April 2024 African Minerals and Geosciences Centre (AMGC) | +255 22



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Abdelbagi Gailani, the former 1st Minister for Minerals in Sudan & current CEO of Segia Gulf Mining Company in KSA to AMGC on 25th March 2024. On 1st April 2024 AMGC received 7 professional scientists for a 5-days capacity building training on Basics of X-Ray Fluorescence (XRF) and Atomic Absorption Spectrometer (AAS) along with Performance Evaluation Techniques from the Burundian **Office of Mines and Ouarries**

(OBM), Republic of Burundi. Their certificates handling ceremony was done on 5th April 2024 and honored by H.E. Leontine NZEYIMANA, the Ambassador of the Republic of Burundi to Tanzania. AMGC participated in the East Africa Regional AMREC/PARC/GMI Implementation and Public Sensitization Workshop from 3rd to 5th April 2024 in Kampala, Uganda. Director General of AMGC paid a courtesy visit to the Permanent Secretary of Ministry of Energy & Mineral Development of Uganda on 2nd April 2024. AMGC received 6 undergraduate students taking Bachelor of Science in chemistry at Mwenge Catholic University (MWECAU) in Tanzania for field practical training from 15th April 2024 to 18th May 2024 and Mr. Ephraim Z. Ntakisivya for 9 months Intern program. AMGC congratulated Mr. Elijah Mwangi, the Principal Secretary of State Department for Mining at the Ministry of Mining, Blue Economy and Maritime Affairs, Kenya. AMGC congratulated a young Tanzanian Miss Heriethana Christomoo Tenga, who had successfully completed her 6 months internship program in ceramic section. Director General AMGC, paid a courtesy visit to H.E. Isaac Njenga, the Kenya High Commissioner to Tanzania on 19th April 2024. AMGC held its monthly management meeting for March 2024. AMGC received 7 Tanzanian apprentices for economic capacity building.





On 25th March 2024 the African Minerals & Geosciences Centre (AMGC), was honored for a courtesy visit by Dr. Abdelbagi Gailani, the **CEO of Segia Gulf Mining Company** in KSA. Dr. Gailani was the first Minister for Minerals in the Sudan and who made the decision that Sudan joins AMGC in 2010. He was in a short business visit to Dar es Salaam and, in his visit to AMGC, was accompanied by Dr. Waleed Hussain Ruba ALmadina Mining **Company in Kindom of Saudi Arabia** (KSA) and Eng. Mohamed Saif Ruba ALmadina Mining Company in KSA.









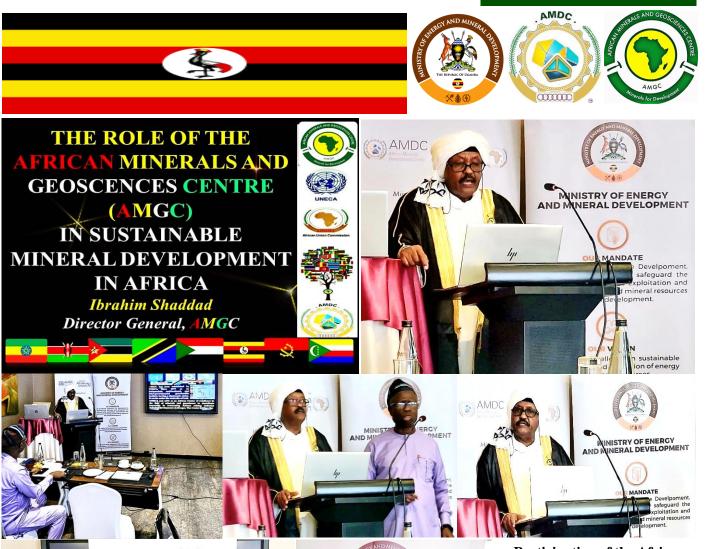
EAST AFRICA REGION AMREC / PARC / GMI IMPLEMENTATION AND PUBLIC SENSITIZATION WORKSHOP

3rd - 5th April 2024, Venue: Golden Tulip Hotel Kampala, Uganda



Participation of the African Minerals and Geosciences Centre (AMGC) in the East Africa Regional AMREC/PARC/GMI Implementation and Public Sensitization Workshop, which was organized by the Interim Secretariat of the African Minerals Development Centre (AMDC), domiciled at the African Union Commission, Department of Economic Development, Trade, Tourism, Industry and Minerals. The workshop took place from 3rd to 5th April 2024 in Kampala, Uganda.





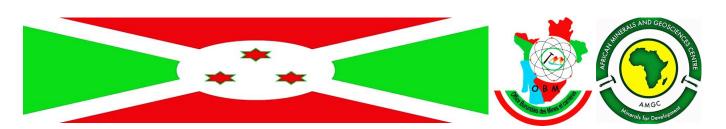
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Participation of the African Minerals and Geosciences Centre (AMGC) in the East Africa Regional AMREC/PARC/GMI Implementation and Public Sensitization Workshop, which was organized by the Interim Secretariat of the African Minerals **Development** Centre (AMDC), domiciled at the African Union Commission, **Department of Economic Development**, Trade, Tourism, Industry and Minerals. The workshop took place from 3rd to 5th April 2024 in Kampala, Uganda.



The Director General of the African Minerals & Geosciences Centre (AMGC) paid a courtesy visit to the esteemed Ministry of Energy & Mineral Development of Uganda on 2nd April 2024. He met Madam Irene. P. Bateebe, the Permanent Secretary of the Ministry of Energy and Mineral Development. Mr. Shaddad briefed the Permanent Secretary, among other issues, the challenges facing AMGC, as well as discussed the performance of the Centre and maximization of Uganda to its benefits from the spectrum of mineral services provided by the Centre. Mr. Shaddad expressed the AMGC gratitude to the much appreciated support of the Government of Uganda through its esteemed Ministry of Energy, Oil and Minerals Development, which enables the Centre to implement its activities to its highest peak. It is worth mentioning that Uganda has joined the Centre since January 1980, chaired and hosted the AMGC 25th Governing Council on 26th May 2005 in Kampala, Uganda. The Minister for Energy and Minerals Development by then was Hon. Syda N.M. Bbumba. Out of the six Directors General for the Centre, the late Mr. James Kagule Magambo was the 2nd Director General from 1986 - 1994.





The African Minerals and Geosciences Centre had received seven professionals' scientists from the Burundian Office of Mines and Quarries (OBM), Republic of Burundi. The professionals attended a 5-days capacity building training on Basics of X-Ray Fluorescence (XRF) and Atomic Absorption Spectrometer (AAS) along with Performance Evaluation Techniques. The list of professionals included;

- 1. Ms. Beatrice NKURUNZIZA
- 2. Mr. Jean Paul SIMBAVIMBERE
- 3. Mr. Deogratias BAZIKAMWE
- 4. Mr. Abel Desire NSHIMIRIMANA
- 5. Mr. Paisible IGIRANEZA
- 6. Ms. Joselyne CIZA
- 7. Mr. Norbert RUNOMA

This training was hosted and facilitated by Chemical and Environmental Department of AMGC from 1st to 5th April 2024.





Certificate handout ceremony on 5th April 2024 at the African Minerals and Geosciences Centre (AMGC) to seven professional scientists from the Office of Mines and Quarries (OBM), Republic of Burundi. The ceremony was honored by H.E. Leontine NZEYIMANA, the Ambassador of the Republic of Burundi to Tanzania. The professionals attended a 5-days capacity building training from 1st to 5th April 2024 on Basics of X-Ray Fluorescence (XRF) and Atomic Absorption Spectrometer (AAS) along with Performance Evaluation Techniques. The list of professionals include;

1. Ms. Beatrice NKURUNZIZA

- 2. Mr. Jean Paul SIMBAVIMBERE
- 3. Mr. Deogratias BAZIKAMWE
- 4. Mr. Abel Desire NSHIMIRIMANA
- 5. Mr. Paisible IGIRANEZA
- 6. Ms. Joselyne CIZA
- 7. Mr. Norbert RUNOMA

Three of the trainees got time to visit the Geological Survey of Tanzania (GST) in Dodoma for familiarization on analytical and quality management capabilities. The Centre is indebted to the continued cooperation from Tanzania.



The African Minerals and Geosciences Centre (AMGC) received 6 undergraduate students taking Bachelor of Science in Chemistry at Mwenge Catholic University (MWECAU) in Tanzania. The students are attending a 5-weeks field practical training from 15th April 2024 to 18th May 2024 so as to gain hands-on knowledge in analytical chemistry. The list of students includes;

- 1. Miss. Asha A. Mfinanga
- 2. Miss. Asia S. Athumani
- 3. Miss. Hellen M. Wangwe
- 4. Miss. Irene I. Menu
- 5. Mr. Ally A. Said
- 6. Mr. Ndaturu J. Balele

At the same, AMGC received Mr. Ephraim Z. Ntakisivya who is a graduate in BSc. Chemistry from MWECAU for an Intern program of 9 months. AMGC in these programs continues to contribute for the technical capacity building of the young generation in the mineral sector.





CONGRATULATION The African Minerals and **Geosciences Centre (AMGC)** take the opportunity and honor to congratulate Mr. **Elijah Mwangi, the Principal** Secretary of **State Department** for Mining at the Ministry of Mining, Blue **Economy and Maritime** Affairs, Kenya for emerging position ONE on ranks of all **Principal Secretaries in the** Government of Kenya for hard working. It is worth mentioning that Mr. Elijah Mwangi is a distinguished member of the AMGC **Standing** Committee of **Officials.**

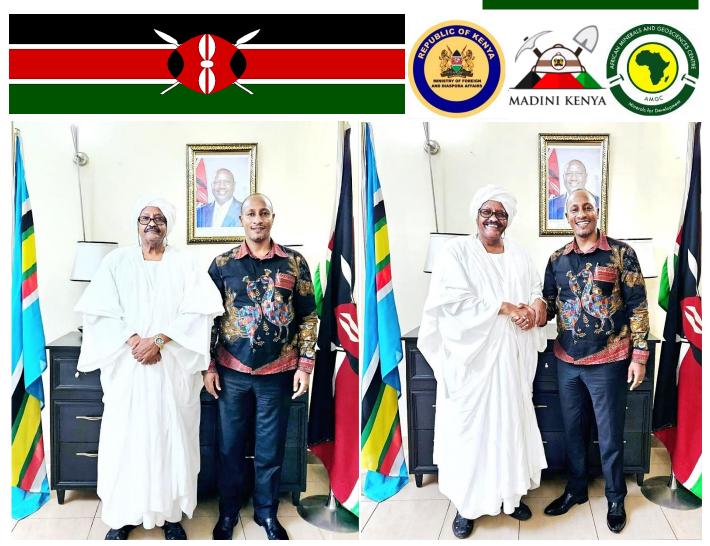






The African Minerals and Geosciences Centre (AMGC) congratulated a young Tanzanian Miss Heriethana Christomoo Tenga, who had successfully completed months her six internship program for economic capacity building the in Industrial **Minerals Application Department** at the Centre. As part of empowering women and youth, Miss Heriethana moved to Mineralogy, Petrology, and Gemology Department so as to acquire other skills.

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On 19th April 2024 Mr. Ibrahim Shaddad, the Director General of the African Minerals and Geosciences Centre (AMGC) paid a courtesy visit to H.E. Isaac Njenga, the Kenya High Commissioner to Tanzania. H.E. the High Commissioner of Kenya was briefed among other issues regarding the performance of the Centre and current challenges facing it. It is worth mentioning that Kenya joined the Centre in July 2006 becoming the 7th member state, chaired the AMGC Governing Council and hosted the Policy Organ Meetings three times (May 2011, June 2014 and May 2015) and the coming one will be hosted by Kenya under the chairmanship of Hon. Salim Mvurya, the Minister for Mining, Blue Economy & Maritime Affairs, of Kenya, who is the current Chairman of the Governing Council of AMGC.



THE AFRICAN MINERALS AND GEOSCIENCES CENTRE (AMGC) MONTHLY MANAGEMENT MEETING FOR MARCH 2024

The AMGC's monthly management meeting for March 2024 was held on Monday 22nd April 2024 and the following was discussed, 1. Review of the degree of implementation of the decisions of the last Management Meeting and the implementation of the departments activities for the month of March 2024.

2. Any Other Business.

The meeting was honored by the participation of Mr. Maruvuko Msechu, the advisor of Hon. Minister for Ministry of Minerals of Tanzania. Mr. Maruvuko is the representative of Tanzania in the Board of Directors of AMGC.



The African Minerals and Geosciences Centre (AMGC) provides economic capacity building to various apprentices as part of encouraging and empowering women and youth to build their skills and create competent professionals in the current and future generation. Currently, the Centre has 7 Tanzanian apprentices in different departments as follows:

- 1. Miss Mary Michael Mafuru in the Administration and Financial Department
- 2. Mr. Amani Mwangwale Zumba in Administration and Financial Department
- 3. Mr. Iddi Mikidadi in Industrial Mineral Application Department
- 4. Mr. Dickson Clemence in Geo-information Department
- 5. Mr. Heneriko Mazzuki, Industrial Minerals Application Department
- 6. Miss Queen Masawe in Industrial Mineral Application Department
- 7. Miss Heriethana Tenga in Mineralogy, Petrology and Gemology Department

EVENTS



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08th MINEXPO KENYA 2024 - International Trade Exhibition on Mining & Machinery, will be held on 05th to 07th June 2024, Kenyatta International Convention Centre, Nairobi

UPCOMING EVENT:



08th MINEXPO TANZANIA 2024 - International Trade Exhibition on Mining & Machinery, Dar es Salaam from 25th to 27th September 2024

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New Courses

AND GEOSCI



The Mineralogy, Petrology a n d Gemology Department is happy to announce the following new training courses



Gemstone/Mineral Estimation and Valuation



Jewelry Design



Gemstone Exploration & Gem Safari's

www.seamic.org

More Info matokeo@seamic.org





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 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 (FAD)			
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 (CED)			
Spectrometric Methods of Analysis.	2 Weeks	\$800	
Analysis of Gold and Other Base Metals	2 Weeks	\$800	
Modern Laboratory Management Method	2 Weeks	\$1,500	
Quality Management Section (QM)			
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 (MPGD)			
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 Department (IMAD)			
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	
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Mineral Processing and Small-scale Mining Department	t (MPSSMD))	
Practical Mineral Processing and The Basic Mineral	2 Weeks	\$800	
Processing Flowsheet			
Sampling and Sample Preparation for Laboratory Testing	2 Weeks	\$800	
Artisanal and Small-Scale Mining Activities	2 Weeks	\$800	
Techniques of Gold Cyanidation	1 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	1 Week	\$400	
Geo-information Department (GID)			
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
- See Mineralogical evaluation of industrial minerals, ore minerals and clays
- Gemstone identification and grading
- Specialized training in Germology, Gernstone Cutting and Polishing and Mineralogical and Petrological Sample preparation and Analytical Techniques.



Petrography and Gemmological Microscope

ANALYTICAL SERVICES

- ✓ Preparation of standard thin sections and polished sections
- Rock slabbing and polishing
- Rock core splitting
- ✓ Petrographic examination of thin sections and polished sections
- ✓ Evaluation of industrial minerals, ore minerals and clays
- Gemstone testing and identification
- Diamond grading
- Consultation and Expert opinion

TRAINING SERVICES

- Mineralogical and petrological sample preparation and analytical techniques
- Gemstone Characterization, Identification and Value Addition
- Semstone Identification Techniques

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- ✓ Gemstone Value Addition Techniques (Gem Cutting)
- Gemstone Cabochon making and Carving
- Gemstone Faceting

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Ag. Manager, Industrial Minerals and Application

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