

NEWSLETTER

Promoting the study and advancement of Earth Sciences since 1895



CHANGE OF DATE

STRUCTURAL GEOLOGY COURSE & FIELD TRIP

SOUTHBROOM

KZN SOUTH COAST

18 & 19 MAY 2024

REGISTER NOW




CALL FOR REGIONAL, DIVISIONAL AND GENERAL NOMINATIONS TO GSSA COUNCIL 2024-2025

The GSSA is calling for nominations to Council, commencing July 2024 and ending July 2025, under by-law 2.3. Nominations are sought for general, regional, and divisional representatives. Nominees must be a member in good standing for a minimum period of three years, and be able to participate in the Council meetings held remotely five times a year on Saturday mornings. Council is the primary governing body of the GSSA, overseeing and ratifying the Management Committee (MANCO) and the Executive. In recent years there have not been enough nominees to warrant an election, and current Council members have indicated their willingness to serve another year. Nevertheless, nominations are welcome and an on-line election will be held if necessary. A list of current Council Members is posted on the website at <https://www.gssa.org.za/wp-content/uploads/GSSA-Office-Bearers-and-Committees.pdf>.

CLICK HERE



INSIDE THIS ISSUE:

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- 2024 Membership Fees
- NCape Branch Events
- MINSA Membership
- MINSA Quarterly Talk





STEVE MCCOURT

GSSA PRESIDENT

There has been a range of meetings during April. Business meetings included Manco on the 3rd and 26th and Council on the 6th. The GSSA Meetings Committee hosted 3D Geological Modelling with 34 delegates (Ian Basson from TECT) and Advanced Excel for Geoscientists with 84 delegates (Marius Swart from Earthlab) and as part of the CMP programme Mark Turpin held a group mentoring session on Time Management - Being Organized. The month ended with the relaunching of the Eastern Bushveld Branch at an event hosted by Northam's Booysendal Platinum Mine on April 30th.

Important outcomes of the Council meeting on April 6th, included the ratification of the recommendations of the REI funding Committee and a decision to support the 14th Annual Soweto Career Day and Expo to be held at the Orlando Communal Hall in Soweto on 9-10 May. The GSSA will share a stand with Wits School of Geosciences and the Groundwater Division.

Further news on community involvement is that GSSA Council Member Gill Drennan (Wits) has been nominated to serve as an alternate member on the National Science and Technology Forum's proSET Committee. Gill will represent SET/M Education. In addition, Joshua Kilani (VP Meetings) has accepted an invitation to be a panel member for the Minerals Council webinar on exploration scheduled for May 2024.

Under Professional Affairs, I am pleased to report that the GSSA represented by Tania Marshall will take up the Chair of the Global Geoscience Professionalism Group effective May 2024.

April 20th was the extended deadline for submission of abstracts for papers and posters to be presented at the Merensky Reef Centenary Meeting in August and I am pleased to report that a total of 80 abstracts were received. The Scientific Committee comprising Rais Latypov (Wits), Steve Prevec (Rhodes), Freddie Roelofse (UFS), and Sofya Chistyakova (Wits) will now review the abstracts and allocate the successful papers to the appropriate session at the conference.

As previously reported, the next biennial Geocongress will be hosted by the University of the Free State in Bloemfontein in June 2025.

Members are alerted to the publication of SAJG volume 127-1 (March 2024) online at GeoscienceWorld. The issue contains 8 peer-reviewed papers spread over 136 pages. Individual manuscripts can be accessed and downloaded in PDF format through the Members Portal on the GSSA website - www.gssa.org.za

SAJG

SA JOURNAL OF GEOLOGY


Click [here](#) for Members' Access to the SAJG via the GSSA website

MARCH 2024

SOUTH AFRICAN

Journal OF Geology

GSSA
Geological Society of South Africa



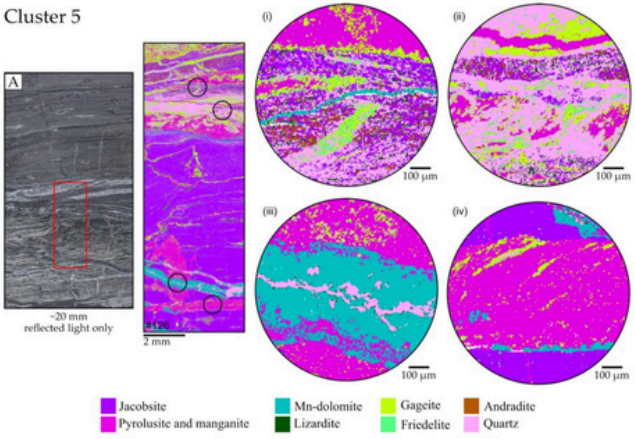
Transactions of the Geological Society of South Africa

HIGHLIGHTED IN THIS ISSUE:

- The petrogenesis of orbicular granites in the Diana's Pool area, Zimbabwe
- Correlations on the southern Kaapvaal Craton Margin, 1: Ventersdorp lavas transgressed the Doornberg lineament
- Mineralogy and mineral paragenesis of the Palaeoproterozoic manganese ores of the Avontuur Deposit
- The geological relationships between the mafic-ultramafic intrusion in the Haib area and the Vuurdood Subsuite
- The processing behaviour of the sphalerites from the Big Syncline deposit, South Africa
- Petrogenesis and tectonic implications of the Bloubergstrand basaltic andesites, Tygerberg Formation
- Petroleum potential from Permian-Triassic strata of the Maniamba Basin, Mozambique: A preliminary characterisation
- Geomagnetic jerks observed in geomagnetic observatory data over Southern Africa between 2017 and 2023

GSW
Geological Society of South Africa
www.GeoScienceWorld.org

Cluster 5



~20 mm reflected light only
2 mm

100 µm 100 µm 100 µm 100 µm

Jacobsite Mn-dolomite Gageite Andradite
Pyrolusite and manganite Lizardite Friedelite Quartz

Thin-section photograph (transmitted light) and false-colour mineral map of a typical sample of manganese ore-type cluster 5 from the Avontuur Deposit in the Kalahari Manganese Field. See Coetzee et al., 31-54 for details.

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INVITATION TO CONTRIBUTE

DARWIN BUST FUND

Make it possible for a bronze bust of a young Charles Darwin to be displayed on Simon's Town Pier in Simon's Town. The clay maquette for this bust has been created by the renowned Cape Town sculptor, Johan Steyn.



The institutional home for the project is the Geological Society of South Africa, which has provided a ring-fenced bank account and will administer the donated funds. The project also has the support of the Cape Town Heritage Foundation and the Simon's Town Historical Society. An amount of R86 500 has already been pledged towards the total amount of R135 000 required for the project. **Please donate generously.**

Donations should be deposited into Standard Bank account number 022 721 444 GSSA-DPP at the Eloff Street branch of Standard Bank, Johannesburg, branch code 051 001, with the name and email address of the donor. All donations will be acknowledged. Donors will be updated on the progress of the fund-raising campaign and will be invited to the unveiling ceremony.

MOTIVATION FOR THE MOUNTING OF A BUST OF CHARLES DARWIN IN SIMON 'S TOWN

Charles Darwin's 19-day visit to the Cape of Good Hope in May/June 1836 during the five-year voyage of HMS Beagle was the first opportunity he had to discuss his embryonic ideas on evolution with knowledgeable, English-speaking scientists. In particular, his discussions with the astronomer/natural philosopher, Sir John Herschel, in the Cape were crucially important to the development of his ground-breaking Theory of Evolution by Natural Selection.

Darwin had a thorough understanding of geology when he embarked on the five-year voyage of HMS Beagle in December 1831. During the voyage he collected vast amounts of data as well as fossils and plant and animal specimens that allowed him to eventually develop his Theory of Evolution.

His insights into geology made him realize that, contrary to contemporary teaching, the Earth is much older than previously thought and that its crust is constantly changing through the physical forces that are still active today. He realized that, if the physical environment is changing, plants and animals also need to change in order to be well adapted, thrive, breed, and pass their genes onto the next generation.

Darwin's discussions with Herschel on this 'Mystery of mysteries' enabled him to crystallize his ideas. He also took Herschel's advice that he should use his data not only for descriptive purposes but also to propose and test a 'big idea'. Darwin shaped the rest of his career around the wise advice that Herschel gave him in the Cape.

The bust of Charles Darwin, which depicts the 27-year-old naturalist as he looked in June 1836, in the sculptural style of the 1830s, will commemorate the important role that his visit to the Cape of Good Hope played in the development of one of the most influential theories in the history of science.



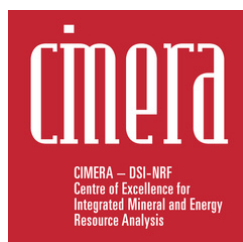
We look forward to your support of this important project.

Dr Craig Smith, Executive Manager
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083 262 2604

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Project Manager, Cape Town
mikefishesbruton@gmail.com
083 212 7609

The GSSA wishes to acknowledge our **2024 Sponsors**

Annual Sponsors



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Event Sponsors



REGISTRATION OPEN

100 YEARS OF THE MERENSKY REEF

HANS MERENSKY - BUSHVELD COMPLEX

One hundred years later, the Geological Society of South Africa (GSSA) believes that this is a milestone worth celebrating. To honour Hans Merensky, platinum and all things Bushveld Complex related, the GSSA is organising a two-day scientific/technical conference (including a poster session as well as a trade show), combined with various pre- and post-Conference field trips to the Eastern, Western and Northern limbs and different social events during the period 15 -23 August 2024.



15 - 23
AUGUST 2024



REGISTER NOW



Sponsorship Opportunities



info@gssa.org.za



https://www.gssa.org.za/?page_id=7330

More Info

MERENSKY CONFERENCE SPONSORS

Platinum Sponsors



Event Sponsors



Exhibitor



HOW TO NAVIGATE THE NEW GSSA MEMBERS ONLY SITE FOR CPD

The GSSA website has a new Members login page.

This tutorial will walk you through how to log your CPD on this new site.

[CLICK HERE](#)



Events

Calendar

Upcoming Online Events

18 & 19 MAY STRUCTURAL GEOLOGY
FIELD TRIP – KZN

04 JUNE GIS FOR EXPLORATION

11 & 12 JUNE SAMPLING & DATA
MANAGEMENT

24 JUNE PROJECT MANAGEMENT FOR
GEOLOGISTS

2 & 3 JULY PRACTICAL GEOLOGICAL MAPPING
TO MAP MAKING
VENUE – JHB COUNTRY CLUB

26 & 27 JULY MARINE GEOSCIENCES IN
SOUTHERN AFRICA

06 AUGUST INTRO TO DRILLING

15 – 23 AUGUST 100 YEARS OF THE MERENSKY REEF
– CONFERENCE AND FIELD TRIP

2024 ANNUAL MEMBERSHIP FEES

Affiliate Member	R1100
Retired Affiliate	R470
Dual Member	R2230
Member / Fellow	R1675
Institutional Member	R8780
Retired Member/Fellow	R500
Student Member	Free
Life Member/Fellow/Honorary	Free - Optional contribution towards admin or research /education funding

Payment Methods

- Online via the GSSA website – <https://www.gssa.org.za/GSSA/>
- EFT
- Credit Card

Please email accounts@gssa.org.za for any account related queries.

Members please login and update
your membership information

CLICK HERE >>



WEST COAST DIAMONDS EVENT & EXCURSION

Date: 17th & 18th May 2024

Venue: Port Nolloth & Kleinsee, Northern Cape

Event Supporters



MEET THE SPEAKERS

Gregory Katz

Director/Shareholder/Managing Partner

Trigon Adamas Pty Ltd



Collin Mbangu

Senior Exploration Geologist
Namdeb Diamond Corporation



Deoné Strauss

Senior Exploration Geologist
Namdeb Diamond Corporation



Lyndon De Meillon

Director

Paleostone Mineral
Consultants and Mining



Mike De Wit

Consultant & Research Fellow of
University of Stellenbosch



Registration Link: <https://www.cognitoforms.com/GeologicalSocietyOfSouthAfrica/WestCoastDiamondsEventAndExcursion1718May2024>

ANNUAL SPONSORS



"WEST COAST DIAMONDS" EVENT & EXCURSION

VENUE: PORT NOLLOTH &
KLEINSEE NC.
DATE: 17 & 18 MAY 2024

EVENT DETAILS AND
PROGRAMME
TO FOLLOW

Click
Register
Now

CONTACT US ON:
admin.nc@gssa.org.za

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POINTS

Northern Cape branch
Geological Society of South Africa



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MINROM



Down Hole Survey cc



GEO-EXPLORE STORE



Programme



The Northern Cape Branch of the Geological Society of South Africa supporting geology careers in the younger generations at the 2024 KOLOMELA CAREER DAY

The yearly Kolomela Career Day, hosted at Postmasburg High School, envisioned the theme of “Constructing your future” for the 2024 year. This event hosted around 400 learners from the surrounding schools in the Tsantsabane Municipality, ranging from Grade 7 – Grade 12. The career day focused on exposing the learners to different career paths and bursary opportunities, mainly from Kolomela and the surrounding mines, like Beeshoek Mine, as well as different exhibitors from educational institutions.

Five members from the NC GSSA branch represented the career of geology through the stall set up. They captured the essence of geology with intriguing rock collections and a designed pamphlet with information on geology and the branch itself. The NC GSSA team really did go the extra mile in supporting the learners in “constructing their future”.

The branch would like to thank the Kolomela Management and the General Manager for taking the time to embrace them with his presence.

The branch continues to strive in developing the younger generations and these opportunities give good platforms for young working professionals to engage with future geologists in the making.



Executive Committee: Chairperson: Loni Gallant (Lisani Geological Services); Vice Chairperson: Palesa Boikanyo (South 32); Secretary: Tricia Scott (Anglo American), Treasurer: Francois Stassen (Imdex Limited) and Communications: Thabang Phakoe (DMT Kaibatla).

Committee members: Elmar Human (Minrom), Conrad De Kock (Raubex); Eveline Kekana (Assmang); Kabelo Mongalo (Alexkor); Leonita Kuhn (South 32); Lutendo Mavhungu (RES), Lorena Tafur (Anglo American), Nkosinathi Mthethwa (Glosam Manganese Mine) and Vince Schaper (Maxgeo).

Which Code to Use?

Probably the best known (most widely known?) of the international mineral reporting codes is JORC, followed by the NI 43-101 and then SAMREC. But, which one of these (or of any of the other codes) should a Competent Person use?

For mineral reporting for a listed company, the answer is relatively straightforward – the Exchange where the company has its primary listing will generally require a specific code. For example:

- if the company is listed on the ASX, then the CP must report according to JORC.
- if the company is listed in Canada, then the CP must report according to NI 43-101 and the CIM standards for projects in Canada. The other CRIRSCO codes can be used for projects outside of Canada as long as a mapping to the CIM standards is prepared.
- If the company is listed on the JSE, then the CP must report according to SAMREC.
- If the company is listed in the USA, then the CP must report according to S-K 1300.
- For some of the smaller, lesser-known exchanges, similar requirements also hold. It is incumbent on the CP to investigate the requirements of the jurisdiction where the company is listed.

Certain exchanges allow the CP to select any of the CRIRSCO codes and report accordingly (the LSE, Hong Kong Stock Exchange and many of the smaller European stock exchanges, for example). In this case, the CP is likely to select the reporting code with which they are most familiar, or which provides the most support for the mineral/metal being reported on. For example – the SAMREC code is often selected by CPs reporting on diamond projects, due to the diamond specific guideline document providing detailed assistance for such projects. Currently PERC provides most support for industrial minerals and the Colombian CCRR provides specific guidance for reporting of emerald deposits. For coal, both Australia (JORC) and South Africa (SAMREC) have standards/guidelines which are used and are slightly different based on the coal deposits in each country i.e. the Australian guide is not necessarily applicable to South African coal deposits.

For non-listed entities, the choice is determined by the preference of the CP, the company management or the jurisdiction in which the company and/or the project resides. In addition to the CP selecting the code that has the most guidance on the mineral/metal to which their report relates, the choice might also be guided by preferences in the investment community. If a non-listed company operating in Botswana, for example, is looking to raise private equity in South Africa, they are more likely to compile their document according to SAMREC, because that is what is generally understood by private investors in South Africa.

For non-listed companies looking to raise private funds locally in a country that has no exchange or specific knowledge of specific codes, the choice is made by the CP and the company.

In all cases the CP needs to understand the reporting code and apply it in its entirety.

DISCOVER, LEARN, INNOVATE: YOUR MINSA MEMBERSHIP AWAITS

SIGN UP

**Becoming a member is
easy!**

Click the sign up button Contact us: minsa@gssa.org.za

1. Join a vibrant community
2. Become part of MINSA and engage with a network of passionate students and professionals in geology and mineralogy.
3. Access to workshops and field trips: Gain hands-on experience and deepen your knowledge through workshops, seminars, and field trips tailored for our members.
4. Contribute and collaborate: Have the opportunity to contribute to 'The Geode,' MINSA's newsletter. Share your research, insights, and stories with a broad audience of enthusiasts and experts.
5. Professional development: Elevate your career with access to mentorship programs, networking events, and collaborations with key industry and academic leaders.
6. Voice your ideas: MINSA listens to its members. Have a say in our initiatives and help us tailor our programs and events to better serve the geology and mineralogy community.





Shaping the Future Together: MINSA's Invitation to Tomorrow's Geologists and Mineralogists

In the ever-evolving world of geology and mineralogy, the voices of the young and the emerging professionals are not just valuable; they are essential for shaping the future of these sciences. The Mineralogical Association of South Africa (MINSA) recognizes this imperative need and is actively extending an open invitation to students and young professionals across the country to join its ranks and contribute to the vibrant future of mineralogy. MINSA would like to extend an invitation to students and young professionals across the country, aiming to empower the next generation of scientists. By joining MINSA, members are offered various opportunities designed to foster professional growth. These include access to quarterly talks, workshops, field trips, and seminars, alongside a platform for sharing research and insights. This initiative is more than a membership; it's an invitation to be part of a community that values collaborative learning, innovation, and the mutual exchange of knowledge.

MINSA's student membership is FREE when accompanied by a short motivation (150–200 words)

A Voice for the Youth

Central to MINSA's mission is the recognition and incorporation of the aspirations and feedback from its younger members. The association is committed to ensuring that the evolving fields of mineralogy and geology remain relevant and responsive to the needs and visions of the upcoming generation. This focus on youth engagement underscores MINSA's dedication to creating a dynamic and inclusive scientific environment.

The Geode: A Platform for Recognition

Through "The Geode", MINSA's newsletter, the association offers students and young scientists a unique opportunity to highlight their work and share their journey with a broader audience. This platform is not just about showcasing research; it's about building a narrative of progress, innovation, and community contribution, offering young professionals and students the visibility and acknowledgment they deserve within the professional community.

Collaboration and Professional Development

Emphasizing the importance of mentorship and professional networking, MINSA actively seeks collaborations with other professional groups, such as the Geological Society of South Africa (GSSA). These partnerships aim to connect young members with established mentorship and graduate development programs, further enriching the professional growth and development of MINSA's youthful contingent.

Join Us in Shaping the Future

MINSA's doors are open to all young enthusiasts from the geosciences, from university students to early-career professionals stepping into the workforce. The association eagerly anticipates the fresh ideas and feedback from its youngest members, ready to integrate these into the collective effort to advance the fields of mineralogy and geology.

If you're driven by a passion for geosciences and seeking a community that champions your development and contributions, look no further than MINSA. For more information on joining and taking an active role in this exciting journey, please contact us directly at minsagssa.org.za

QUARTERLY TALK - HYBRID

**“THE OCCURRENCE OF RARE EARTH ELEMENTS
IN SOUTH AFRICAN COAL AND ASH”**

Prof. Nikki Wagner

Director, DSI-NRF CoE CIMERA

Department of Geology

RSVP at minsa@gssa.org.za on/before 6 May 2024

For those attending in person: Please RSVP latest on 3rd May
(light snacks and drinks will be served afterwards)

cimera

CIMERA – DSI-NRF
Centre of Excellence for
Integrated Mineral and Energy
Resource Analysis

DATE: 8 MAY 2024

TIME: 16:00 for 16:30

**LIVE VENUE: Department of Geology Tea Room,
C1 Lab 4th Floor, University of Johannesburg,
Auckland Park, Kingsway Campus**

Research into understanding and documenting the occurrence of rare earth elements (REEs) in South African coals and ash is gaining traction. We aim to present on the identification, characterisation, and mineralogy of REEs in various South African coal ash samples. Ash samples with high total REE values were examined using the Mineral Liberation Analyser (MLA). It is apparent that the REE occurrence differs between the different sources / coalfields.



NOT A Minsa MEMBER YET?

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