SECOND CIRCULAR

29th Colloquium of African Geology

"The earth sciences and Africa's development: current realities, future projections"

26 – 29 September 2023 | Windhoek, Namibia

CALL FOR ABSTRACTS

The Lion's Claw, a distinctive rock formation at the World Heritage site of /Ui-//aes, also known as Twyfelfontein in the Kunene Region, Namibia

"Namibia the World's Geological Paradise"

Spearheaded by the Geological Survey of Namibia

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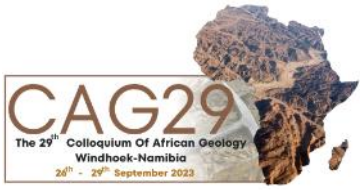
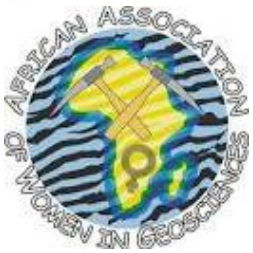
Partners / stakeholders include:





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MESSAGE FROM THE PRESIDENT OF THE GEOLOGICAL SOCIETY OF AFRICA (GSAf)

The Colloquium of African Geology (CAG) is a major biennial meeting, held under the auspices of the Geological Society of Africa, where earth scientists from around the globe have the opportunity to present their research on topics of African geology to an international forum of their peers. It also offers an opportunity to initiate, develop and implement projects which promote interaction between Academia, Industry and Society.

The 28th Colloquium of African Geology (CAG28), hosted by Morocco, it was announced that the 29th Colloquium (CAG29) as well as the 19th Conference of the Geological Society of Africa would be hosted by Namibia during the final week of September 2023. The theme of the event will be:

"The earth sciences and Africa's development: current realities, future projections"

The event will be attended by senior and early-career earth scientists from government, associations, mineral exploration and mining companies and civil societies, as well as representatives from politics and the media are welcome. Career scientists from African countries and other developing areas are especially encouraged to regard this event as an opportunity to present their research to a wide audience, with participations from different sectors, countries, and continents. Namibia, the host country, boasts an interesting, heterogeneous geology covering some 2.6 billion years of earth history, with a wide variety of mineral deposits and mineralization styles, that have contributed - and still contribute-immensely to the country's economy. In addition, Namibia's impressive geomorphic landscapes have great potential for geo-tourism, while the host city, Windhoek, is a culturally diverse centre of learning. Academically, the geoscientific sessions and excursions highlighted in this circular and following circulars promise to provide a deeper insight into the multi-faceted geological history of the African continent.

I therefore enjoin all geoscientists globally, to start making plans to attend what will be an interesting and geologically fulfilling event, which will be held in Namibia from September 26th to 29th 2023.

Prof. Olugbenga Okunlola
gbengaokunlola@yahoo.co.uk

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MESSAGE FROM THE CHAIRPERSON OF THE ORGANIZING COMMITTEE

It is a great pleasure to invite you all to Namibia to take part in the 29th Colloquium of African Geology (CAG29). The Local Organizing Committee and the National and International Scientific Committee, with support from various sponsors, will endeavour to put together a program that does justice to this year's theme "The earth sciences and Africa's development: current realities, future projections".

Hosting CAG29 in Namibia gives us a unique chance to showcase our country's spectacular geology to Africa and the rest of the world, as well as to raise Namibia's visibility as a premium geoscience destination.

For you, attendance of CAG29 may present a once-in-a-lifetime opportunity to come to the beautiful city of Windhoek and participate in an exciting scientific program covering the breadth of the geosciences, experience fascinating geological features in the field, network with the international geoscience community, or to hold business meetings in a congenial and relaxed setting. Whether you are from industry, government or academia, you will find a full and interesting program at CAG29.

This First Circular provides important information to assist delegates planning their participation in CAG29. The full schedule will be announced in the second circular. Preliminary field trip information is also available in this circular.

Please, complete the "Join the mailing list" form when visiting the website https://cag29gsaf.org/ to automatically receive updates and news.

The appreciation of the Organizing Committee goes to the many members of the geoscientific community around the world who have shown interest in this prestigious event over the past years and decades. It is our hope that you will be able to join us for the 29th Colloquium of African Geology and we look forward to welcoming you in Windhoek in September of 2023. While many of you will be no strangers to Namibia, we venture to suggest that our multihued country may still have some new aspects to offer – geologically and otherwise!

Mrs. Anna Nguno Anna.Nguno@mme.gov.na / cag29.whk@gmail.com

Bogenfels Rock Arch, a 55-metre-high rock arch situated on the coast between Lüderitz and Oranjemund, Karas Region, Namibia

INTRODUCTION

The Geological Survey of Namibia is the principal organizer of the 29th Colloquium of African Geology (CAG29) on behalf of the GSAf, as well as in cooperation with various stakeholders, including the Young Earth Scientists (YES) Network Namibia, the Geoscience Department-University of Namibia, the Geoscience Council of Namibia, the Namibian Hydrogeological Association, and the Department of Mining and Process Engineering-Namibia University of Science and Technology. The Local Organizing Committee (LOC) is quite dynamic and diverse in its composition, with representatives from associations, institutions, mining companies, governmental and non-governmental organizations, and the media.

The Colloquium of African Geology (CAG) is a major biennial meeting organized under the auspices of the Geological Society of Africa (GSAf). Professor W. Q. Kennedy, assisted by Dr. Tom Clifford, convened the very first CAG at the University of Leeds, England, in March 1964. There was a pulse of excitement that electrified the assembled audience from Africa, Europe, North and South America, Australia and New Zealand when Prof. Kennedy announced his new concept of a 'Pan-African thermo-tectonic event'.

Since then, there have been 28 events, 18 of which were held in Europe, and only 10 in Africa, specifically in South Africa, Ethiopia, Tanzania, Nigeria, Swaziland, Zimbabwe, Morocco(twice), Mozambique and Tunisia.

With the inspiring theme "The earth sciences and Africa's development: current realities, future projections", CAG29 will be held at the Safari Hotel Conference Centre, Windhoek, from September 26th to 29th, 2023. At this stage of the organization, the LOC is calling for abstracts.

Folded Schist and Marble (Pan-African Damara Orogenic belt) in the Ugab Valley,

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CAG29 FORMAT

There will be four days of technical sessions, including plenary talks, keynote lecture, dedicated times for posters, pre- and post-excursions / field trips, several workshops, short courses, and exhibitions.

PROPOSED OVERALL STRUCTURE OF THE CAG29

The general program structure will be as follow:

Pre-CAG29 field trips	18 to 24 September 2023
Online registration opens on the conference website	26 March 2023
On-site registration opens, exhibition set-up	Midday, 25 September 2023
Welcome reception and icebreaker	Evening, 25 September 2023
Opening ceremony	Morning, 26 September 2023
Scientific Program	26-29 September 2023
Gala Dinner	27 or 28 September 2023
GM Geological Society of Africa	29 September 2023
Business meetings and activities for accompanying participants	25-30 September 2023
Workshops and Short Courses	18 September to 07 October 2023
Post- CAG29 field trips	30 September to 07 October 2023

IMPORTANT DATES FOR THE SCIENTIFIC PROGRAM

Please take note of the following deadlines:

Scientific Program	Date
Abstract submissions period open	27 April 2023
Field-trip registration open	1 May 2023
Workshop and Short Courses registration open	1 May 2023
Abstract Submissions period close	30 May 2023
Field-trip registration Closes	1 July 2023
Workshop and Short Courses registration closes	1 July 2023
Start of notifications of accepted abstracts	10 June 2023
Online registration and payment deadline	14 September 2023
Deadline for presenting author registration	1 August 2023
Release of third circular (final programme)	14 August 2023

SPONSORSHIP

The LOC are interested in sponsors for specific events during the Colloquium. This will include the technical sessions and workshops, conference materials and excursions. Delegate sponsorship packages are also available for organizations wishing to sponsor attendance by student, early-career, and other delegates.

SOCIAL PROGRAMS

Social activities include the icebreaker party and reception and a sightseeing tour of Windhoek. Day trips to geotouristic highlights are also available.

VENUE- SAFARI HOTEL

The Safari Hotel is conveniently located across the road from the Geological Survey of Namibia, on the southern outskirts of Windhoek.

ACCOMMODATION

Safari Hotel is one of the recommended accommodations. Information on other recommended accommodations will be available on the CAG29 website in due course.

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VISAS

All foreign visitors' s passports must be valid for at least 6 months beyond their intended stay. For more information on visa requirements to visit Namibia, see: https://mha.gov.na/web/mhai/countries-exempted-from-visa-requirements . The secretariat will provide a letter of invitation for visa purpose to delegates who have paid the full registration fee.

REGISTRATION

The online registration form is available at (https://cag29gsaf.org/registration/) and will be accessible until 10 September 2023. Participants who prefer to register using a printed form can access the printable registration form from the website. The form should be sent to the CAG29 Secretariat by email at cag29.whk@gmail.com / cag29contact@cag29whk.com

Participants are required to pay registration fees by bank transfer or deposit not later than one week after registration and not later than 14 September 2023 (see below for the bank transfer details). Please send your proof of payment to the secretariat. After 14 September 2023, it will be possible to pay the on-site registration fee at the Conference registration desk.

The registration fee covers the costs of the meetings participation including a copy the conference proceedings, meeting rooms, coffee / tea breaks, poster session and the welcoming reception.

PAYMENT INFORMATION

NEDBANK NAMIBIA LIMITED

Account Name: 29th Colloquium of African Geology

Account Type: Current Account
Account no.: 11990692051

Branch Name: Business Banking
Branch code: 461617
Swift code: NEDSNANX

REGISTRATION FEES (local payment should be made in Namibia Dollar, N$)

Category	Early bird	Late	On site
GSAf Members and Affiliates	**N$ 4000 (Euro 250 / US$ 270)**	**N$ 4500 (Euro 300 / US$ 330)**	**N$ 4500 (Euro 300 / US$ 330)**
Accompanying persons	**N$ 2000 (Euro 120 / US$ 130)**	**N$ 2500 (Euro 150 / US$ 170)**	**N$ 2500 (Euro 150 / US$ 170)**
Students	**N$ 2000 (Euro 120 / US$ 130)**	**N$ 2500 (Euro 150 / US$ 170)**	**N$ 2500 (Euro 150 / US$ 170)**
Non-members	**N$ 4500 (Euro 300 / US$ 330)**	**N$ 5000 (Euro 350 / US$ 380)**	**N$ 5000 (Euro 350 / US$ 380)**

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ABSTRACT SUBMISSION FOR CAG29

Abstracts will be accepted for either oral or poster presentations and will be reviewed and accepted by the scientific committee. The abstracts are expected to be in the format as illustrated in the abstract template for Cag29 on this page. Please note that the deadline to submit abstracts is 30 May 2023.

CAG29 LANGUAGE

English will be the official language of CAG29. We kindly ask all participants to prepare abstracts, posters and oral presentations in English.

PUBLICATIONS: SPECIAL ISSUE OF THE JOURNAL OF AFRICAN EARTH SCIENCES

The CAG29 proceedings will be compiled, and selected papers will be considered for publication in the special issue of the Journal of African Earth Sciences.

ABSTRACT FORMAT

Title must be in Arial, 14pt, Bold

Authors 'names must be in bold Arial 11pt

A, b etc The authors affiliations must be in arial italic 10pt.

Corresponding author's email address must be provided, in italic and underlined: author1@cag29.na

Abstract.

The abstract should include the following:

- Introduction; outline of the paper; outlining the objectives, methodology used.
- Results: outlining major findings of the research.
- Discussion and conclusion: brief discussion of the results and concluding statement.

Format of abstract:

Main text should be written in Arial 11pt, single line spacing, justified, and single paragraph. Abstract should not exceed 500 words.

Keywords: Maximum 5 words

ABSTRACT EXAMPLE

Transient shallow-ocean oxidation associated with the late Ediacaran Nama skeletal fauna: Evidence from iodine contents of the Lower Nama Group, southern Namibia

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d Department of Geology, Faculty of Agriculture, Engineering and Natural Sciences, University of Namibia, Keetmanshoop, Namibia

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Abstract.

The terminal Ediacaran interval from ~ 550 Ma to 541 Ma witnessed the first appearance of skeletal metazoans and complex ecosystems in Earth history. This biotic innovation event is thought to be related to increase of oxygen in Earth's surface environments, but many studies suggested that pervasive oceanic anoxia continued through the late Ediacaran and early Cambrian. To further evaluate the redox conditions of the terminal Ediacaran interval and their potential relationship with biotic changes, we analyzed the iodine contents in the Lower Nama Group (~550–547 Ma) from the Driedoornvlagte and Zebra River sections, southern Namibia. The I/[Ca + Mg] values fluctuate from 0.08 to 6.20 μmol/mol, with an average of 0.94 μmol/mol in the Driedoornvlagte section and 0.70 μmol/mol in the Zebra River section. High I/[Ca + Mg] values (> 2.6 μmol/mol) occur immediately above the boundary between the lower and upper Omkyk Members, with a peak up to 6.20 μmol/mol indicative of well-oxygenated surface waters comparable with those of the modern marine environments. Abundant skeletal fossils including *Cloudina, Namacalathus, Namapoikia* and trace fossils are observed only in the intervals after the high I/[Ca + Mg] peak. The results are consistent with the interpretation that the Nama skeletal communities grew in oxic (O2 > 20–70 μM) and dysoxic (O2≥10 μM) waters above the chemocline. The I/[Ca + Mg] ratios show significant tempo-spatial variations, which is also consistent with previous studies that suggested redox-stratified terminal Ediacaran sedimentary basins and highly heterogeneous oceanic redox conditions.

Keywords: I/[Ca + Mg] Lower Nama Group, Redox conditions, Ocean oxygenation, Late Ediacaran

SCIENTIFIC SUB-THEMES

	SUB-THEMES CAG29	SESSIONS (Inclunding and not limited to):
ST01	**The African Geological Record, Palaeontology, ancient environments, and paleoclimates**	**ST01_S01-**Palaeontology, ancient environments, and palaeo-climate **ST01_S02-** Sequence stratigraphy of Africa **ST01_S03-**Nannostratigraphic study of the Cretaceous/Paleogene formations of the Côte d'Ivoire sedimentary basin (West Africa): Evolution of depositional environments
ST02	**Geodynamic evolution of the African continent: geochronology, mobile belts, and intraplate magmatism.**	**ST02_S01-** TBA
ST03	**Ore deposit geology of Africa (Mineral Resources and ore forming processes)**	**ST03_S01**- Metallogeny and Ore Deposits in Africa **ST03_S02**- The Geology and Georessources in NW Africa. **ST03_S03**- Geological characterization and ore genesis of critical metals and mineral deposits **ST03_S04**-Sediment-hosted and supergene manganese deposits **ST03_S05**-New analytical techniques and equipment applied to ore deposits. **ST03_S06**- Mineralized mobile belts of Africa
ST04	**Geophysics and Geochemistry – Peering into the subsurface and Integrated approaches in Geosciences**	**ST04_S01-** Innovation and integrated approaches in Geophysics **ST04_S02-** Advances in geochemical exploration techniques, data interpretation and integration
ST05	**Hydrogeology and water sustainability under a changing climate**	ST05_S01- Hydrogeology and water sustainability under a changing climate
ST06	**Geology in the service of society: agrogeology, medical geology, engineering geology and geohazards and Information management**	**ST06_S01-** Engineering Geology and Geohazards **ST06_S02-** Agrogeology, Medical Geology **ST06_S03**-GIS and Remote Sensing as Tools of Africa Development **ST06_S04-**Information management systems and value added products
ST07	**Geoparks, Geotourism and Geo-ethics for Promoting Earth Heritage**	**ST07_S01-** Geoheritage, Geotourism and Geoparks in Africa **ST07_S02-** UNESCO and Earth science collaboration through the International Geoscience Programme (IGCP) for Sustainable development in Africa
ST08	**The role of Fossil Fuels in Africa's Energy Transition to carbon neutral economies**	**ST08_S01**- role of Fossil Fuels in Africa's Energy Transition to carbon neutral economies
ST09	**The role of the Mineral Industry in the Green Hydrogen Energy Economy**	**ST08_S01-** role of the Mineral Industry in the Green Hydrogen Energy Economy
ST10	**Africa's Nuclear Fuel Resources: Potential Benefits and Challenges**	ST10_S01-Africa's Nuclear Fuel Resources: Potential Benefits and Challenges
ST11	**Investment in the Mineral Industry: green fields exploration and extractive industry: policy issues, legislations, potentials, challenges, governance and best practices**	**ST11_S01-** geological characteristics of the critical metals and minerals **ST11_S02-** mining taxation, fiscal policies and fiscal instruments **ST11_S03-** mining and exploration financing and investment modalities **ST11_S04-** Opportunities for local content, downstream, upstream and sidestream linkages in the hydrocarbon industry **ST11_S05-** Characteristics of the mining industry that drive investment decisions.
ST12	**Geoscience Education for Sustainable Development**	**ST12_S01**- Geoscience communication **ST13_S03**- Geoscience curriculums that meet industry needs
ST13	**The fourth Industrial revolution and its impact on mineral resource countries**	**ST13_S01**-The fourth Industrial revolution and its impact on mineral resource countries

		ST13_S02- Geostatistics and Data Science in resource development and quantification **ST13_S03**- Artificial intelligence, big data, and mineral system approach in mineral predictive mapping: Background and applications
ST14	**Hydrocarbons Potential in Africa**	**ST14_S01**- Oil fields of Africa **ST14_S02**- New hydrocarbon discoveries in Africa **ST14_S03**- Do oil discoveries equate to resource curse? **ST14_S04**- Opportunities for local content, downstream, upstream and sidestream linkages in the hydrocarbon industry

CAG29 FIELD TRIPS /EXCURSIONS

Several pre- and post-conference excursions and field trips are scheduled to take place before and after CAG29 indoor meeting. Proposed field trips includes:

FT01 - Namibian carbonatites and REE deposits (Leaders: Pete Siegfried & Rainer Ellmies (Namibia))

FT02 - Neoproterozoic stratigraphy of the southern margin of the Congo craton: Rodinia rifting, Snowball Earth, and early Gondwana assembly (Leaders: Francis A. Macdonald, Adrian Tasistro-Hart, and Galen P. Halverson, (USA)).

FT03 - Sperrgebiet palaeontology, geology, and Diamond deposits (Leaders: Brigitte Senut (France), Martin Pickford (France), Helke Molke (Namibia), John Ward (South Africa))

FT04 - Damara transect (Leaders: Jérémie Lehmann (South Africa))

FT05 - Namibian Base Metal Deposits, Otavi Mountainland (Leader: Rob Bowell, USA/Canada)

FT06 - Windhoek water supply (Leader: Greg Christelis, Namibia)

FT07 - Field visit to Namibian Gold Mines and projects (Leader: Volker Petzel, Namibia)

FT08 - Onganja Mine Visit (Leader: Rob Carr, Namibia)

FT09 - Mid Triassic Rocks & Fossils of Etjo Mountain (Leader: Roger Smith, (South Africa)

FT10 - Naukluft Mountains (Leader: TBA)

FT11 - Proposed Geopark in the Erongo and Kunene Regions (Leader: Kombada Mhopjeni, Namibia)

FT12 - Uranium Province in Namibia (Leader: Gabi Schneider, Namibia, Judith Kinnaird and Paul Nex, UK)

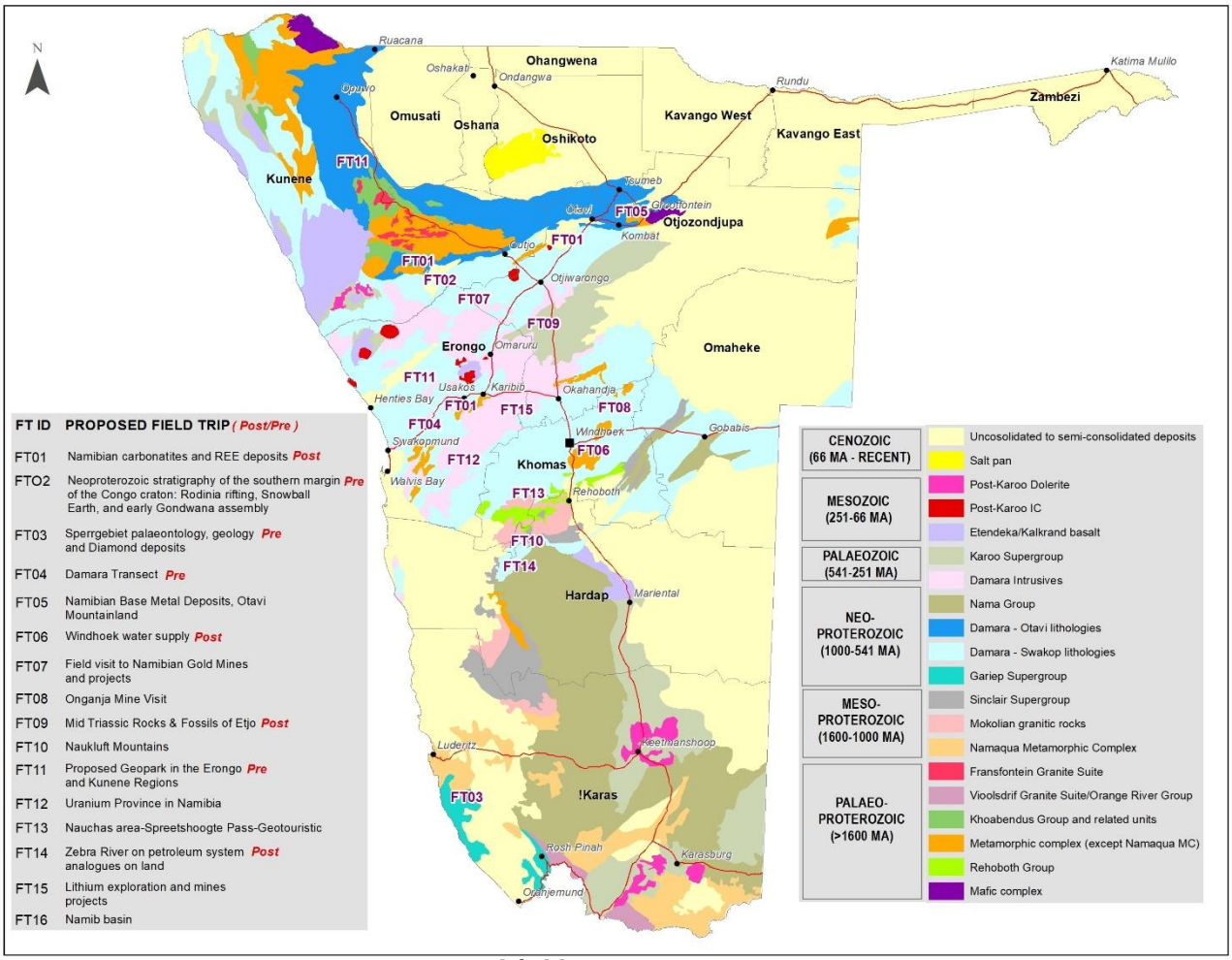
FT13 - Gamsberg and Nauchas area-Spreetshoogte Pass-Geotouristic (Leader: Dr. Thomas Fullgraf, France)

FT14 - Zebra River on petroleum system analogues on land (Leaders: Dr. Ansger Wange and Prof. Ben Mapani)

FT15 - Lithium exploration and mines projects (Leader: TBA)

FT16 –Namib basin (Angola) (Leader: Roger Swart (Namibia))

Dates and detailed information will be confirmed soon on the website. Participation is on a first-come, first-served basis and subject to availability. Priority will be given to fully paid-up participants.



CAG29 Proposed field trips / excursions map

CAG29 WORKSHOPS

#	Title of the Workshop	Organization /Project & Contact Person (s)
WS01	Enabling African Geodata	Deep-time Digital Earth (DDE); Prof Mike Stephenson
WS02	Workshop on UNESCO Global Geoparks in Africa	- United Nations Educational, Scientific and Cultural Organization (UNESCO) International Geoscience and Geoparks Programme Secretariat and the UNESCO Windhoek Office. - PanAfGeo-2 Work Package WP-D (Geoheritage) delivery team. - Geological Survey of Namibia. Ms. Kombada Mhopjeni, Dr. Ozlem Adiyaman Lopes, Dr. Enrique Diaz Martinez & Prof. Asfawossen Asrat
WS03	Potential for the Artisanal and small-scale mining (ASSM) sector in Africa	ASSM Consult Aps Mr. John Tychsen
WS04	Students & Early Career earth scientists: challenges and opportunities in the ever-evolving global society	Student & Early Career Geoscientis; Josephine Uushona, Halleluya Ekandjo, Mbili Tsiningayamwe
WS05	Geological Remote Sensing; Data, Methods and Techniques	Department of Applied Earth Sciences, ITC Faculty, University of Twente; Bruno Portela & Andries Botha
WS06	Challenges, Opportunities and Applications of Geochemical Mapping in Africa	SRK Consulting & Queens University, Canada, Nigerian Geological Survey Agency and Geological Survey of Namibia; Prof Rob Bowell, Iorsue Akaahar and Filadelphia Mbingeneeko,
WS07	Next Generation Technology for Mining: Mining software	TBA
WS08	The future for Women in Geoscience.	Namibian Hydrogeological Association (NHA) Ester Gustavo
WS09	Total Professors Associe-TPA	TPA, NAMCOR

CAG29 SHORT COURSES

#	Name /title	Organization
SC01	Geoscientific databases, mineral predictivity mapping and value-added products	BEAK Consultants GMBH Dr Andreas Barth
SC02	Customized and tailored Geographic Information System (GIS) and Remote Sensing (RS) for mineral exploration and mining industries	GEOTREND AND RESEARCH DATA SOLUTIONS CC
SC03	Unlocking the treasure of the subsurface: Drilling, core logging, and analysis with modern technology	Kodo drilling, NAMCOR, GSN, Ondikwa Geoservises
SC04	Thermodynamic modelling in metamorphic petrology using PerPleX, TWQ and QUILF software	UNAM Geology Department

CAG29 EXHIBITIONS

#	Name /title	Organization
EX01	Small-scale miners / mining	MME, CAG29 / UNESCO
EX02	Geological Maps and other products of the Southern Mapping project	Geological Survey of Namibia & the Council of Geoscience
EX03	Society for Geology Applied to Mineral Deposits	Society for Geology Applied to Mineral Deposits
EX04	Wonders of Namibia through amateur lenses	CAG29

HONORARY / ADVISORY COMMITTEE

1. Dr. Leake S Hangala, former Permanent Secretary of the Ministry of Mines and Energy in Namibia
2. Ms. Zenzi Awases, WiMAN-President, Vice-President-Association of Women in Mining in Africa (AWIMA)
3. Dr. Roy Miller, former Head of the Geological Survey of Namibia.
4. Mr. Ibrahim Shaddad, Director General, African Minerals and Geosciences Centre
5. Prof. Aberra Mogessie, former President of the Geological Society of Africa
6. Dr. Absai Vatuva, Head of UNAM Geology Department, Namibia
7. Ms. Gloria Simubali, Head of the Geological Survey of Namibia
8. Mr. Arnold Bittner, Managing Director of SLR Namibia & Technical Discipline Manager of African Water Services
9. Prof. Hassina Mouri, Vice President - IUGS, Vice-Chair -IGCP, UNESCO Chair in Medical Geology in Africa, University of Johannesburg, South Africa.

CAG29

The 29th Colloquium Of African Geology

Windhoek-Namibia

26th - 29th September 2023

The prominent & remarkable circular Richat structure 'Eyes of Africa' feature (diameter of almost 50 kilometres) in the Sahara Desert of Mauritania.