable Pavements	3. Advancing sustainable practice	3F Innovation in pavement materials
Bernhard	Botes	Royal Haskoningdhv	An in-depth and innovative look into the identification and evaluation of the best fit-for-purpose tack coat to be used between composite pavement layer on national route 2 section 1	3. Advancing sustainable practice	3F Innovation in pavement materials
Colin	Gewanlal	Tensor International Limited	Revision of TG3 - From Asphalt Reinforcement to Subgrade Stabilisation	3. Advancing sustainable practice	3F Innovation in pavement materials
Gerrit	Jordaan	University Of Pretoria	Delivering transportation services – identification of requirements towards the realisation of affordable road infrastructure in a developing economy	3. Advancing sustainable practice	3F Innovation in pavement materials
Johannes	Lambert	Tosas (Pty) Ltd	Cationic bitumen emulsion rheologically modified using high shear low flow technology	3. Advancing sustainable practice	3F Innovation in pavement materials
Tony	Lewis	Vna Consulting	Performance of GB5 high modulus asphalt on a heavily trafficked road in South Africa	3. Advancing sustainable practice	3F Innovation in pavement materials
Tafadzwa	Mafuma	Much Asphalt	New Crumb Rubber Technology - a life cycle extender for porous asphalt	3. Advancing sustainable practice	3F Innovation in pavement materials
Christian	Mulol	Savoir Consulting (Pty) Ltd	Fatigue Resistance Properties of Glass Fibre Grid Reinforced EME	3. Advancing sustainable practice	3F Innovation in pavement materials
Frank	Netterberg	Frank Netterberg	Rehabilitation of salt-damaged asphalt surfacings with bitumen-rubber and other seals	3. Advancing sustainable practice	3F Innovation in pavement materials
Eugenie	Pienaar	Stellenbosch University	Influence of Spray Jet Technology on Bond Strength of Asphalt and Pavement Life	3. Advancing sustainable practice	3F Innovation in pavement materials
Mookgo Precious	Sephooko		The impact of adding nanomaterials on the performance of asphalt binder	3. Advancing sustainable practice	3F Innovation in pavement materials
Brendan	Bennett	Aurecon	A Comparison Between Sustainability Practices in Road Construction	3. Advancing sustainable practice	3G Green procurement
Clare	Dring	Fulton Hogan Ltd	Smarter Sustainable Pavements	3. Advancing sustainable practice	3G Green procurement
James	Maina	University of Pretoria	Optimization of Reclaimed Asphalt (RA) in Asphalt Mixtures Production	3. Advancing sustainable practice	3G Green procurement
Andrew	Laatz	Hho Consulting Engineers Pty Ltd	Old concrete makes way for new asphalt	3. Advancing sustainable practice	3G Green procurement
Glynn	Llewellyn	Pavement Engineer / Infrastructure Project Delivery Group	Sustainable Road Rehabilitation Solution using Reclaimed Asphalt: Camps Bay Drive Case Study	3. Advancing sustainable practice	3G Green procurement
Nokuthula	Mazibuko	University Of Stellenbosch	Performance of Bitumen Stabilised Materials using recycled concrete aggregate	3. Advancing sustainable practice	3G Green procurement
Karlushka	Mothilal	Aecom	Factors hindering the implementation of reclaimed asphalt on a full scale basis in South Africa	3. Advancing sustainable practice	3G Green procurement

Wynand	Nortje	National Asphalt	Recycled High Density Polyethylene in Asphalt	3. Advancing sustainable practice	3G Green procurement
Sasheen	Rajkumar	Sanral	Understanding Binder Replacement and the Impact it has on Asphalt Recycling	3. Advancing sustainable practice	3G Green procurement
Chantal	Rudman	Stellenbosch University	A study of change in the response of recycled concrete aggregate used in pavement layers when self-cementation occurs	3. Advancing sustainable practice	3G Green procurement
Manfred	Uken	Royal Haskoningdhv	Advancing sustainable practice - finding a common voice and approach to sustainability for the South African roads sector	3. Advancing sustainable practice	3G Green procurement
Devan	Govender	Naidu Consulting	The Empowerment of Locals through the Road Transportation Sector	3. Advancing sustainable practice	3H Worker wellness, safety and access to employment opportunities
Johan	Muller	Independent Specialist Road Binder Consultant	Employing traditional construction techniques, reserving sustainable contractor developments as well as preserving or using lower cost road construction materials	3. Advancing sustainable practice	3H Worker wellness, safety and access to employment opportunities
Neo Frank	Tsemame	WSP Africa	Waterbound Macadam Construction on the N8 Truck Stop at the Maseru Border Post: A Case Study	3. Advancing sustainable practice	3H Worker wellness, safety and access to employment opportunities
Samuel	Abejide	Central University Of Technology, Free State	Development of an ontology based expert system for determining the confidence level of HMA pavements	4. Global change drivers in flexible pavement provision and maintenance	4 Global change drivers in flexible pavement provision and maintenance
Denis	Makarov	University of Twente	Automation Framework for Comprehensive Real-time Monitoring of Asphalt Processes	4. Global change drivers in flexible pavement provision and maintenance	4 Global change drivers in flexible pavement provision and maintenance
Stefan Johannes	Oberholzer	SMEC South Africa	Digital Twins of Linear Structures	4. Global change drivers in flexible pavement provision and maintenance	4 Global change drivers in flexible pavement provision and maintenance
Philip	Paige-green	Paige-green Consulting	The prioritisation and adaptation for climate change resilience of rural access roads	4. Global change drivers in flexible pavement provision and maintenance	4 Global change drivers in flexible pavement provision and maintenance
Wynand	Steyn	University Of Pretoria	Training and Educating Pavement Engineer 4.0	4. Global change drivers in flexible pavement provision and maintenance	4 Global change drivers in flexible pavement provision and maintenance

Updated: 18/07/19
Subject to change.