



**Our Future. Reimagined.**



Council for Geoscience



### OPENING/WELCOME

#### Welcome to the final CIMERA newsletter of 2025!

We are thrilled to share the latest edition of the CIMERA newsletter. It is packed with reflections on 2025's milestones, including GeoCongress 2025 highlights, engaging workshops held, and international collaborations. We celebrate student achievements, bid fond farewells, and extend warm welcomes to new team members. You will also find updates on upcoming events such as CIMERA's annual colloquium and courses, as well as recent publications to keep you informed and inspired.

This newsletter marks a personal milestone for me as I recently joined the CIMERA team. It has been inspiring to witness first-hand the meaningful work being done here and to contribute to the Centre's mission of advancing research excellence in mineral and energy resources. Although this is our final newsletter for 2025, there is still plenty in store for the remainder of the year. Keep reading to discover what else we have planned. Whether you are a student, academic, researcher, policymaker, or industry professional, we hope this newsletter keeps you informed, inspired, and connected.

Thank you for being part of the CIMERA community.

Warm regards,  
**Busisiwe Maphalala**



### FAREWELLS, THANKS & WELCOMES

In May, with sad hearts, we bid farewell to Miss Khanya Matiwane, our Events & Marketing Coordinator, who joined our team mid-2023. Khanya elevated our social media presence and brand profile. We wish her all the best as she embarks on an MSc in AI Digital Marketing abroad.

We also extend heartfelt thanks to Dr. George Henry, who stood in as CoE Manager from October 2024 to April 2025. His leadership and support during this period were invaluable. We are grateful that George will remain an active member of CIMERA's Scientific Advisory Committee.



We warmly welcome Ms. Busisiwe Maphalala, our new CoE Manager; she joined the team in May 2025. With her research and project management experience in the minerals and metals sector from her time at the CSIR, she brings invaluable expertise to the team.

Finally, we are delighted to welcome Miss Itumeleng Modisha, who joined us in August 2025 as our Events & Marketing Coordinator. Itumeleng brings creativity and strategic insight to our outreach efforts, and we look forward to her contributions in strengthening CIMERA's visibility and impact.

## 2025 HIGHLIGHTS & REFLECTIONS

### GeoCongress 2025 Recap

DSTI-NRF CIMERA was a sponsor and attended GeoCongress 2025, hosted at the welcoming University of the Free State from 24 to 27 June 2025. GeoCongress is a leading geoscience conference in South Africa that brings together academics, industry professionals, and students to share research, foster collaboration, and promote innovation in the geosciences. It aims to advance scientific understanding and encourage partnerships that address real-world geological challenges through knowledge exchange and interdisciplinary dialogue.

CIMERA hosted a workshop on 24 June 2025, attended by collaborators and stakeholders. The workshop aimed to connect both CIMERA-affiliated and non-affiliated stakeholders, gather ideas regarding CIMERA's long-term plans and industry research needs, and explore new research projects and funding opportunities. It was a great success, with strong participation, valuable feedback, and exciting ideas for CIMERA's future.

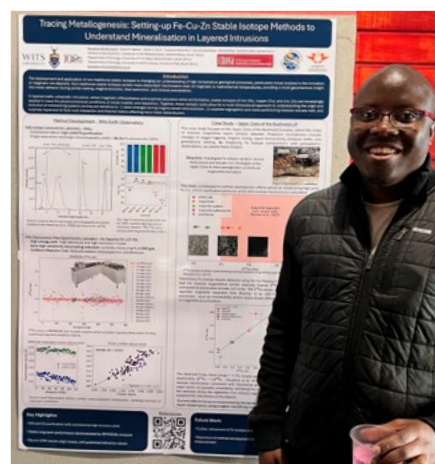
Several CIMERA-affiliated collaborators and students actively participated in GeoCongress 2025, with many delivering oral or poster presentations. CIMERA's Co-Director, Prof. Susan Webb, delivered a keynote address on "Integrating Geophysical Research in the ICDP Bushveld Drilling Project (BVDP): The Importance of Physical Properties." Dr. Geoffrey Howarth presented a compelling keynote titled "Kimberlitic Olivine as a Tool for Constraining Deep Mantle Processes and Diamond Preservation." Other notable oral presentations included:

- Dr. Stephanie Scheiber-Enslin on "Using Geophysics to Uncover the Southwestern Part of the Bushveld Complex"
- Prof. Axel Hoffman on "A Review of Factors Responsible for Witwatersrand Gold Mineralisation"

- Treyen Pillay on "Developing a Seismic Reference Section of the Eastern Bushveld Complex's Critical and Lower Zones Using Borehole Geophysical Data from the ICDP BVDP"
- Rowan Lucienne Walker on "Intrusion Mechanism and Magma Differentiation of the Timbavati Gabbro: Integrating Machine Learning and Remote Sensing for Geological Mapping"
- Luyanda Mayekiso on "The Use of Software and Hive Technology in Constructing Virtual Field Education of the Tanka Karoo"
- Busisiwe Khoza on "Mantle Sources for the Bushveld Complex: Insights from New, High-Precision Sr-Nd Isotope Data from the Marginal Zone"
- Itumeleng Matlala on "The Significant Role of Petrography in Highlighting the Impact of Mode of Occurrence in Minimizing Mineral Matter During Coal Beneficiation"
- Fatima Chitlango on "Reconstruction of Paleo-Depositional Environments for the Permian Vereeniging-Sasolburg Coalfield, South Africa"

Poster presentations included:

- Patience Mudanalwo Ratshalingwa (Pr.Sci.Nat) on "Intra-Cratonic Architecture and Metallogenic Significance of the Kaapvaal Craton"

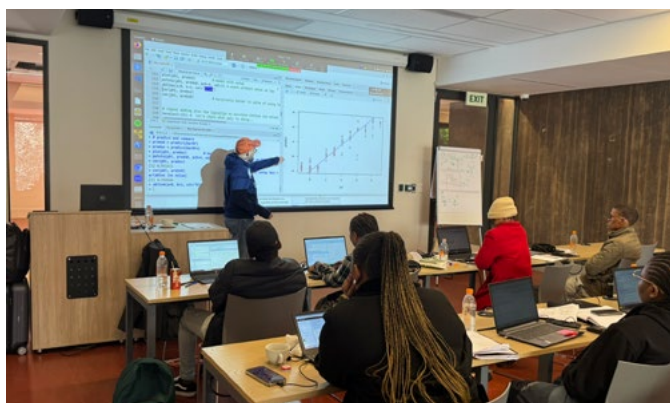




- Nomaswazi Makhombothi on “Mineral Chemistry as Vectors to Granite-Associated Magmatic Hydrothermal Mineralisation in the Northern Cape, South Africa”
- Khulekani Khumalo on “Tracing Metallogenesis: Setting Up Fe-Cu-Zn Stable Isotope Methods to Understand Mineralisation in Layered Intrusions”

## Data Analytics Workshop

DSTI-NRF CIMERA, in collaboration with the Helmholtz Institute Freiberg for Resource Technology (HIF) in Germany, hosted a workshop titled “Introduction to Data Analysis with R for Geoscientists,” presented by Dr. Raimon Tolosana-Delgado from HIF. Twenty-one participants, including students and industry representatives, gained hands-on experience in this dynamic, interactive workshop. Dr. David Khoza is gratefully acknowledged as a sponsor for the event, enabling five postgraduate students to participate.



MSc student (University of the Witwatersrand) Masonwabe Jubase posted this about the workshop:

*“I am deeply grateful for the opportunity to attend the Introduction to Data Analysis Using R for Geoscientists course led by Raimon Tolosana-Delgado. The course provided a solid foundation in R programming and covered a wide range of topics, including data structuring, exploratory data analysis (EDA), scale assessment, and constrained data such as categorical data, compositions, and orientations. It also delved into multivariate techniques like principal component analysis, regression, hypothesis testing, and both supervised and unsupervised classification. These skills will be immensely valuable for my Master’s research project titled ‘Mineralogical and Petrogenetic Characterization of Witkop Pegmatites, Northern Cape, South Africa.’ This work involves a comparative analysis of two pegmatites with the goal of identifying the parameters that differentiate Lithium-enriched from non-Lithium-enriched pegmatites. I would like to extend my sincere thanks to Dr. David Khoza for generously sponsoring my registration. I am also thankful to DSTI-NRF CIMERA and the Helmholtz Institute Freiberg for Resource Technology (HIF) at HZDR for organizing and supporting*

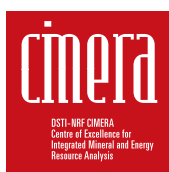
CIMERA also hosted an exhibition stand, where engagement was boosted through a social media competition that invited attendees to follow its platforms. A winner was drawn, and Hanco was delighted to receive the prize.

CIMERA’s participation at GeoCongress 2025 was a testament to its ongoing commitment to advancing geoscience research, collaboration, and capacity development in South Africa.



*this impactful short course. The week-long workshop was exceptionally enriching—truly the kind of learning experience one could equate to an entire academic year. I found the EDA component particularly fascinating, as it brought clarity and purpose to the statistical training I received during my undergraduate studies in geology.”*

## International Continental Drilling Program (ICDP) 2025 EC and AOG Meetings Hosted by CIMERA



DSTI-NRF CIMERA was proud to host the 2025 International Continental Drilling Program (ICDP) Executive Committee (EC) and Assembly of Governors (AOG) meetings in Johannesburg, held between 4 to 11 May 2025. The ICDP is an independent organisation that supports international drilling projects at globally significant geological sites to advance Earth science by exploring the subsurface and funding research with high societal relevance. This was the first combined EC and AOG meeting held in Africa.

The ICDP South African country membership is funded by the NRF, and South Africa is one of 21 member countries, enabling the South African geoscience community to participate in deep drilling projects both locally and internationally.

A total of 23 international delegates participated in the EC and AOG meetings (as the respective country representatives, UNESCO representative, and the ICDP OSG). The EC assessed the reviews of the 22 proposals submitted for funding.





Delegates attending the CGS visit at Donkerhoek Core Repository

either as a pre-proposal, workshop proposal, or final proposal. The AOG is the highest body and confirms the final acceptance and budget for each project.

The Day 1 field excursion was attended by a total of 36 delegates, and 42 attended the Day 2 excursion. CIMERA invited the South African ICDP committee members, as well as postgraduate students and staff, to participate in the field excursions and final dinner. Field excursions provide an ideal opportunity to experience the geological environment around Gauteng, as well as to network and establish working relationships. This also served to demonstrate the value of South Africa's ICDP membership, including its societal benefits, contributions to science outreach, and its role in the training and development of early-career scientists and youth.

The delegation participated in underground and surface tours at Cullinan

Diamond Mine, the Gold Reef City Experience, and tried their hands at rock art painting at the Origins Centre, University of Witwatersrand. A site visit to the Council for Geosciences (GCS) National Core Repository at Donkerhoek enabled the delegation to view CGS's world-class core storage facilities.

We thank the CGS for hosting us at Donkerhoek and for the evening dinner in Pretoria, where the international delegates had the opportunity to taste some South African specialties. We also thank the ICDP for funding the field excursions, enabling additional delegates to join the ICDP activities. CIMERA was proud to host the week, and we received extremely positive feedback from the ICDP delegates regarding the formal and informal activities. Many delegates expressed their interest in returning to South Africa for family holidays.



Cullinan surface tour group



Dr Bohnhoff (ED ICDP), Profs Wagner and Webb (CIMERA), Ms Tshitlho and Ms Molefe (NRF)



Prof Durrheim explains the Dseiss core



Welcome at the CGS Core Yard, Donkerhoek



## CIMERA on the Air: Celebrating CIMERA's Science Writing Competition Winners on UJFM

On 25 August 2025, DSTI-NRF CIMERA had the pleasure of celebrating our 2024 Science Writing Competition winners on UJFM Radio! This competition, challenged students to translate their scientific research into their home language, showcasing not only their research skills but also their ability to communicate science in diverse languages, and most importantly, to a general audience.



We are thrilled to share that Fatima Chitlango, one of the three winners, had the incredible opportunity to read her entry live on air in her home language, bringing her research to the broader community in a truly authentic and inspiring way.

This moment highlights CIMERA's commitment to promoting science communication, linguistic diversity, and student excellence. We are proud to see our students using their voices to make research accessible and engaging for all.



**Looking forward to the 2025 Science Writing Competition – TAKE UP THE CHALLENGE: EXPLAIN WHY YOUR RESEARCH MATTERS IN THE REAL WORLD.** (Refer to page 7 to find out more about the 2025 Science Writing Competition and how to enter).

## STUDENT NEWS & ACHIEVEMENTS

### International Conference Participation

#### CIMERA Students Shine on the International Stage

DSTI-NRF CIMERA is proud to celebrate our students who have been funded to present their cutting-edge research at prestigious international conferences this September. These opportunities not only showcase the quality of research coming from our students but also provide them with invaluable platforms to engage with global experts in their fields.

##### 'Mabatho's Journey to Australia

'Mabatho Mapiloko presented her PhD research at the SEG 2025 Conference in Brisbane, Australia, which took place from 26 to 30 September 2025. She delivered both a poster presentation and a speed talk, highlighting the significance of her doctoral research. Mabatho completed her PhD under the supervision of Dr. Yudovskaya and Prof. Nex.



##### Fatima's Presentation in Indonesia

Fatima Chitlango was selected to present at the 41st Society for Organic Petrology (TSOP) Annual Meeting, hosted in Yogyakarta, Indonesia, from 7 to 14 September 2025. She delivered an oral presentation on her research titled: *"Geochemical Composition of the Permian Coalbrook Sub-basin (Vereeniging-Sasolburg Coalfield, South Africa)."*



Fatima was awarded the prize for the best student presentation – **CONGRATULATIONS.**

Her PhD research is supervised by Prof. Nikki Wagner and Dr. Marvin Moroeng.



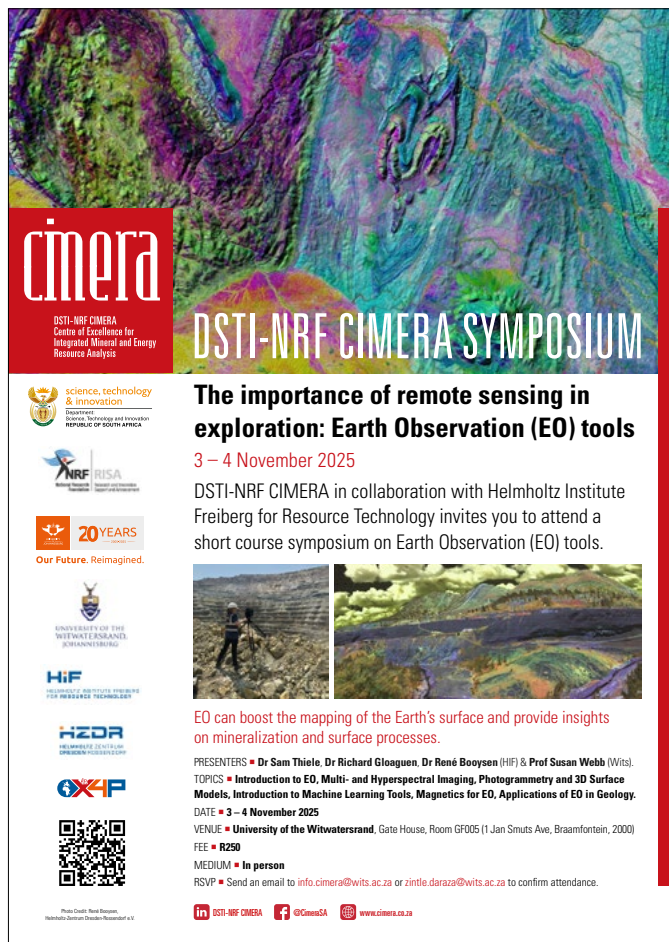
##### Liseloane's Research Collaboration in Germany

Earlier this year, Liseloane Malelu completed a research visit to Germany from 16 June to 27 August 2025. The purpose of her visit was to conduct joint research on mineralogy, geochemistry, and statistical analyses of ores from the Bushveld Complex. The results will contribute directly to her PhD thesis. During her stay, Liseloane also participated in two specialized courses organized with the Doctoral School at HIF, further strengthening her academic and research expertise.

We are immensely proud of our students for representing CIMERA and South Africa on the global stage. Their participation strengthens their academic journeys and builds international networks that will benefit the local research community for years to come.



## IMPORTANT ANNOUNCEMENTS



**cimera**  
DSTI-NRF CIMERA  
Centre of Excellence for  
Integrated Mineral and Energy  
Resource Analysis

**DSTI-NRF CIMERA SYMPOSIUM**

**The importance of remote sensing in exploration: Earth Observation (EO) tools**  
3 – 4 November 2025

DSTI-NRF CIMERA in collaboration with Helmholtz Institute Freiberg for Resource Technology invites you to attend a short course symposium on Earth Observation (EO) tools.

EO can boost the mapping of the Earth's surface and provide insights on mineralization and surface processes.

PRESENTERS • Dr Sam Thiele, Dr Richard Gloaguen, Dr René Booysen (Hf) & Prof Susan Webb (Wits).  
TOPICS • Introduction to EO, Multi- and Hyperspectral Imaging, Photogrammetry and 3D Surface Models, Introduction to Machine Learning Tools, Magnetics for EO, Applications of EO in Geology.

DATE • 3 – 4 November 2025  
VENUE • University of the Witwatersrand, Gate House, Room GF005 (1 Jan Smuts Ave, Braamfontein, 2000)  
FEE • R250  
MEDIUM • In person  
RSVP • Send an email to [info.cimera@wits.ac.za](mailto:info.cimera@wits.ac.za) or [zintle.daraza@wits.ac.za](mailto:zintle.daraza@wits.ac.za) to confirm attendance.

Logos: science, technology & innovation; NRF; 20 YEARS; Our Future. Reimagined.; UNIVERSITY OF THE WITWATERSRAND; Hf; HZDR; ICRP.

QR code and social media links: [www.cimera.co.za](https://www.cimera.co.za)

## Earth Observation Symposium 3–4 November

DSTI-NRF CIMERA, in collaboration with the Helmholtz Institute Freiberg for Resource Technology, is proud to host the 2nd symposium on *"The Importance of Remote Sensing in Exploration: Earth Observation (EO) Tools"* from 3–4 November 2025 at the University of the Witwatersrand.

Expert presenters – Dr. Sam Thiele, Dr. Richard Gloaguen, Dr. René Booysen, and Prof. Susan Webb – will share insights on:

- Multi- and Hyperspectral Imaging
- Photogrammetry & 3D Surface Models
- Machine Learning Tools
- Magnetics for EO
- Applications of EO in Geology

## Critical Raw Materials: A Global Perspective Course

### Critical Raw Materials will power our future.

From electric vehicles to energy storage, resources required for these technologies are reshaping the global economy, and you have a key role to play.

This short course provides a comprehensive overview of the global critical metals industry, with a focus on both international and African contexts. Participants will explore the diverse types of mineralisation, learn how to identify and evaluate deposits, and deepen their understanding of the geological models that guide exploration. The course also unpacks the economic drivers of supply, demand, and mining viability, equipping professionals to critically analyse and engage with one of the most dynamic sectors in today's resource landscape.

Gain in-depth insights into critical raw materials from experts in the School of Geosciences at the University of the Witwatersrand. A must for mining professionals, bankers, economists, and strategists shaping the future of mineral resources.

Applications accepted until 12 November 2025.

SECURE YOUR SPOT NOW: <https://witsplus.ac.za/c/critical-raw-materials>

Call 011 717 4208 for further information.



**Critical Raw Materials**

Applications accepted until  
**12 November 2025.**

Logos: UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG; WITS PLUS LIFELONG LEARNING; WITS GEOSCIENCES; cimera.

Contact: [witsplus.ac.za](https://witsplus.ac.za)  
011 717 4208



## Calling all DSTI-NRF CIMERA Alumni

Please ensure that we have your updated details as we would like to invite you to our events.  
Please email the CoE Manager at [cimera@uj.ac.za](mailto:cimera@uj.ac.za) and share your news with us.





# SCIENCE WRITING COMPETITION 2025

**TAKE UP THE CHALLENGE:  
EXPLAIN WHY YOUR RESEARCH MATTERS  
IN THE REAL WORLD**

**Translate your research for a general audience.**

Submit your Word document in English to [cimera@uj.ac.za](mailto:cimera@uj.ac.za) by 3 November 2025.

- Length: 600–800 words
- Include a catchy title and use a creative writing style.
- Open to all Geoscience students and postdoctoral research fellows.
- Prizes awarded to the top three DSTI-NRF CIMERA entries.
- Winners will be announced during the closing session of the DSTI-NRF CIMERA Annual Research Colloquium on 25 November 2025.
- Winning entries will be published.









## UPCOMING EVENTS



# DSTI-NRF CIMERA SOFT SKILLS WORKSHOP

in collaboration with WIMSA

Hosted by the Dept. of Geology & Mining at the University of Limpopo





**MOGALEADI SEABELA**  
WIMSA DEPUTY  
CHAIRPERSON



**PHATHUTSHEDZO MUSALAFU**  
STUDENT  
PARTNERSHIP LEAD



**HUMBULANI HAVHI**  
REGIONAL BRANCHES



**JENNINE OSBORNE**  
PARTNERSHIP LEAD

**WORKSHOP OBJECTIVES:**

Focus is on equipping PhD students for the professional world

- Learn from industry leaders' experiences
- Improve professional communication and self-presentation
- Strengthen financial literacy and independence
- Build a positive, professional online presence
- Embrace innovation, diversification, and lifelong learning

**REGISTER HERE**  
capped at 30 students



**TUESDAY,  
25 NOVEMBER 2025**

**UNIVERSITY OF  
LIMPOPO, EARTH  
SCIENCE BUILDING**

**TIME  
13:30 - 16:00**

## Science Writing Competition

### DSTI-NRF CIMERA Science Writing Competition 2025: Celebrating Creativity in Geoscience

The DSTI-NRF CIMERA Science Writing Competition 2025 is open for entries; please refer to the flyer below. The top three entries will be awarded prizes, and the winners will be announced during the closing session of the DSTI-NRF CIMERA Annual Research Colloquium on 25 November 2025. Winning pieces will also be published, allowing these outstanding contributions to reach the wider geoscience community.

## LAST CALL FOR ABSTRACTS & REGISTRATION

DSTI-NRF CIMERA Annual Research  
**COLLOQUIUM'25**  
hosted by Department of Geology and  
Mining at University of Limpopo

## I N V I T A T I O N

We are delighted to invite you to the  
DSTI-NRF CIMERA Annual Research Colloquium  
hosted by the University of Limpopo  
at their New Earth Science Building.

**24–25 November 2025**  
New Earth Science Building, University of Limpopo, Polokwane.

REGISTRATION CLOSES 15 NOVEMBER 2025  
[https://docs.google.com/forms/d/e/1FAIpQLStfmFWp8-0zQ2guhJewOGtzJBvowOC0kpp5W\\_7wQU13PioQWg/viewform?usp=header](https://docs.google.com/forms/d/e/1FAIpQLStfmFWp8-0zQ2guhJewOGtzJBvowOC0kpp5W_7wQU13PioQWg/viewform?usp=header)

**24 November 2025**  
DSTI-NRF CIMERA Collaborator Presentations + Posters, Networking Event.

**25 November 2025**  
DSTI-NRF CIMERA Collaborator Presentations.  
Soft Skills session in collaboration with WIMSA.

DSTI-NRF Abstract Submission  
by 15 September 2025 to [cimera@uj.ac.za](mailto:cimera@uj.ac.za), maximum 400 words.

DSTI-NRF CIMERA will cover the cost of transport from  
Johannesburg to Polokwane and two nights hotel accommodation.  
Please refer to registration form using above link.






### DSTI-NRF CIMERA Annual Research Colloquium

The DSTI-NRF CIMERA Annual Research Colloquium, hosted by the University of Limpopo, will take place on 24 to 25 November 2025. The event will showcase cutting-edge research from CIMERA-funded students, offer opportunities to engage with leading experts, and provide a platform for networking across the geoscience community. Please ensure you register as soon as possible.

#### Soft Skills Workshop

As part of the DSTI-NRF CIMERA Annual Research Colloquium, we will host an interactive Soft Skills Workshop in collaboration with Women in Mining South Africa (WIMSA) on the afternoon of 25 November 2025. This session is designed to equip postgraduate students with practical skills, including professional communication, contract awareness, financial astuteness, and career development strategies, facilitated by experts from various fields.

Spaces are limited, so make sure to register early!



# 2025 DSTI-NRF CIMERA ANNUAL RESEARCH COLLOQUIUM

24 – 25 November 2025.

University of Limpopo, Earth Science Building.

## PROVISIONAL PROGRAMME



### 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	WELCOME NOTES
	CHAIR	SLOT	TIME	PRESENTER	TOPIC
SESSION 1			09:30 – 10:00	<b>KEYNOTE SPEAKER</b> <b>Mr Nevan Pillay</b> Vedanta Resources / Chair of DSTI-NRF CIMERA Steering Committee	<b>Title: TBC</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	
SESSION 2		4	11:30 – 11:50	<b>Julia Mapula Maponya</b> (UJ)	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	
SESSION 3		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>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.
		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.





# PROVISIONAL PROGRAMME (cont.)

SESSION 3		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	POSTER PRESENTATIONS (timed 1-minute elevator pitches; 14 presenters)	
			15:15 – 15:50	COMFORT BREAK AND POSTER VIEWING	
SESSION 4		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	DEPARTURE FOR NETWORKING EVENT	
			18:00 – 21:00	NETWORKING SESSION AND BRAAI	

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 & UL Representatives	WELCOME
	CHAIR	SLOT	TIME	PRESENTER	TOPIC
SESSION 5		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>Atavile Ximbi</b> (UJ)	Remote sensing and structural geology of the Rooikuseb anticlinorium in the Southern Central Zone, Damara Belt, Namibia.
		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.
	5	23	11:50 – 12:20	<b>KEYNOTE SPEAKER</b> <b>Busiswe Maphalala</b> 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	

## INDUSTRY EVENTS



### 2025 NSTF South32

Profs. Nikki Wagner and Susan Webb, accompanied by Dr. George Henry, attended the 2025 NSTF-South32 Awards evening held in Sandton, Johannesburg, on 31 July. DSTI-NRF CIMERA was nominated as a finalist in the Communication Award. We congratulate Prof. Ryan Blumenthal, Forensic Pathologist and Associate Professor, and his research group from the Department of Forensic Medicine, University of Pretoria, the winner of this highly competitive category.

*It was certainly a glamorous evening!*



### The Society of Exploration Geophysicists

The Society of Exploration Geophysicists (the "other" SEG) held their annual meeting known as IMAGE jointly with the AAPG (American Association of Petroleum Geoscientists) in Houston Texas from 25-28, August 2025. This meeting attracted over 7800 people and focuses on energy exploration with a keen component of mineral exploration and alternative energy. CIMERA Co-Director Susan Webb attended the meeting presenting a well-received technical talk titled "The International Continental Drilling Program (ICDP): new insights into the formation of the deepest part of the Bushveld Complex". She also represented the Southern African Geophysical Association (SAGA) on the SEG Council and is a Board member of the SEG Foundation. She caught up with Petroleum



Agency of South Africa (PASA) CEO Dr. Bongani Sayidini in the exhibition hall and with Dr. Craig Beasley, the founder of Geoscientists without Borders during the Foundation luncheon. She discussed CIMERA plans with numerous people and while her candidacy for president of the society was ultimately unsuccessful, it did bring much attention to exciting developments with CIMERA in African Geoscience and Mineral exploration.





## ICDP — BVDP

### And just like that, the drilling is complete!

The International Continental Scientific Drilling Program (ICDP) Bushveld Drilling Project began in January 2012 with the approval of the first workshop proposal. On Monday, 25 August 2025, drilling operations officially concluded after reaching a final depth of 1,877.2 metres, following 0 m of core recovery and poor hole conditions.

The project has been managed through the CIMERA offices, and we are now in the process of logging the recovered core to determine the exact stratigraphic position of the termination point. The recovered core begins in the lower portion of the Critical Zone and extends through the poorly studied Lower Zone.

To date, the project has already produced its first publication, Suzuki et al., (2024), which reports on geomicrobiology findings and water research results supported by the Water Research Commission of South Africa.

An exciting highlight of the project has been the donation of over 6 km of core, helping to establish a comprehensive reference section for the Eastern Bushveld Complex. In addition, several seismic experiments and geophysical borehole logs have been completed, contributing to a deeper understanding of this world-class geological system.

We look forward to hosting a sampling party in early 2026, once the core has been fully logged in the mDIS system, scanned with the multispectral scanner, and curated at the Council for Geoscience.

Researchers interested in studying this remarkable core are encouraged to indicate their interest, as an exciting new phase of scientific discovery awaits.







## CIMERA Team Reconnects in the Great Outdoors!

The CIMERA team recently stepped out of the office and into the trees for a fun-filled team-building session at Acrobranch Modderfontein. From balancing acts to thrilling ziplines, the day was all about laughter, encouragement, and rediscovering the joy of working (and playing) together.

It was a refreshing reminder that teamwork extends beyond meetings and projects. It's about trust, support, and celebrating each other's strengths. The team returned energised, connected, and ready to take on the rest of the year with renewed spirit!

### CLOSING REMARKS

As we look back on an eventful year, the DSTI-NRF CIMERA team extends our sincere appreciation to all our students, researchers, collaborators, and partners for their continued commitment to advancing geoscience research and innovation.

2025 has been a year of growth, collaboration, and achievement. From welcoming new staff members and supporting student research abroad to creating platforms that celebrate science communication. Each milestone reflects the dedication and excellence that define our CIMERA community.

We look forward to closing the year with our **Annual Research Colloquium**, hosted by the **University of Limpopo** at their new **Earth Science Building**, another milestone we are proud to celebrate, as it marks the first time the Colloquium will be held outside of Gauteng. We are excited for another year of impactful research, collaboration, and discovery in 2026.

*Thank you for being part of our journey in shaping the future of geoscience in Africa and beyond.*

Warm regards,  
The DSTI-NRF CIMERA Team

### CALLING ALL ALUMNI

**cimera** DSTI-NRF Centre of Excellence for Integrated Mineral and Energy Resource Analysis



science, technology & innovation  
Department: Science, Technology and Innovation  
REPUBLIC OF SOUTH AFRICA



RISA  
Research and Innovation  
Support and Advancement



### CALLING ALL CIMERA-FUNDED STUDENTS AND ACADEMIC STAFF TO SUBMIT CONTRIBUTIONS TO THE CIMERA NEWSLETTER.

We would love to receive photographs of field excursions, conferences, analytical work, publications, and so on, showcasing the benefit of CIMERA funding in the execution of your research. Please submit all contributions for 2025 by the end of November to [cimera@uj.ac.za](mailto:cimera@uj.ac.za), subject line NEWSLETTER 2026.