

SOUTHERN AFRICAN GEOMORPHOLOGY: PURE AND APPLIED

25 - 28 JULY 2017

University of Swaziland, Kwaluseni. (Manzini) Swaziland

DRAFT CONFERENCE PROGRAMME

Tuesday, 25 July 2017

18:00 -	<p>Preconference Meet and greet cocktail event in the foyer of the Main venue and preconference registration.</p> <p>Welcome by the Pro Vice Chancellor and the Dean of the Faculty of Science and Engineering.</p>
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CONFERENCE DAY 1
Wednesday, 26 July 2017

07:00-08:45	Registration and coffee/tea – foyer of the Main Venue
Venue	Opening Session - Main venue
08:45 – 08:55	Welcome: Prof Heinz Beckedahl , SAAG conference chair, University of Swaziland
08:55 – 09:05	Opening: The Ministry of Tourism and Environmental Affairs, Swaziland
09:05 – 10:00	Keynote address : <i>To be confirmed</i>
10:00 – 10:30	Morning coffee/tea – foyer of the Main Venue
Venue	Main venue
10:30 – 10:40	Address - Venue sponsor
10:40 – 12:00	<ul style="list-style-type: none"> • Biennial General Meeting of SAAG • Discussion: the Erosion Focus Group
12:00 – 12:30	Session 1: Poster Session
	<p>Soil erosion prevention is better than cure in South Africa's only large river network without a dam – Dr Jay le Roux, University of the Free State, South Africa</p> <p>Investigating the genesis and management of the Gobhlo granite cave system, Swaziland - Mthobisi Masilela, Heinz Beckedahl and Paul Sumner, University of Swaziland and University of Pretoria, South Africa</p> <p>Fluvial systems - Renee Grundling, University of Pretoria, South Africa (<i>title to be confirmed</i>)</p> <p>Mapping and monitoring the spatio-temporal variations of land degradation using multispectral remote sensing data. A case study of Sekhukhune District - Terrence Sepuru, University of Limpopo, South Africa</p>
12:30 – 14:00	Lunch – dining hall

Venue	Main Venue	
Session	Session 2 : Geomorphology in General	
14:00 – 14:20	Overview of the geology and macro-geomorphology of the Swaziland region – Profs Heinz Beckedahl and Thomas Schlüter, University of Swaziland	
14:20 – 14:40	Southern African dust sources – Dr Frank Eckardt, University of Cape Town, South Africa	
14:40 – 15:00	Unmanned aerial vehicles (UAVs): applications for geomorphological research and use in South Africa – Dr David Hedding, University of South Africa, South Africa	
15:00 – 15:20	The opportunities posed by the geo-trail in regard to tourism in Swaziland and Mpumalanga, RSA - Prof Thomas Schlüter, University of Swaziland	
15:20 – 15:30	Discussion	
15:30 – 16:00	Afternoon coffee/tea – foyer of the Main Venue	
Venue	Main Venue	Secondary Venue
Session	Session 3 : Cold climate geomorphology	Session 4 : Bio-geomorphology: the use of plants to achieve geomorphic (landscape) objectives
16:00 – 16:20	Aeolian processes and sediment flux on sub-Antarctic Marion Island - Mr Abuyiselwe Nguna, University of Fort Hare, South Africa	Slopes stability improvement with vetiver system technology - Dr Paul Truong, The Vetiver Network International, Australia
16:20 – 16:40	Cosmogenic nuclide surface exposure dating: pitfalls and challenges for isolated fieldwork - Ms Elizabeth Rudolph, University of the Free State, South Africa	<i>Title to be confirmed-</i> Ms Alexandra Kruger, Permaculture Education Africa, South Africa
16:40 – 17:00	Discussion	Discussion
19:30 – 24:00	Dinner and networking.	

CONFERENCE DAY 2
Thursday, 27 July 2017

Venue	Venue
Session	Session 5 : Soil erosion and rehabilitation in theory and practice
08:30 – 08:50	Manipulating the geomorphology of wetlands in minimising the impacts of erosion: a southern African wetland rehabilitation case study - Dr Piet-Louis Grundling, NRM: Wetlands Programme, Department of Environment Affairs, South Africa
08:50 – 09:10	An assessment of global rainfall erosivity – Prof Werner Nel, University of Fort Hare, South Africa
09:10 – 09:30	Principles for developing a catchment rehabilitation strategy: the case of the NLEIP in the Tsitsa catchment, South Africa - Dr Benjamin van der Waal, Rhodes University, South Africa
09:30 – 09:50	Vertical soil traps and Vetiver system for slope stabilization – Mr Leonel Castro, Vetiver Inc, Guatemala
09:50 – 10:20	Discussion
10:20 – 11:00	Morning coffee/tea – foyer of the Main venue
Venue	Main Venue
Session	Session 6 : Geomorphology in General
11:00 – 11:20	Landuse change and sedimentation on water reservoir in Upper Runde sub-catchment, Zimbabwe – Dr Winmore Kusena, Midlands State University, Zimbabwe
11:20 – 11:40	Understanding the relationships between land cover dynamics and soil erosion in former homelands of Limpopo, South Africa: A remote sensing perspective – Dr Timothy Dube, University of Limpopo, South Africa
11:40 – 12:00	Application of vetiver system technology for stream bank and coastal dike stabilisation in Vietnam - Dr Paul Truong, Vetiver Network International, Australia
12:00 – 12:20	GIS and Remote Sensing for Geomorphological Studies - Dr Sizwe Mabaso, University of Swaziland, Swaziland
12:20 – 12:40	Discussion
12:40 – 14:00	Lunch – dining hall
Venue	Main Venue
Session	Session 7 : Fluvial geomorphology
14:00 – 14:20	The evolution of channel incision in the Mara River, Kenya – Prof Kate Rowntree, Rhodes University, South Africa
14:20 – 14:40	The link between the physical river habitat template, aquatic ecology and water quality – Ms Chantel Petersen, CSIR, South Africa
14:40 – 15:00	Geomorphology applied: Typing river ecosystems and mapping river condition, National Biodiversity Assessment (NBA) 2018 – Dr Lindie Smith-Adao, CSIR, NRE, South Africa
15:10 – 15:30	Discussion
15:30 – 16:00	Afternoon coffee/tea – foyer of the Main Venue
Venue	Main Venue
Session	Session 8 : The geomorphology of wetland systems
16:00 – 16:20	Assessing geomorphologic disturbances of wetland ecosystem by wildlife and tourism activities. A case study of Dete Vlei in Hwange district, Zimbabwe – Dr Thomas Marambanyika, Midlands State University, Zimbabwe
16:20 – 16:40	Mapping the Swaziland wetlands using remote sensing – Dr Althea Grundling, Agricultural Research Commission, South Africa
16:40 – 17:00	Discussion
Evening free - Dinner for delegates' own account	

DAY THREE
Friday 28 July 2017

Practical course in the use of bio-engineering and Vetiver grass (*Chrysopogon zizanioides*) jointly organised by the Erosion Focus Group of the Land Rehabilitation Society of Southern Africa (LaRSSA) and the Vetiver Network International (TVNI)

Venue	Venue, Kwaluseni Campus	
08:00-08:30	Registration and coffee/tea	Secretariat
Time	Item	Facilitator
08:00-08:15	Opening, welcome and outline of the Workshop	<i>Heinz Beckedahl</i>
08:15 -09:00	Slide show on the use of vetiver grass for phytoremediation applications	<i>Paul Truong</i>
09:00 -09:20	Understanding erosion processes – the key to successful rehabilitation work	<i>Heinz Beckedahl</i>
09:20-10:45	<p>Introduction and overview for soil erosion process based rehabilitation using bio-engineering practices and vetiver grass</p> <ul style="list-style-type: none"> • Shaping and trimming of donga and gully side slopes including practical use of A-Frame for setting out contour lines. • Placing and installation of bio-engineering systems (sand bags, rock berms, silt fences and bio-jute erosion control netting). • General overview and introduction to the use of Vetiver grass for soil erosion applications. 	<i>Roley Nöffke</i>
10:45–11:00	Mid morning tea and coffee break	

POSTCONFERENCE TOUR		
<p>Depart: 11:00</p> <p>Return: 13:00</p>	<p>Bus departs from Kwaluseni for field trips to:</p> <ul style="list-style-type: none"> • The Kwaluseni erosion site • The Mkolo Forest pipeline rehabilitation site • The Nhlambeni sewerage works and the Ezulwini sewerage works to view environmental work stabilising side slopes using vetiver grass planted some 13 years ago. 	<p>Facilitators:</p> <p><i>Heinz Beckedahl, Paul Truong and Roley Nöffke</i></p>

Delegates depart