



# 2025 DSTI-NRF CIMERA ANNUAL RESEARCH COLLOQUIUM

24 – 25 November 2025.

University of Limpopo, Earth Science Building.

## PROGRAMME



UNIVERSITY OF THE  
WITWATERSRAND,  
JOHANNESBURG



University of Fort Hare  
Together in Excellence



DAY 1: MONDAY 24 NOVEMBER 2025				
		07:15	BUS WILL DEPART FROM HOTEL TO VENUE	
		08:00 – 09:00	REGISTRATION AND TEA	
		09:00 – 09:10	<b>Prof Nicola Wagner</b> (UJ) DSTI-NRF CIMERA Director	WELCOME
		09:10 – 09:30	Invited Representatives from UL: VC / DVC / Dean Faculty of Science and Agriculture	WELCOME NOTES
	SLOT	TIME	PRESENTER	TOPIC
<b>SESSION 1:</b> CHAIRS ■ Prof Nicola Wagner (UJ, CIMERA Director) and Prof Susan Webb (Wits, CIMERA Co Director)		09:30 – 10:00	KEYNOTE SPEAKER <b>Mr Nevan Pillay</b> Vedanta Resources / Chair of DSTI-NRF CIMERA Steering Committee	<b>Putting Theory into Practice – An Explorer's Journey.</b>
	1	10:00 – 10:20	<b>Charl D Cilliers</b> (UWC)	Virtual Field Trips: Preparing students for geological fieldwork in South Africa.
	2	10:20 – 10:40	<b>Fatima Chitlango</b> (UJ)	Paleo-depositional environmental reconstruction for the Permian Vereeniging-Sasolburg Coalfield, South Africa.
	3	10:40 – 11:00	<b>Busisiwe Khoza</b> (Wits)	Resolving the B3 Group Paradox: New Isotopic Evidence for the Parental Magmas of the Main and Upper Zones of the Bushveld Complex and its Implications for Bushveld Mineralization.
		11:00 – 11:30	TEA BREAK	
<b>SESSION 2:</b> CHAIR ■ Elelwani Denge (UL)	4	11:30 – 11:50	<b>Julia Mapula Maponya</b> (UV)	Genesis and Mode of Occurrence of Magnetite-Rich Iron Ore within Gabbronorite of the Bushveld Igneous Complex: Evidence from Petrography, XRD, and Geochemistry.
	5	11:50 – 12:10	<b>Faith Nyati</b> (Wits)	High-precision Geochronology of the Rooiberg Group to Constrain the Shallow Crustal Effects of the Bushveld LIP.
	6	12:10 – 12:30	<b>Treyen Pillay</b> (Wits)	Interrogation of borehole geophysical data from the International Continental Scientific Drilling Program (ICDP) of the Bushveld Drilling Project (BVDP) for lithology determination.
	7	12:30 – 2:50	<b>Thabiso Sibanyoni</b> (UJ)	Using structural geology and geochronology to constrain the emplacement age of mafic-ultramafic Ombuku South and Otjijanasemo intrusions at the periphery of the Kunene Complex, northern Namibia.
		12:50 – 13:40	GROUP PHOTOGRAPHS AND BUFFET LUNCH; PUT UP POSTERS AFTER LUNCH	



# PROGRAMME (cont.)



<b>SESSION 3:</b> CHAIR ■ Dr. Marvin Moroeng (UJ)	8	13:40 – 14:00	<b>Kaydi Govender</b> (Wits)	Constraining the magma sources and tectonic setting of the Kunene AMCG Complex.
	9	14:00 – 14:20	<b>Chanelle du Plessis</b> (UP)	Insights into mantle processes of the Cullinan kimberlite (previously Premier kimberlite) pipe, Kaapvaal craton, South Africa.
	10	14:20 – 14:40	<b>Khulekani B Khumalo</b> (Wits)	Tracing Magmatic Ores: Setting-up Fe-Cu-Zn Stable Isotope Methods to Trace Mineralisation in Layered Intrusions.
	11	14:40 – 15:00	<b>Thabo S Kgarabjang</b> (UL)	Gold Distribution in Arsenic, Antimony-Bearing Sulphides at the Stibium Mopani Gold-Antimony Deposit, Murchison Greenstone Belt, South Africa: Evidence for Refractory Gold Mineralization.
		12	15:00 – 15:15	<b>POSTER PRESENTATIONS</b> (timed 1-minute elevator pitches; 14 presenters)
		15:15 – 15:50	<b>COMFORT BREAK AND POSTER VIEWING</b>	
<b>SESSION 4:</b> CHAIR ■ Prof Napoleon Hammond (UL)	13	15:50 – 16:10	<b>Daniel Ferreira</b> (SU)	The Tantalite Valley Complex: Insights into its genesis and evolution.
	14	16:10 – 16:30	<b>Munyai Phumudzo Gift</b> (UV)	Phytoremediation of metals from Klein Letaba gold mine tailings, Limpopo Province, South Africa.
	15	16:30 – 16:50	<b>Nthatsi Sandra Makhoba</b> (Wits)	Paragenesis of different styles of magmatic sulphide mineralisation in the mafic-ultramafic phase of the Kunene Complex, Angola.
	16	16:50 – 17:10	<b>Tahnee Otto</b> (SU)	Experimental investigation of Bushveld chromitite formation II: The story from sintered olivine capsules.
		17:20	<b>DEPARTURE FOR NETWORKING EVENT</b>	
		18:00 – 21:00	<b>NETWORKING SESSION AND BRAAI</b>	



# PROGRAMME (cont.)

DAY 2: TUESDAY 25 NOVEMBER 2025				
07:30		BUS WILL DEPART FROM HOTEL TO VENUE		
08:00 – 08:45		REGISTRATION AND TEA		
08:45 – 09:00		<b>Prof Sue Webb</b> (Wits) DSTI-NRF CIMERA Co-Director & Prof NQ Hammond (UL)		WELCOME
	SLOT	TIME	PRESENTER	TOPIC
<b>SESSION 5:</b> CHAIR ■ Dr Maropene Rapholo (UL)	17	09:00 – 09:20	<b>Fezeka Dliwako</b> (Wits)	Tectonic processes affecting the central Kaapvaal Craton: evidence from esoarchaeal TTGs from the Johannesburg Dome.
	18	09:20 – 09:40	<b>Nthabeleng Ramotholo</b> (UKZN)	The Metallogeny of the mafic-ultramafic Sithilo Complex, Tugela Terrane, Natal Metamorphic Province.
	19	09:40 – 10:00	<b>Zakhele Radebe</b> (UJ)	Organic petrography, mineralogy and sulphur distribution within the n0.2 seam in the Belfast coal mine, Witbank coalfield, South Africa.
	20	10:00 – 10:20	<b>Catherine Grobbelaar</b> (UCT)	Hyperspectral mineral identification for geological mapping and REE exploration.
	21	10:20 – 10:40	<b>Khethukuthula Ndebele</b> (UCT)	Premier kimberlite cluster megacrysts: constraints on kimberlite melt evolution in Bushveld-modified lithosphere.
		10:40 – 11:10	TEA BREAK	
	22	11:10 – 11:30	<b>Goitseone Benedict</b> (UP)	Fe-Ti oxides as a proxy for metallogenic processes in mafic/ultramafic intrusions peripheral to the Kunene AMCG Complex in Angola.
<b>SESSION 6:</b> CHAIR ■ Dr Karen Smit (Wits)	22	11:30 – 11:50	<b>Chanelle du Plessis</b> (UP)	Insights into mantle processes of the Cullinan kimberlite (previously Premier kimberlite) pipe, Kaapvaal craton, South Africa.
	23	11:50 – 12:20	<b>KEYNOTE SPEAKER</b> <b>Busiswe Maphalala</b> (UJ) CoE Manager	<b>The Changing Face of Geosciences: Towards a Regenerative and Responsible Future.</b>
12:20 – 13:00		LUNCH and PROFESSIONAL PHOTOGRAPHS		
13:00 – 13:15		Translate your research presentations and winners; presented by Directors		
13:10 – 13:30		Best presentation & poster, vote of thanks, & Colloquium close, + video		
13:30 – 16:00		Soft Skills workshop (students); discussion forum (academics)		
16:10 – 20:30		BUS DEPARTURE FROM VENUE TO JOHANNESBURG		

# POSTER PROGRAMME

15:00 – 15:50 MONDAY 24 NOVEMBER 2025	
PRESENTER	TOPIC
<b>Jazmynn Eksteen</b> (UKZN)	Geological controls on unconsolidated sediment and non-diamond placer distribution in the 20 to 14 A-C diamond concessions, Saldanha Bay to Strandfontein shelf.
<b>Liseloane Lucia Malelu</b> (WITS)	Integrated Geometallurgical and Mineralogical Assessment of Vanadium in Magnetite of the Upper Zone in the Bushveld Complex.
<b>Puleng Nthebe</b> (WITS)	Thermochemical impact of tectonic processes on the lithospheric mantle beneath the SE margin of the Kaapvaal Craton: using mantle xenoliths from Lesotho.
<b>Bokani Moyo</b> (UCT)	Enhancing diamond breakage classification using the morphology of natural stones.
<b>Matebello Mokoena</b> (WITS)	Sulphide paragenesis mechanisms in the Okiep Copper Deposits, South Africa.
<b>Ishta Maharaj</b> (UKZN)	Detailed bedrock morphology and structural geology controls on diamond traps offshore Hottentot's Bay, Southern Namibia.
<b>Dr Fritz A. Agbor</b> (UWC)	Thermal Maturity History and Hydrocarbon Generation Modelling within The Southern Pletmos Sub-Basin, Offshore South Africa.
<b>Wayne Nel</b> (UFS)	The iron formations of the eastern Mesoproterozoic Aggeneys Terrane, and their significance to Zn-Pb deposits.
<b>Thoriso Lekoetje</b> (WITS)	Zircon–Baddeleyite Co-crystallisation and Accessory Phase Behaviour in Mafic Magmas: Insights from the Kunene Complex.
<b>Masonwabe Jubase</b> (WITS)	Mineralogical and Petrogenetic Characterization of Witkop Pegmatites, Northern Cape, South Africa.
<b>Amahle Ngcobo</b> (UKZN)	Investigating the Bethal Limb of the Bushveld Complex.
<b>Mphanama Thangeni</b> (UV)	Petrography and Mineralogy of Copper-Bearing Rocks in the Mutale Copperfield, Soutpansberg Group.
<b>Mangapa Moloto</b> (UL)	Characteristics of ore mineralogy associated with gold mineralization in the Windmill orebody, Kalahari Goldridge deposit, Kraaipan greenstone belt, South Africa.
<b>Thabiso Mokobodi</b> (UL)	Geological mapping and investigation of natural hydrogen gas potential in the Nkangala district, Mpumalanga province, South Africa.