



AMGC News

Director General's Message



The Director General (DG) of AMGC participated in AMDC workshop on African Minerals Resource Classification Implementation Strategies in Windhoek Namibia from 20th to 22nd March 2023. Hobo meteorite, Namibia was visited. The DG also paid on 27th March 2023 a courtesy visit to H.E. Eng. Habtamu Tegagn, the Minister of Mines and Petroleum and Natural Gas of Ethiopia in Addis Ababa, Ethiopia. During the Month, the Centre received H.E. Ambassador Colonel (Rtd) Fred Mwesigye, the High Commissioner of Uganda in Tanzania. H.E visited to familiarize himself with mineral services provided by the Centre and at the same time to be the Guest of Honor to officiate handing over of certificates to two Ugandan professionals who participated in training course on Mineralogy and Gemology Analytical Techniques. The Centre conducted a three-day Recertification Audit for ISO 9001:2015 standard from 1st - 3rd March 2023 also on 8th March 2023 the Centre was visited by 222 students from Bahari Nursery and Primary School to familiarize themselves with the mineral services provided by the Centre. Four undergraduate students from Mwenge Catholic University, Kilimanjaro, Tanzania completed their 5-weeks practical training programme at the Centre. On 15th March 2023, the Centre received 12 children from Braeburn International School for clay day workshop.

Contents

Visit of the High Commissioner of Uganda in Tanzania & Training Course on Mineralogy and Gemology	
Analytical Techniques	1
Recertification Audit	2
Visit of Bahari Nursery and Primary School Students	2
Practical Training Graduation for University Students	3
Clay Day Workshop	4
AMDC Workshop on AMREC Implementation Strategies	4 – 5
A visit to Moba Meteorite, Namibia	5
DG's Courtesy Visit to the Minister of Mines and Petroleum and Natural Gas of Ethiopia	6 – 7
Visit of Delegation from Afromine International Investment	8
New Courses	9
Event	10
New Trainings	11- 12
Training List	13 –14

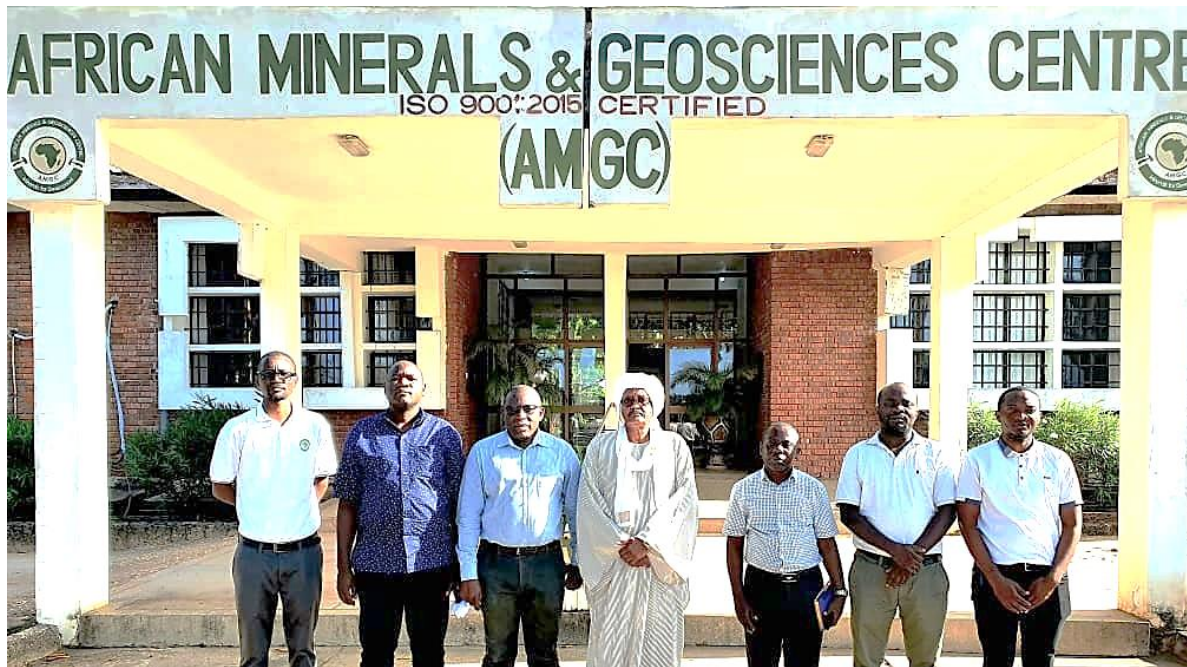


Visit of the High Commissioner of Uganda in Tanzania & Training Course on Mineralogy and Gemology Analytical Techniques



The African Minerals and Geosciences Centre (AMGC) on 3rd March, 2023 received H.E. Ambassador Colonel (Rtd) Fred Mwesigye, the High Commissioner of Uganda in Tanzania. H.E. paid a visit to AMGC so that he could familiarize himself with mineral services provided by the Centre and at the same time to be the Guest of Honor to officiate handing over of certificates to two Ugandan professionals - Ms Molly K Bakka Male and Ms Stella Nankinga who participated in training course on Mineralogy and Gemology Analytical Techniques that started on 20th February and finished on 3rd March, 2023.

Recertification Audit for ISO 9001:2015 Standard



AMGC conducted a three-day Recertification Audit for ISO 9001:2015 standard during 1-3 March 2023. The audit was performed by Mr. Ramadhan Nyambuka from SGS. The audit scope included laboratory services in Chemical and Environmental Department, Analytical Fingerprinting Lab, Mineral Processing and small-scale Mining department, Mineralogy, Petrology and Gemology Department and Industrial Minerals Application Department along with specialized training and dissemination of geo-information.

Visit of Bahari Nursery and Primary School Students



On 8th March 2023 AMGC received 222 grades 5, 6 and 7 students and 3 teachers from Bahari Nursery and Primary School which is situated nearby the Centre at Kunduchi Beach area, Dar es Salaam. The main goal of their visit was to familiarize with the mineral services provided by the Centre. The students with their teachers enjoyed a tour in various departments of the Centre where they were given in-depth explanations and they could witness some practicals in the laboratories. The teachers who accompanied the students were Mr. Geoffrey Kalikawe, Mr. Mwita Matinde and Madam Emerician Kiangi. Hosting this kind of study tour is one of the services provided by the Centre for raising awareness to various stakeholders on the mineral resources of Africa.

Practical Training Graduation for University Students



Graduation ceremony at African Minerals and Geosciences Centre (AMGC) for 4 undergraduate students taking Bachelor of Science in Chemistry at Mwenge Catholic University (MWECAU), Kilimanjaro, Tanzania. The students completed satisfactorily their 5-weeks practical training programme as per their university requirement. The list of students include; Miss. Irene I. Mdemu, First year, Miss. Lisbeth C. Mugusi, First year, Mr. Ephraim Z. Ntakisiyya, Third year, and Mr. Ally A. Said, First year. The training has been conducted at various departments of AMGC from 06 February 2023 to 10 March 2023.

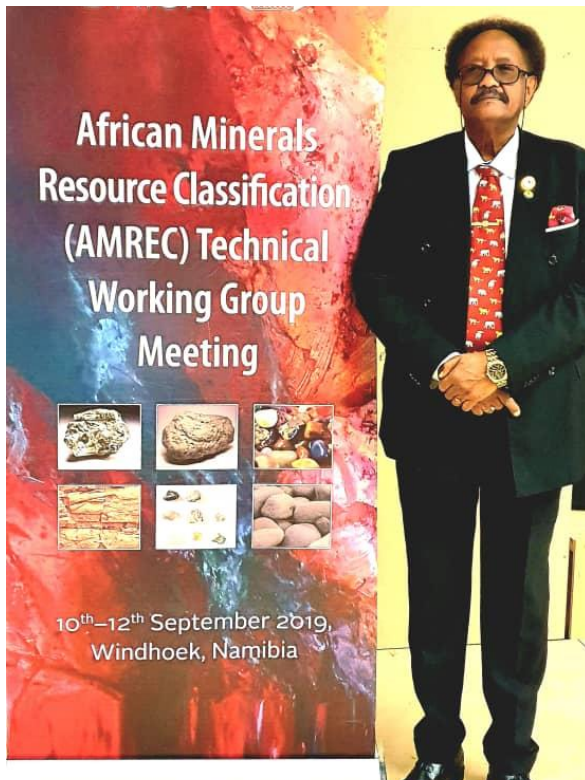
Clay Day Workshop



On 15th March 2023, the African Minerals and Geoscience Centre (AMGC) received 12 children from Braeburn International School for clay day workshop. The clay day workshop is a special short training program conducted under Industrial Minerals Application Department (IMAD) designed for women and men, children, schools and families for acquiring the basic know-how and skills in ceramics and pottery simple technology. IMAD also provides other various training courses for production of ceramics, pottery, researches and consultancy services for Industrial Minerals (Development Minerals).

AMDC WORKSHOP ON AMREC IMPLEMENTATION STRATEGIES





AMGC Director General, Mr. Ibrahim Shaddad participated in AMDC workshop on AFRICAN MINERALS RESOURCE CLASSIFICATION (AMREC) IMPLEMENTATION STRATEGIES in Windhoek Namibia during 20-22 March 2023, Mr. Shaddad delivered a presentation entitled THE ROLE OF AMGC IN SUSTAINABLE MINERLAS DEVELOPMENT IN AFRICA.

A VISIT TO HOBA METEORITE, NAMIBIA



The Hoba meteorite, short for Hoba West, is a meteorite that lies on the farm of the same name, not far from Grootfontein, in the Otjozondjupa Region of Namibia. It has been uncovered, but because of its large mass, has never been moved from where it fell. The main mass is estimated at more than 60 tonnes. The Hoba meteorite impact is thought to have occurred less than 80,000 years ago. It is inferred that the earth's atmosphere slowed the object in such a way that it impacted the surface at terminal velocity, thereby remaining intact and causing superficial impact crater. The meteorite is unusual in that it is flat on major surfaces.

DG's Courtesy Visit to the Minister of Mines and Petroleum and Natural Gas of Ethiopia



AMGC Director General (DG) Mr. Ibrahim Shaddad paid on 27 March 2023 a courtesy visit to H.E. Eng. Habtamu Tegagn, the Minister of Mines and Petroleum and Natural Gas (MOMPNG) of Ethiopia. The DG had a successful meeting with H.E. the Minister and the meeting was attended by Dr. Degene Hailemariam, the Director General of Geological Survey of Ethiopia (GSE) as well he is the Chairman of AMGC Board of Directors. The meeting was also attended by Mr. Sisay Shimelis, of Universal Minerals Exchange as well as a Senior International Consultant, who is also providing consulting services to the MOMPNG. The DG had the honour to congratulate H. E. the Minister for being appointed Minister for MOMPNG of Ethiopia. The DG also briefed H.E. the Minister among other issues regarding developments in the Centre, current challenges facing it and its performance from 2012 to February 2023. H.E. the Minister confirmed the commitment of Ethiopia to support AMGC and maximize its beneficiations from mineral services provided by the Centre and enjoy the 40% cost reduction from all mineral services provided by the AMGC including training, analyses and consultancy. The Centre is ready to respond to any service requests in house as well as ready to provide whatever Ethiopia needs in mineral services particularly outreach cost sharing on job specialized trainings to be conducted at GSE's premises in Addis Ababa. A tripartite Memorandum of Understanding (MoU) is proposed between MOMPNG, Universal Minerals Exchange and AMGC to go into a Public Private Partnership (PPP) business model to enhance the bottom line of Ethiopian economy in a profound way in the areas of:- Joint research and development, experience sharing, consultancy projects as well as capacity building and Assist GSE on testing of minerals and develop its analytics infrastructure, Setting of International Gold & Gems Exchange Park in Addis Ababa Ethiopia. AMGC sincerely recognizes about the outstanding commitments and



Obligations of the Government of Ethiopia to the Centre that enabled it to implement its activities to its highest peak. Due to Ethiopia's significant contribution to the running of the Centre, shouldered more than three times hosting Policy Organ Meetings of the Centre as well as ten times the responsibility of chairing the Governing Council. Ethiopia was elected Chair of the Board of Directors of the Centre from 1997 to 2006 chaired by Mr. Ketema Tadessa, former Director General of the GSE. In 2006 the Ethiopian Director General, Mr. Ketema Tadesse, was appointed the fifth Director General of the Centre, and Angola took over the chairmanship of the Board of Directors. When the term of Mr. Ketema as the Director General of AMGC ended in 2015, Ethiopia resumed back its chairmanship for the Board of Directors and is serving up to now. From 2015 to 2019 the Board of Directors was chaired by Mr. Masresha Gebreselassie, former Director General of the GSE, from 2019 to January 2022 by Ms. Enattfenta Melkau Gebre, former Director General of the GSE and from January 2022 up to now by Dr. Dejene Hailemariam, current Director General of the GSE. Out of the six Director Generals managing the Centre since 1977, Ethiopia was elected twice to manage the Centre, the first Director General was Mr. Mahdi Shumburo from Ethiopia, who served for nine years during 1978-1986 and the fifth Director General was Mr. Ketema Tadesse who served for nine years during 2006-2015. One of the departmental managers at AMGC was Mr. Mesfin Wubeshet of the Geo-information services, who had been employed as the only International Professional staff for the last quarter of a century (25 years). It is worth mentioning that the Centre's current premises in Dar es Salaam, Tanzania was constructed in 1990/91 and both the consulting architect and the contractor who built the buildings were Ethiopian companies, Getachew Bekele Architect and Berta Construction Company, respectively.

Visit from AfroMine International Investment Company LTD.



AfroMine is a multinational company that works smartly with a very high innovation to invest in mining and its services with policies and institutional values that preserve the environmental resource and we are keen to use it in a way that ensures the safety of nature for the next generations. We work to create a business environment for mining companies, investors, mining business executives, strategic partners, policy makers, economists and environmental stakeholders, in Africa, allowing participation in policy making and receiving international investment opportunities.



AMGC

New Courses

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

1

Gemstone/Mineral Estimation and Valuation

2

Jewellery Design

3

Gemstone Exploration & Gem Safari's

www.seamic.org

More Info
matokeo@seamic.org

EVENT



BE PART OF CAG29 - 2023

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

THROUGH:

- Sponsorship
- Presentation
- Attendance
- Exhibition
- Lead a field trip/workshop

DATE: 26 - 29 September, 2023

VENUE: Windhoek, Namibia

CONTACT INFO:

cag29@mme.com.na
cag29.whk@gmail.com
+264 61 2848398

ABOUT CAG:

The Colloquium of African Geology (CAG) is a major biennial meeting organized under the auspices of the Geological Society of Africa (GSAF), where earth scientists globally have the opportunities to present their research results on topics related to African geology and surrounding areas.

"Namibia. the World's Geological Paradise"





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

Tanzanian government issued a new directive on restrictions with regards to the COVID-19. All travelers coming to Tanzania will not be required COVID 19 Free Certificate if they have a valid full vaccination certificate. If one is not vaccinated a COVID 19 Free Certificate with PCR Test and will be subjected to screening and possible additional test at the airport with Rapid Antigen Test. Below is the list of the training courses offered by AMGC.

Those who are interested to participate in the training courses at AMGC facilities are advised to consult the airline they plan to travel with about the current requirements of travel to Tanzania when planning the trip to Dar es Salaam.

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 Analytical Techniques	2 Weeks	\$800
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 methods	2 Weeks	\$800
Industrial Minerals Application Department		
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 Processing Flowsheet	2 Weeks	\$800
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 Extraction and Purification Processes	2 Weeks	\$800
Environmental Management in Mining	2 Week	\$800
Geo-information Department		
GIS and Remote Sensing for Mineral Exploration and Geological Mapping	2 weeks	\$800
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 Exploration	2 weeks	\$1,200
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



African Minerals and Geosciences Centre

**Kunduchi Beach
Area
P.O. Box 9573
Dar es Salaam
Tanzania**

+255 22 2650347

Fax: +255-22-2650319

seamic@seamic.org

***Minerals for
Development***

Find us on the Web:

www.seamic.org



GEOCHEMICAL AND ENVIRONMENTAL SERVICES

The Geochemical and Environmental Department of AMGC carries chemical analysis of geological materials (rocks, minerals, soil, sediment and concentrate) so as to demarcate areas with economic mineral potential. It also offers useful analytical data on metals, water, soils, minerals, fish, sewage for use by metallurgists, environmentalists, agriculturalists, road construction engineers and water engineers. The section provides training and consultancy services to clients from member states and other countries.



Chemist at work in AAS laboratory

Chief chemist at work in ICP - OES laboratory

TRAINING SERVICES

Training on relevant aspects of specialized chemical analysis of geological and environmental materials by short courses or attachment and tailor-made basis are also organized by the Department. The training courses include:

- ✓ Spectrometric Methods
- ✓ Analysis of Gold and Other Precious Metals
- ✓ Modern Laboratory Management Methods
- ✓ Environmental Technologies
- ✓ Field Sampling Techniques for Chemical Analyses
- ✓ Laboratory Sample Preparation Techniques for Chemical Analyses



Chemist testing loss on ignition

Chemist preparing petroleum samples for ICP - OES testing

Contacts

Ibrahim Shaddad

Director General

ibrahimshaddad@seamic.org

Charles Buteta

Quality Manager/
Manager, Chemical and
Environmental Department

charles@seamic.org

Bashiri Juma

Ag. Manager, Industrial Minerals
Department/ Ag. Finance &
Administration Department

bashiri@seamic.org

Alex Mkama

Manager, Mineral Processing and
Small-Scale Mining Department

mkama@seamic.org

Matokeo Simba

Manager, Mineralogy, Petrology &
Gemology Department

matokeo@seamic.org