

AMGC News

Director General's Message



During the month of May 2023, the African Minerals and Geosciences Centre (AMGC) has assigned Mr. James Mgalla as Senior Technician of Industrial Minerals Application Department (IMAD) at AMGC. The Director General of AMGC Participated In PanAfGeo-2 Mid-Term Meeting: Strengthens Africa-EU Geoscientific Cooperation on May 15th to 16th, 2023 in Republic of Brazzaville,

Congo. Dr. Marit Kitaw, the Interim Director of the Minerals **Development** Centre nominated by the African Union Commission as a Board member of AMGC. The Director General of AMGC paid on 18th May 2023 a courtesy visit to the Geological Survey of Ethiopia (GSE); Ministry of Mines and Petroleum of Ethiopia. He paid on 19th May 2023 a courtesy visit to Dr. Marit Kitaw, the Interim Director of the African Minerals Development Centre (AMDC). On 23 May 2023, he welcomed newly recruited Junior Chemist Mr. Hassan Zakrino Makonde. The Centre through its Petrology, Mineralogy and Gemmology Department started conducting a practical training course on Gemstone Characterization and Identification Techniques for Mrs Nammi Sruthisha. The Centre hosted a meeting of representatives from International Conference of Great Lakes Region (ICGLR). German Federal Institute for Geoscience and Natural Resources (BGR) and Ministry of Minerals of Tanzania.

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The African Minerals and Geosciences Centre (AMGC) has assigned Mr. James Mgalla as Senior Technician of Industrial Minerals Application Department (IMAD) at AMGC and issued him a re-categorized contract for two years starting from 28th April 2023. Mr. James Mgalla is a Ceramic Designer and Decorator at the Centre for the past 13 years. On 28th April 2023 Mr. James Mgalla has submitted to the Management of the AMGC his academic credentials of having Diploma in Arts and Culture from Bagamoyo College of Arts and according to the Staff Rules and Regulation of AMGC, he has been re categorized to the level of a Senior Technician at the IMAD starting from 28th April 2023.

PanAfGeo 2M18 Midterm Meeting 15-16 May, 2023 Congo Brazzaville



The Director General of AMGC participated in the Advisory Board for PanAfGeo 2M18, midterm meeting in Congo Brazzaville during 15-16 May 2023. The PanAfGeo-2M18 Strengthens Africa-EU Geoscientific Cooperation Project is a human capacity Projects organized by both Association of European Geological Surveys (AEGS) and Organization of African Geological Surveys (OAGS), sponsored by European Union (EU), and supported by African Union (AU). The meeting focused on reviewing project progress and engaging with stakeholders from the Organization of African Geological Surveys (OAGS) and other organizations.



Mr. Ibrahim Shaddad, the Director General of the African Minerals & Geosciences Centre (AMGC) has paid on 18 May 2023 a courtesy visit to the Geological Survey of Ethiopia (GSE), Ministry of Mines and Petroleum of Ethiopia. A meeting was hold with Dr. Degene Hailemariam, the Director General of GSE as well as the Chairman of AMGC Board of Directors. The Director General of AMGC paid a visit to Ethiopian Mining Gallery, which established by the Ministry of Mines of Ethiopia to play a significant role in boosting the mining sector in Ethiopia. The Ethiopian Minerals Gallery is a state-of-the-art data warehouse that allows visitors easily understanding Ethiopia's mineral resources by type and location.





CONGRATULATIONS

Mr. Ibrahim Shaddad, the Director General of the African Minerals & Geosciences Centre (AMGC) has paid on 19 May 2023 a courtesy visit to Dr. Marit Kitaw, the Interim Director of the African Minerals Development Centre (AMDC). Mr. Shaddad expressed his congratulation to Dr. Marit, for being assigned by the African Union Commission (AUC) as its representative in AMGC Policy Organs namely the Board of Directors (BoD), Standing Committee of Officials (SCO) and Governing Council (GC).





On 23rd May 2023, Mr. Ibrahim Shaddad, the Director General of the African Minerals and Geosciences Centre (AMGC) welcomed Mr. Hassan Zakrino Makonde, the newly recruited Junior Chemist for the Analytical Finger Print (AFP) laboratory AFP hosted by the Centre.











The African Minerals and Geosciences Centre (AMGC) through its Petrology, Mineralogy and Gemology Department is conducting a practical training course on Characterization and Identification Gemstone **Techniques** for Mrs Nammi Sruthisha, Tanzania Resident from India for two weeks starting from Monday 22 May2023 till 02 June 2023.





The African Minerals and Geosciences Centre (AMGC) hosted a meeting of representatives from the International Conference of Great Lakes Region (ICGLR), German Federal Institute for Geoscience and Natural Resources (BGR) and Ministry of Minerals of Tanzania.



On Friday May 26, 2023, the African Minerals and Geosciences Centre (AMGC) hosted a meeting of representatives from the International Conference of Great Lakes Region (ICGLR), German Federal Institute for Geoscience and Natural Resources (BGR) and Ministry of Minerals of Tanzania. The meeting discussed current challenges facing the Analytical Fingerprinting Laboratory (AFP) and various strategies for sustainability including provision of intensive training on the AFP technology. The ICGLR delegation also briefed the Director General of AMGC on the issues discussed in the 2-day workshop on Operational Planning for Analytical Fingerprint 2023-2024 which was held at Bahari Beach Hotel, Dar es Salaam - Tanzania from 24-25 May 2023.

The AFP lab is hosted by AMGC under a tripartite cooperation between AMGC, ICGLR & BGR and funded by the German Government in support to the Regional Initiative against the illegal exploitation of Natural Resources (RINR).

APPRECIATION & GRATITUDE

The African Minerals and Geosciences Centre (AMGC) would like to express its much appreciation and gratitude to Tanzania, Angola, Sudan, Kenya and Uganda or fulfilling their financial commitments to the Centre.



New Courses



The Mineralogy, Petrology and Gemmology Department is happy to announce the following new training courses

- Gemstone/Mineral Estimation and Valuation
- 2 Jewellery Design
- **3** Gemstone Exploration & Gem Safari's

More Info matokeo@seamic.org

EVENT

CAG29 Second Circular

SECOND CIRCULAR





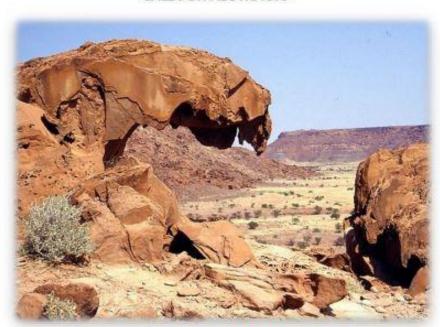


29th Colloquium of African Geology

"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





NEW Training Courses

African Minerals and Geosciences Centre (AMGC) is pleased to announce the introduction of four new courses Geostatistics, Petroleum Sciences and Resource Estimation in collaboration with Khartoum based Consulting firm called **Knowledge and Training Centre** (**KTC**). The course shall be facilitated by the Director of KTC, Dr. M. Zayed Awad, an eminent specialist in the areas of Geostatistics, resource evaluation, stratigraphy, reporting, training and mentoring, risk and decision analysis, petroleum economics, project management. The training course will be organized in Dar es Salaam at the AMGC training facilities. The following training courses are going to be offered through this collaboration.

1. Fundamental of Petroleum Economics

Duration: One Week **Course fee:** US\$ 1,200

This course introduces the participants to requirements for conducting petroleum economics; different stages of the petroleum industry life cycle involving upstream, mid-stream and downstream sectors will be explained. Participants will learn how to construct a Cash Flow Model for oil and gas investment decision. They will also learn how to deal with the different financial components of petroleum cost, and classification of costs into OPEX and CAPEX. Net Cash Flow Stream analysis and computation of economic indicators (Yardsticks) such as NPV, IRR, PBP, MCE and DPI, and their interpretations are essential for petroleum investment decision-making. Cash Flow Adjustment using discount rates is also considered. Types of fiscal regimes will be explained, participant will also learn how to incorporate the fiscal parameters into a cash flow stream.

2. Geostatistical Mineral Resource Estimation

Duration: One Week **Course fee:** US\$ 1,700

The course will focus on the fundamentals of Geostatistical application in mining that are required for domain specification that are required for mineral resource estimation and will include hands-on training with Geostatistical software. Geostatistical conditional Simulations may be used to assess the uncertainty associated with the Reserves Evaluation at exploration,

feasibility, and production stages. The simulations provide a range of potential reserves for the ore body's Tonnage, Metal Quantity and Recovered Grade.

3. Introduction to Oil and Gas Industry

DURATION: One Week **Course fee:** US\$ 1,200

This course is designed for a wide-ranging of petroleum industry personnel. It is designed to provide green-hands technical, and a non-technical personnel with practical petroleum industry life cycle. The course covers the key phases of the exploration, development and production industry as well as transportation and refining of crudes oils.

4. Geostatistics for Mining - foundation Course

Duration: Two Weeks **Course fee:** US\$ 2,000

Geostatistics, in combination with other statistical methods, offers a wide range of mathematical tools that can be used to analyze, model, provide estimates and assess uncertainties, for different types of spatial phenomena, for example, grades or geological features. The course will focus on the fundamentals of Geostatistics and statistics and will include hands-on training with Geostatistical software.

THE INSTRUCTOR



Dr. M. Zayed Awad, the former Sudanese Minister for Oil and Gas (September 2014-May 2017) BSc (Hons) from University of Khartoum, Sudan, MSc (Geol) from Technical University of Berlin (TU), PhD (Stratigraphy) from Technical University of Berlin (TU). Dr. Zayed is a university instructor with postgraduate qualifications in petroleum geology, stratigraphy, economic geology, Geostatistics, and relevant application soft wares. He has more than 35 years' experience in university teaching and more than 25 years worldwide experience in

the petroleum industry and training. He has supervised many MSc and PhD research students and reviewed several reports and research papers. He is the founder of Knowledge & Training Center (KTC) in Sudan, and he is active as a trainer since 2003. He worked on many projects and given training courses to hundreds of attendees on many aspects of geology. Dr. Zayed's skills are in Geostatistics, resource evaluation, stratigraphy, reporting, training and mentoring, risk and decision analysis, petroleum economics, project management. Dr. Zayed was the initiator and editor-in-Chief of the book titled "Petroleum Geology and Resources of the Sudan" published by Geozone (Berlin) in 2015.

LIST OF TRAINING COURSES

Training Topics	Duration	Fee		
Finance and Administration Department				
Leadership and Management Skills	2 Weeks	\$1,500		
Financial Management Skills	2 Weeks	\$1,500		
Executive Secretarial Skills	2 Weeks	\$1,500		
Chemical and Environmental Department				
Spectrometric Methods of Analysis.	2 Weeks	\$800		
Analysis of Gold and Other Base Metals	2 Weeks	\$800		
Quality Management Section				
Laboratory Certification and Accreditation	2 Weeks	\$1,500		
Modern Laboratory Management Methods	2 Weeks	\$1,500		
Quality Control and Quality Assurance in Laboratories	2 Weeks	\$1,500		
Laboratory Safety and Security	2 Weeks	\$1,500		
Mineralogy, Petrology and Gemology Department				
Mineralogical and Petrological Sample Preparation and	2 Weeks	\$800		
Analytical Techniques				
Gemstone Identification Techniques	1 Week	\$400		
Gemstone Value Addition Techniques	2 Weeks	\$800		
Usage of Benchtop X-ray Diffraction (XRD)	2 Weeks	\$800		
Gemstone formation, mode of occurrences and mining	2 Weeks	\$800		
methods				
Industrial Minerals Application Departm	ent			
Pottery for Beginners	2 Weeks	\$800		
Mould Making	2 Weeks	\$800		
Forming Techniques	2 Weeks	\$800		
Decorations in Pottery and Ceramics	2 Weeks	\$800		
Bricks & Tiles Manufacturing [Clays]	2 Weeks	\$800		
Glaze Formulation	2 Weeks	\$800		
Body Composition Formulation	2 Weeks	\$800		

Mineral Processing and Small-scale Mining Department				
Practical Mineral Processing and The Basic Mineral	2 Weeks	\$800		
Processing Flowsheet				
Sampling and Sample Preparation for Laboratory Testing	2 Week	\$800		
Artisanal and Small Scale Mining Activities	2 Weeks	\$800		
Techniques of Gold Cyanidation	2 Week	\$800		
Mineral Economics	2 Weeks	\$800		
Metallurgical Balance and Process Evaluation	2 Weeks	\$800		
Extractive Metallurgy – Metallic Ore Deposits, Metal	2 Weeks	\$800		
Extraction and Purification Processes				
Environmental Management in Mining	2 Week	\$800		
Geo-information Department				
GIS and Remote Sensing for Mineral Exploration and	2 weeks	\$800		
Geological Mapping				
Best Practices in Mineral Resource Estimation	1 week	\$400		
Geodatabase Development for Web mapping	2 weeks	\$800		
GIS and Remote Sensing Application for Geohazards	1 week	\$400		
Integrated Mineral Exploration Techniques	2 weeks	\$800		
GIS and Remote Sensing for Hydrological Applications	1 week	\$400		
Open-Source GIS	2 weeks	\$800		
Geochemical Exploration and Mapping	2 weeks	\$1,200		
Structural Geology and Geotectonics in Mineral	2 weeks	\$1,200		
Exploration				
Fundamental of Petroleum Economics	1 week	\$1,200		
Geostatistical Mineral Resource Estimation	1 week	\$1,700		
Introduction to Oil and Gas Industry	1 week	\$1,200		
Geostatistics for Mining - foundation Course	2 weeks	\$2,000		
Prospect Evaluation: Volumetric and Risk Analysis	2 weeks	\$2,000		



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Minerals for Development

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MINERALOGY, PETROLOGY AND GEMMOLOGY SERVICES

The Mineralogy, Petrology and Gemmology Department utilizes the skills of its staff to address crucial issues in the mineral sector such as lack of technical knowledge on mineral testing and identification, evaluation, grading and value addition techniques.

EXPERTISE

- Mineralogical and petrological sample preparation and analysis
- Mineralogical evaluation of industrial minerals, ore minerals and clays
- Specialized training in Gemmology, Gemstone Cutting and Polishing and Mineralogical and Petrological Sample preparation and Analytical Techniques.



Petrography and Gemmological Microscopes

ANALYTICAL SERVICES

TRAINING SERVICES

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