

NEWSLETTER

Promoting the study and advancement of Earth Sciences since 1895



HYBRID

AFRICAN EXPLORATION SHOWCASE

12 & 13 November 2025

**Jhb Country Club
Auckland Park**

- Sponsorship Opportunities ✓
- Exhibition ✓
- Networking ✓
- Professional Development ✓

The African Exploration showcase aims to provide an opportunity for professionals in the industry to be informed about new African exploration projects and current developments. It is an ideal opportunity to learn more about deposits that could potentially add significant economic value to the continent's pipeline.

Our speakers are from major and junior mining companies, and from large consulting companies to independents, which should ensure an interesting event.

AES PROGRAMME

REGISTER NOW

INSIDE THIS ISSUE:

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ATTENTION PLEASE

A reminder that some Members still need to settle their 2025 fees. In a few cases, we may have outdated contact details due to changes in employment or email addresses, and some Members may be under the impression that their employer has already made payment on their behalf.

If you're unsure about your membership status or payment, please feel free to contact us at info@gssa.org.za for assistance.



info@gssa.org.za



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NOLEEN PAULS

GSSA PRESIDENT

Unearthing Wellbeing: Mental Health in the Geosciences

October marks Mental Health Awareness Month in South Africa — a timely reminder that wellbeing is essential to professional excellence. For members of the Geological Society of South Africa (GSSA) and the wider geoscience community, this awareness takes on special meaning. Ours is a profession defined by exploration, discovery, and resilience — but also by long hours, remote work, physical demands, and, often, isolation.

Geoscientists are no strangers to tough conditions. Whether mapping in remote terrain, working underground, or analysing complex datasets under pressure, our work often stretches both body and mind. The field's cyclical nature — from commodity downturns to exploration booms — can also bring uncertainty about employment, project continuity, and professional stability. It's little wonder that mental health challenges can quietly take root in such an environment.

As a Society, the GSSA recognises that mental health is foundational to safe, effective, and sustainable professional practice. Supporting ourselves and one another strengthens not only individual resilience but also enhances collaboration, innovation, and the long-term vitality of our discipline.

The Society also acknowledges the growing conversation around psychological safety in science — the understanding that innovation thrives when people feel safe to speak up, admit uncertainty, or share when they're struggling. As we build a stronger, more inclusive GSSA, let's ensure this principle extends beyond technical discourse to human wellbeing.

We encourage all members to:

- Check in with colleagues, especially those in remote or high-pressure roles
- Make time for rest, balance, and meaningful personal connection
- Speak openly about mental health — and listen with empathy when others do

Cultivating a culture of care within the geosciences is part of building a stronger professional community — one where people feel supported, valued, and safe to share their challenges as well as their achievements.

Together, let's ensure that our work — and our wellbeing — remain grounded in care, connection, and resilience.



Tshego Majane

GSSA - VP Meetings

Tshego Majane is a seasoned geoscience professional and Customer Success Manager at Seequent in EMEA, with over a decade of expertise spanning exploration, production, and technology-driven solutions in the mining industry. His career includes key roles in greenfield and brownfield exploration, technical and business leadership across multiple African mining jurisdictions, and hands-on experience as a geologist and rock engineering technician. He has strong skills in geological core logging, geotechnical mapping, exploration drilling program design, and geological modelling. Tshego has played an instrumental role in developing and deploying geological and mining software aligned with international standards such as SAMREC, JORC, and NI 43-101, and excels in customer success management, business development, account management, client engagement, and after-sales support by effectively managing commercial and technical relationships.

Beyond his technical expertise, Tshego has demonstrated an entrepreneurial spirit by successfully running a township-inspired gourmet food business and restaurant, honing skills in event planning, business management, and leadership. He holds a BSc Geology, Honours from the University of Johannesburg and certifications in Project Management, Strata Control, Metalliferous Theory, and Finance for Non-Financial Managers. Tshego is a registered Professional Natural Scientist, a member of the Geological Society of South Africa (GSSA), and in the GSSA Meetings Committee.

Passionate about innovation, he drives digital transformation and cloud-based solutions for geoscientists. Tshego is also an accomplished percussionist, having performed and collaborated with renowned artists, balancing his dedication to both professional excellence and artistic pursuits.

We welcome Tshego in his new role as Vice-President (VP) Meetings of the GSSA.

On Demand	Drilling Methods & Techniques in Exploration (Drilling Skills for Geologists Certificate Programme)	Online
18 Feb	Geotech for Geologists - understanding rock stability, geological structures & rock mechanics	Online
17-Mar	CPD Workshop	Online
10-March	Financial literacy in mineral project development	Jhb Country Club
2-3 April	3D Geological Modelling	Online
24 June	AI in Geology (related to exploration and production environment)	Online
16-Jul	Beyond the Rocks: Essentials Skills for Geoscientists (tie with Mentorship and YPG)	Jhb Country Club
16-Jul	GSSA AGM - Hybrid	Jhb Country Club
04-Aug	Introduction to Drilling Workshop (digital core logging, QAQC, innovative tools)	Online
Aug	Minerals Resource Mastery	Online
8-Sep	Professionalism & Code of Ethics Workshop	Online
10-13 Sep	Lichtenburg 100 - Conference & Field Trip	Council for Geoscience
19-20 Sep	Structural Geology Course & Field trip	Southbroom - KZN
8-9 Oct	Data Analytics & Machine Learning	Online
19-20 Nov	African Exploration Showcase	JHB Country Club (Hybrid)



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MINIMUM STANDARDS VS BEST PRACTICE

Minimum standards are the baseline requirements that must be met to ensure safety, legality, or basic functionality—they represent the "bare minimum" needed for compliance. Best practices, on the other hand, go beyond these thresholds to reflect the most effective, ethical, or innovative approaches within a field. While minimum standards prevent failure, best practices promote excellence, continuous improvement, and leadership. Adhering to best practices often signals professionalism and a commitment to quality rather than mere adequacy.

Given the above description, what is required by the SAMCODES - minimum standards or best practice?

- In clause 1 and clause 3 of the SAMREC Code, it is noted that "The Code sets out a required minimum standard for the Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves. Although the Code is a required minimum standard for Public Reporting, the SSC Committee recommends its adoption as a minimum standard for other reporting."
- Likewise, the SAMVAL and SAMOG Codes also set out a required minimum standard of information to be disclosed in public reporting. Clause 1.5 of the SAMVAL Code further notes that additional guidance provides best-practice on various aspects. The SAMREC and SAMOG Codes, by contrast, are silent on the issue of best practice.

What this means is that the requirements of the Codes (including Table 1/Form 1) are the least amount of information that must be included in a Public Report. This also includes compliance with the principles of materiality, transparency and competence as well as the standardised terminology and reporting classification.

This by no means prevents the issuing entity and the CP (CV and/or QRE) from producing reports that reflect industry best practice if they should so agree to do. However, best practice is not required of a Public Report.



*The President of The Geological Society cordially
invites you and your partner to the annual*

FELLOWS DINNER

13 November 2025 | 6.30pm

Johannesburg Country Club
1 Napier Road, Auckland Park.

Speaker : Prof Roger Gibson
University of the Witwatersrand

Talk Title - Cosmic immigration - lessons from the
Nqweba Bolide and Meteorite Fall and why
geologists should (occasionally) look up

Dress : Smart Casual

R500 per person

RSVP HERE



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UPDATED FELLOW'S CRITERIA

The Fellow's Committee has updated the criteria applied for assessment of Membership nominations for Fellowship (by-law 1.5). These have been ratified by Council. Please note that existing Fellows shall retain their prior status.

Updates are shown as green text.

1.5.1 A candidate for transfer or election to the class of Fellow of the Society shall be a Member in good standing for at least 5 (continuous) years as a Member and provide evidence of significant contributions to the earth sciences thus fulfilling the objectives of the GSSA.

1.5.2 A candidate for transfer or election to the class of Fellow of the Society must be over 35 years of age.

1.5.3 A candidate for transfer or election to the class of Fellow of the Society shall have been engaged in geology or approved earth science profession for at least ten years, post-Honours (or equivalent) qualification*, either:

- in responsible charge of important operations, or
- as a consultant or advisor, or
- as holder of an important post in teaching or research in the relevant subjects at a recognized tertiary institution.

The following explanatory notes apply. Responsible charge of important operations does not preclude the applicant having been accountable to some higher authority and may be taken as the equivalent of being in charge of a department or operations of reasonable size and importance. The degree of importance will be measured by the ability and skill demanded by the job as well as the size of the operations.

If employed as a consultant or adviser, the applicant should have taken the lead in projects of importance.

A professor, associate professor or senior lecturer is normally considered as holding an important post in teaching. Teachers holding lower positions should have some qualification such as responsibility for important research work or the provision of professional consulting services of importance.

*In the case of the individual not having an Honours-equivalent degree, their application be evaluated by considering educational and experiential learning.

Dr Louise Coney

Chair: GSSA Fellows Committee

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International
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Congress



5-7 November 2025



GSSA
Geological Society of South Africa

THE GEOLOGICAL SOCIETY OF
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SUPPORTING THE 5TH IPGC

1 OCTOBER 2025

AI, Drones & Satellites: Tech Skills Geoscientists Need — or Get Left Behind



This free webinar was hosted on 01 October 2025 in collaboration with the American Institute of Professional Geologists (AIPG), the Geological Society of South Africa (GSSA), the West African Institute of Mining, Metallurgy and Petroleum (WAIMM), and the Geological Society of Zimbabwe (GSZ).

Speakers included Dr. David Hodgetts (VR Geoscience Limited), Prof. Paul Cleverly (Robert Gordon University) and Prof Glen Nwaila (University of the Witwatersrand)

Dr. David Hodgetts: Digital Outcrop Modelling with Drones: A Beginner's Guide

David highlighted the power of drones and satellites in capturing and integrating high-resolution geoscience data to transform field workflows. He also detailed different methods of technology stacks including basic Open Source/low-cost stacks (phone/digital camera for acquisition; open-source software for photogrammetric reconstruction into modelling and interpretation) as well as more advanced, commercial technologies.

Prof. Paul Cleverley: The Geosciences meets Large Language Models (LLM)

Paul explored the potential of Large Language Models in geosciences, moving from theoretical foundations to practical applications that support research and decision-making. He also discussed theoretical underpinnings, opportunities, and ethical considerations in deploying AI for geoscience research and practice.

Prof. Glen Nwaila: “Sandboxes: Catalysts for Innovation in the Mining Industry”

Glen presented “innovation sandboxes” as controlled environments for experimentation and transformation in geoscience and mining - a framework for safely testing new digital, AI, and data-driven ideas before full-scale adoption. He demonstrated how digital sandboxes act as catalysts for innovation in the mining industry, enabling experimentation and accelerating technology adoption, therefore delivering measurable gains such as reduced exploration errors, proactive environmental signals, and more consistent plant outcomes at lower analytical cost.

In case you missed it: <https://www.youtube.com/watch?v=hBMwLqMEQeU&t=34s>

Natalie Brand
VP - Professional Affairs

21 & 22 OCTOBER 2025

Mineral Resource Mastery: Tools, Trends and Industry Insights



The Geological Society of South Africa (GSSA) and the Geostatistical Association of Southern Africa (GASA), with partners from Wits, the University of the Free State, and Stellenbosch University, hosted the inaugural Geostatistics Practitioners Seminar on “Mineral Resource Mastery: Tools, Trends and Industry Insights.”

The event united researchers, consultants, and industry professionals to explore how geostatistics, machine learning, and mathematical geosciences are reshaping mineral resource evaluation—from exploration targeting to reporting and governance.

Presentations highlighted innovations in prospectivity mapping, sampling and variography, recoverable resource estimation, and GeoML-driven, ESG-aware geometallurgy—all reinforcing the value of data integration, uncertainty quantification, and transparent documentation.

A consistent message emerged:

1. Uncertainty must be quantified and calibrated.
2. Governance and documentation underpin credible reporting.
3. Cross-disciplinary integration across geology, geophysics, geometallurgy, and mine planning is both feasible and essential.

With strong participation and enthusiasm, the seminar is set to become an annual event from 2026, fostering a community dedicated to advancing geostatistical excellence and responsible mineral resource practice across Southern Africa.

Glen Nwaila

30 OCTOBER 2025

Building Flexibility and Resilience to Sustain Performance



The second session in the GSSA's Leadership Development Coaching Series, led by Dr Sarah Babb, focused on "Building Flexibility and Resilience at Work to Sustain Performance and Wellbeing."

Aimed at young geoscientists, the session explored how resilience goes beyond simply recovering from challenges — it's about adapting, learning, and maintaining performance through change. Drawing on her extensive experience in leadership development and research in leader identity formation, Dr Babb highlighted how self-awareness, flexibility, and supportive habits enable individuals and teams to thrive under pressure.

Through practical, personalised coaching tools and reflective discussions, participants gained insights and strategies to strengthen their resilience and sustain their wellbeing at work. The series continues to provide empowering frameworks to help emerging geoscientists develop the adaptive leadership skills essential for success in today's dynamic workplace.

Call for Contributions

We would love to feature your contributions – If you have news, updates, insights or articles you would like to share with the Geological community please submit your content to **lully.govender@gssa.org.za** - Your contributions will be reviewed and if approved will be included in the newsletter.



29 OCTOBER 2025

Earth, Elements & Innovation



On the 29th of October, Professor Lynn Morris, Deputy Vice-Chancellor of Wits University, delivered the welcome address at the Earth, Elements and Innovation event.

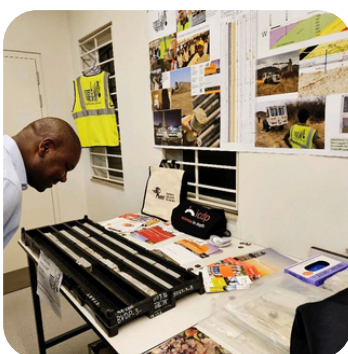
This marks the official launch of two significant initiatives by the Wits School of Geosciences: the African Research Centre for Ore Systems Science (CORES) and the Earth Observatory. The Earth Observatory, Africa's most advanced geoanalytical laboratory, developed by Wits and US-sourced investments, began operating in 2022. CORES aims to position itself as a global leader in innovative research, education and sustainable development.

"The Earth Observatory continues the proud heritage of geology, geochemistry, and geophysics that is part of this university's DNA. The same spirit of innovation continues here, inspiring the next discovery."

"CORES stands proud as it carries forward cutting-edge science to solve real-world problems, inspiring the next generation of geoscientists to lead the mining industry."

These initiatives are set to make Wits and Africa scientific forerunners.

MANCO members Natalie Brand, Louise Coney and Tania Marshall, all Wits alumni, attended the event: "It's amazing to see what the School of Geosciences has achieved since I left under the leadership of the likes of Grant Bybee, Glen Nwaila and others at the forefront of innovation" (N Brand).





**Southern African
Geophysical Association**

#SAGA_1977

Zoom Link  LinkedIn Event 

CPD
points

Discovering and
imaging mineral
systems at all scales
using natural-source
electromagnetic
methods

13 NOV, 4PM
Magnetotellurics | 2025



Alan Jones

Post-doctoral fellowship

University of the Witwatersrand, Johannesburg, South Africa

Bushveld Lower Zone mantle sources

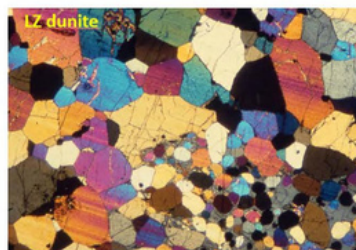


petrogenesis
contamination effects
metallogeny

Project: Geochemical & isotopic (Nd + Sr) characterization of Bushveld Lower Zone ultramafic cumulates using ICPMS & ID-TIMS to constrain mantle sources & crustal contamination effects
Examine calc-silicate xenoliths associated with sulfide-bearing pegmatoidal pyroxenites as a proxy for PGE metallogenesis

Research Team:

Prof Lew Ashwal (Wits Univ)
Dr Ben Hayes (Wits Univ)
Prof Wolf Maier (Cardiff Univ, UK)



Start date- any time after Jan 1, 2026

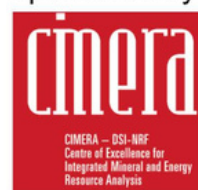
Tenure- one year + possible second year

Stipend- ZAR 320,000 (tax-free) per year

Project running costs: ZAR 65,000 per year

Preferred skills: petrology, petrography, geochemistry, experience with isotope dilution & TIMS mass spectrometry, geochemical & isotopic modelling

sponsored by:



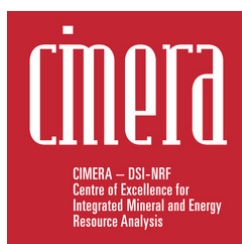
Application: current c.v.,
names of 3 referees
statement of research interests & expertise

To: lewis.ashwal@wits.ac.za

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