



AMGC Director General's Message



During the month of August 2024, the Director General of African Minerals and Geosciences Centre (AMGC) paid a courtesy visit to the esteemed Embassy of Angola in Dar es Salaam, Tanzania on 2nd August 2024. The Director General of AMGC cordially invited by the High Commissioner of India to a Dinner Reception on 15th August 2024 in Dar es Salaam, Tanzania. Certificate handout ceremony held at AMGC to Miss. Gift Mbithe on 2nd August 2024. AMGC did a clay workshop for kids on request from a diplomatic family on 9th August 2024. AMGC received a team of 4 officers from Weights and Measures Agency (WMA) of Tanzania on 9th August 2024. The Centre

conducted a two weeks training course on GIS & Remote Sensing for a professional from INAMI, Mozambique. AMGC also conducted a two weeks training course on Gemstone Value Addition Techniques for a Tanzanian Civil Engineer. AMGC has partnered with Tanzanian Women in Mining & Mineral Industry (TWiMMI) and hosted its first TWiMMI Annual Gemstone Value Addition Training Program (PAMOJA INITIATIVE) from 22nd to 23rd August 2024 at the Africa Mining Vision (AMV) Hall in the AMGC premises at Kunduchi area, Dar es Salaam. AMGC provided technical support to the success of the program which participated by 40 youth (31 females and 9 males) from Tanzania, Kenya, Rwanda, and South Africa. The program was culminated by a field excursion to small-scale mine of moonstones/sunstones located near Kilosa, Morogoro Region, Tanzania. The Deputy Minister for Minerals of Tanzania, Hon. Dr. Steven L. Kiruswa (MP) accompanied by officials were the guest of honor on 23rd August 2024. The Honorable Minister assured the sustainable support of Tanzania to such initiative and commended the appreciated efforts of the Centre for supporting the TWiMMI and hosting activities of their PAMOJA INITIATIVE. The Centre recruited two new local staffs. AMGC completed two days from 28th to 29th August 2024 Preventive Service program of the highly sophisticated analytical instruments that are XRD, XRF, AAS and ICP. AMGC congratulated Hon. Ali Hassan Joho, the incoming Cabinet Secretary (CS) of Ministry of Mining, Blue Economy and Maritime Affairs (MIBEMA), Kenya as well as expressed appreciation and gratitude to Hon. Salim M. Mvurya, the outgoing CS for MIBEMA. AMGC would like to thank Mr Elias Xavier Felix Daudi for the leadership during his tenure as Director General of INAMI, Ministry of Mineral Resources and Energy of Mozambique and member of the AMGC Standing Committee of Officials. AMGC congratulated Mr. Dino Miguel Milise for been appointed Director General of INAMI, Ministry of Mineral Resources and Energy of Mozambique.

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GOVERNO DE
ANGOLA

Ministry of Mineral Resources and Petroleum



On 2nd August 2024 a courtesy visit paid to the esteemed Embassy of Angola in Dar es Salaam, Tanzania. The Director General of the African Minerals and Geosciences Centre (AMGC) expressed appreciation and gratitude to the sustainable support of Angola to the Centre. He briefed H.E. Ambassador Sandro de Oliveira regarding performance of the Centre and challenges facing it. H.E. the Ambassador assured the continued support of Angola to AMGC to overcome challenges facing the Centre. It is worth mentioning that Angola, one of the founding member states of AMGC, has been unreservedly supporting the Centre since joining the Centre on 23rd May 1985. Angola shouldered more than once in 2001 and 2009

hosting the Policy Organ Meetings of the Centre as well as chairing the Governing Council of the Centre. Out of the six Directors General managing the Centre since 1977, Angola elected to manage the Centre from 2002 to 2006 by H.E. Dr. Diamantino Pedro Azevedo, the current Minister for Mineral Resources, Oil and Gas in Angola. H.E. Dr. Diamantino is the current Vice Chairman of the AMGC Governing Council. Angola elected Chair of the Board of Directors (BOD) of AMGC from 2006 to 2014 by Dr. Luis Antonio, the then Advisor of the Minister of Geology and Mines of Angola and now Director of Exchange Office at the Ministry of Mineral Resources, Oil and Gas of Angola. Currently Dr. Luis is the representative of Angola in AMGC Standing Committee of Officials. Mr. Canga Xiaquivuila, the Director General of the Geological Institute of Angola is the representative of Angola in AMGC Board of Directors.



The Director General of the African Minerals and Geosciences Centre (AMGC) was cordially invited by H.E. Mr. Bishwadip Dey, the High Commissioner of India to a Dinner Reception on 15th August 2024, at Swami Vivekananda Cultural Centre in Dar es Salaam to celebrate the 78th Independence Day of India. A number of Tanzanian officials and foreign diplomats, including the Director General of AMGC attended the celebration, which H.E. Mr. Bishwadip Dey highlighted the significance of the anniversary, honoring the struggles of past generations and reviewing bilateral cooperation with Tanzania. It is worth mentioning that the Director General of AMGC already extended an open invitation to the H.E. the High Commissioner of India to pay a familiarization visit to the Centre. AMGC is looking for a development partner in India through its diplomatic mission in Dar es Salaam, Tanzania, the host country of the Centre.



On 2nd August 2024, a certificate handout ceremony held at African Minerals and Geosciences Centre (AMGC) to Miss. Gift Mbithe, a graduate in BSc. Chemistry from Embu University, Kenya, who successfully completed her internship program on Advanced Analytical Chemistry and Instrumentation at Chemical and Environmental Department Laboratories of AMGC. Miss Gift received a hand on knowledge and demonstrated competency in sample preparation and analytical methods of XRF and AAS for rocks, soils, sediments and metallic samples analysis. The program was undertaken from 3rd April 2023 to 2nd August 2024.



On 9th August 2024 the African Minerals and Geosciences Centre (AMGC) does clay workshops for kids on request from diplomatic families, local and foreign communities resident in Dar es Salaam, Tanzania. AMGC is honored to be visited by these kids from these communities at any convenient day to tour its facilities and have first-hand experience seeing potters behind the potter's wheel forming different shapes.





On 9th August 2024 a ceremony held at African Minerals and Geosciences Centre (AMGC) for Mr. Alfred Malingula, Security Guard in Finance and Administration Department who reached retirement age. The Management extended the service of Mr. Alfred Malingula, beyond the age of 62 years retirement for a period of one year, which will be extended for a second year based on his performance, behavior, discipline, and medical fitness. Mr. Alfred Malingula worked for over 25 years at the Centre and has contributed significantly to the work of AMGC.



On 9th August 2024, the African Minerals and Geosciences Centre (AMGC) received a team of four officers from Weights and Measures Agency (WMA), Tanzania. The team was led by Mr. Almachius Pastory, Surveillance Manager accompanied by Ms. Lilian Mwombeki, Mr. Dennis Mtatiro and Mr. Malaki Nyangasi. The visit aimed to brief on the mandate of WMA regarding weights and measures.



On 19th August 2024, the African Minerals and Geosciences Centre (AMGC) through its Geo-Information Department conducted an on job practical training course on GIS and Remote Sensing for Minerals Exploration for two weeks from 19th to 30th August 2024. This course conducted in collaboration with Mr. Japhet Fungo, a resource person from the Department of Geology, University of Dar es salaam; Tanzania. Mr. Afonso Alberto Muianga, a professional Mining Cadaster Administrator, was the training course participant from Instituto Nacional De Minas (INAMI) Maputo Mozambique.

A certificate handout session held at AMGC on 30th August 2024 after a successful completion of the two weeks training course. The professional acquired skills and knowledge on GIS Data Acquisition, Map Design, Spatial Analysis, Satellite Imagery in a GIS (Esri), Introduction to GIS Mapping, Spatial Data Science-Applications, GIS Data Formats, Design-Quality, ArcGIS, InfraWorks, QGIS and Python Course Introduction. The Centre believes that with these skills, he has acquired will enhance his capacity in performing his tasks and activities at INAMI.



On 19th August 2024, the African Minerals and Geosciences Centre (AMGC) through its Mineralogy, Petrology and Gemology Department (MPGD) started a two weeks practical training course on Gemstone Value Addition Techniques from 19th to 30th August 2024. The participant of the course was Mr. Antony Mhina, a Tanzanian Professional Civil Engineer from Concrete Design Ltd, a company based in Arusha Tanzania. Eng. Antony is currently a Blaster at the mentioned company.

A certificate handout session held at AMGC on 30th August 2024 after a successful completion of the two weeks on the practical training course for Eng. Antony Stephen Mhina. The Civil Engineer professional acquired skills and knowledge on various techniques used to cut and polish different varieties of gemstones such as faceting, cabbings, tumbling, and free form technique. The Centre believes that the skills he acquired will help him to develop his career in the lapidary.



The African Minerals and Geosciences Centre (AMGC) is mandated to provide technical support regarding mineral services to public, private and stakeholders in the mining sector and geoscience communities of AMGC member states including Tanzania, the host country of AMGC as well as other African countries. AMGC particularly is committed to support local value addition for sustainable development in the mining sector. The Centre shares the vision of fostering economic empowerment, sustainability, and community engagement as tools for value addition for mining communities. The involvement of AMGC is instrumental in empowering local communities and driving meaningful change in the mining sector. In this juncture AMGC has partnered with Tanzanian Women in Mining & Mineral Industry (TWiMMI) and hosted its first TWiMMI Annual Gemstone Value Addition Training Program (PAMOJA INITIATIVE) from 22nd to 23rd August 2024 at the Africa Mining Vision (AMV) Hall in the AMGC premises at Kunduchi area, Dar es Salaam, Tanzania. AMGC provided technical support to the success of the program which aligns with the Africa Mining Vision (AMV) that underscores the importance of adding value to minerals locally to maximize economic benefits, create jobs, and foster industrial development.

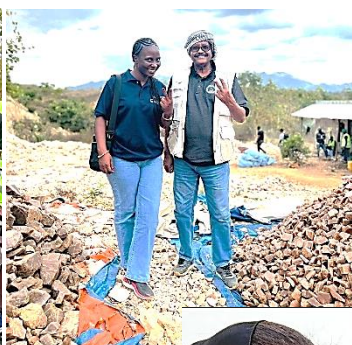
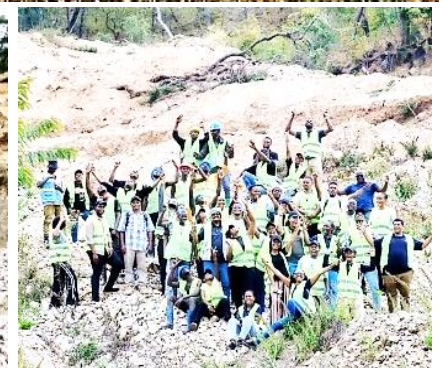
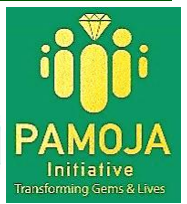
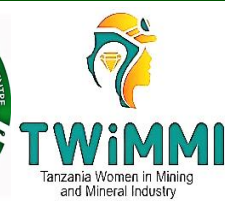


During compressive three working days, the Program covered various presentation regarding gemstone industry, practical training in gemstones value addition and a field excursion to feldspars gem quality (combined moonstones/sunstones) small-scale mine located on the road to Gongoni near Kilosa, Morogoro Region, Tanzania.

The program was participated by 40 youth (31 females and 9 males) from Tanzania, Kenya, Rwanda, and South Africa. The training geared to empower and equip youth and women with Gemstone Value Addition, Global Trend Insight, Africa Mining Vision on Value Addition, Block Chain Technology in Gemstone Traceability, Regulation of doing Gemstone Trading Value Addition in Tanzania and business etiquette training. Finally, all participants given a Gemstone Identification tool kit.



The Deputy Minister for Minerals of Tanzania, Hon. Dr. Steven L. Kiruswa (MP) accompanied by officials were the guest of honor on 23rd August 2024. The Honorable Minister assured the sustainable support of Tanzania to such initiative and commended the appreciated efforts of the Centre for the technical support given to the TWiMMI and hosting activities of their PAMOJA INITIATIVE. Mr. Ibrahim Shaddad, the Director General of AMGC expressed the will and the interest of the Centre to provide unreservedly support to value addition in development minerals particularly gemstones and simple ceramic technology for eradicating poverty and raise standard of living for youth and females in Tanzania, the host country of the Centre, other member states of the Centre and the rest of the African countries.





RECRUITMENT OF NEW LOCAL STAFF

In strengthening the Security workforce of the African Minerals and Geosciences Centre (AMGC), the Management added a temporary Security Guard Mr. Twaha Hussein Haji to be part of the Security Guards at the Centre.

The African Minerals and Geosciences Centre (AMGC) is happy to offer Ms. Shamimu Rajabu a contract as a Receptionist under the Finance and Administration Department (FAD) at the Centre. Ms. Shamimu is a graduate with Bachelor of Human Resource Management from the Tumaini University in Dar es Salaam, Tanzania.



The African Minerals and Geosciences Centre (AMGC) has completed two days from 28th to 29th August 2024 Preventive Service program of the highly sophisticated analytical instruments that are XRD, XRF, AAS and



ICP. Among other instruments, XRD service includes a replacement of a newly procured X-Ray Tube with Cu Anode, Normal Focus, 1.0 Kw, beam absorber adjustment, optics alignment, D/tex adjustment, D/tex center position correction, angle correction measurement, rubricating the gears for theta/2 theta as well as running the Si powder sample to verify that the XRD operate correctly and providing the correct results as it does always. The new Rigaku NEX CG EDXRF was purchased in 2021 by the centre from its budget to replace the old XRD. The instruments can analyze various samples including rocks and minerals, clay materials since it was accompanied by Ultrasonic Probe and Centrifuge to facilitate proper study and characterization of rock ores, sediments, silt, clays and industrial minerals archaeological artefacts. Preventive Service of the Instruments is normally perfumed after every six months in order to keep these machines function according to the Quality Procedures. The service of the instruments was done by senior Eng. Helmut Flinspach, who is a service engineer from Wirsam Scientific & Precision Equipment, Johannesburg, South Africa.



CONGRATULATIONS, APPRECIATION, AND GRATITUDE

On behalf of the African Minerals and Geosciences Centre (AMGC) the Director General would like to congratulate Hon. Ali Hassan Joho, the incoming Cabinet Secretary (CS) of Ministry of Mining, Blue Economy and Maritime Affairs (MIBEMA), Kenya as well as expressed appreciation and gratitude to Hon. Salim M. Mvurya, the outgoing CS for MIBEMA, Kenya. Kenya has taken over the chairmanship of the AMGC Governing Council (GC) after the 39th meeting, which held in Khartoum, Sudan on 18th February 2019 and till to date. The CS for MIBEMA of Kenya, is a distinguished member of the GC of AMGC and that he is the current Chairman of the GC till when the Policy Organ Meetings will be held and thus Chairmanship rotates to another member state. Kenya, which joined the Centre on 4th July 2009 becoming the 7th member state of AMGC, is one of the leading AMGC member states supporting the Centre and fulfilling timely its financial commitments to the Centre. Kenya 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 the CS for MIBEMA.





APPRECIATION AND GRATITUDE

On behalf of the African Minerals and Geosciences Centre (AMGC) the Director General would like to thank Mr Elias Xavier Felix Daudi for the leadership during his tenure as Director General of the National Institute of Mines (INAMI), Ministry of Mineral Resources and Energy of Mozambique and member of the AMGC Standing Committee of Officials. AMGC, sincerely recognizes about his outstanding commitments and obligations not only during the deliberations of the Policy Organ Meetings of the Centre, but also his sustainable efforts to facilitate the Government of Mozambique to fulfil its financial obligations to the Centre. AMGC looks forward to a continued close relationship with him, especially on mineral services advice.



CONGRATULATIONS

On behalf of the African Minerals and Geosciences Centre (AMGC) the Director General would like to honor and congratulate Mr. Dino Miguel Milise for been appointed Director General of the National Institute of Mines (INAMI), Ministry of Mineral Resources and Energy of Mozambique. Mr. Dino is automatically a distinguished member of the AMGC Standing



Committee of Officials (SCO), which is comprised of the Permanent Secretaries and/or Commissioners for Minerals/Mining in the member states. The SCO prepares the Governing Council meetings in a more technical detail and meets after the Board of Directors (BOD) meetings and prior to the Governing Council meeting (GC). The SCO meetings are chaired by the Executive Secretary of the United Nations Economic Commission for Africa (UNECA) or his representative and deputy chair by current country chairing the GC. The BOD which is composed of representatives of Tanzania, Angola, Ethiopia, Kenya, Mozambique, Sudan, Uganda, UNECA and AUC has an overall responsibility on behalf of the GC to monitor, advise and support the Centre, and oversees the execution of the AMGC work programme and takes all necessary steps to ensure effective and rational execution of such work programme meets more than once in a year. Mr. Alberto Fernando Manuel, the Environmental Geologist at the Ministry of Mineral Resources and Energy of Mozambique, is a member of the AMGC BOD, which is chaired currently by Ethiopia. Mozambique, as one of the founding member states of AMGC joined the Centre on 19th June 1976 and has been unreservedly supporting the Centre since its inception in 1977. Due to Mozambique's significant contribution to the running of the AMGC, has shouldered three times hosting of the Centre's Policy Organ Meetings (i.e., 8th GC Meeting held on 2nd to 3rd October 1987, 18th GC Meeting held on 5th August 1998 and 27th GC held on 31st May 2007) as well as more than four times the responsibility of chairing the GC of the Centre. Mozambique has also been among the leading member states of AMGC fulfilling financial its commitments as well as maximizing usage of the Centre's mineral services, including training. The Centre keenly looks forward to a continued sustainable work relationship from Mozambique. It is worth mentioning that out of the six Directors General managing the Centre since 1977, Dr. Antonio Maria Afonso Pedro was elected Director General of the Centre from 1996-2002, after which he resigned and joined the UNECA in Addis Ababa, Ethiopia.

EVENTS

8th AFRICA 2024
MINEXP
 Int'l Mining & Machinery Trade Expo

Concurrent event

BUILDEXPO
 AFRICA 2024



12 - 14 September, Diamond Jubilee Hall, Dar-es-salaam

Products on Display:

Mining Machinery, Equipments & Technology | Mineral Processing Plants and Equipments | Mining And Water Drilling Equipments And Tools | IT in Mines Planning | Mining Explosives | Crushers | Pulsating Centrifuge | Pumps | Screening Panels | Grinding Roller Mills | Polyurethanes & Concrete Fibers | Weighing & Measurement Systems | Bearings, Filters, Gearmotors & Material Handling | Mine Safety Equipments and more.

Meet Exhibitors from **14 Countries**

SUPPORT & PARTNERS:



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Expogroup supports the 'GO GREEN' campaign across the globe, please use paper only when necessary.

08th MINEXPO TANZANIA 2024 - International Trade Exhibition on Mining & Machinery, Dar es Salaam from 12th to 14th September 2024



Hosted and organized by the Government of the Tanzania, through the Tanzania Geothermal Development Company (TGDC) in partnership with UN Environment Programme (UNEP), African Geothermal Association (AGA), and other international partners

SECOND CIRCULAR

10th African Rift Geothermal Conference (ARGeo-C10), that will take place on 21st to 27th October 2024 at Julius Nyerere International Convention Centre, Dar es salaam, Tanzania.



We are thrilled to announce the Mining Tech 2024 International Forum and Exhibition.

Dates: 3rd to 4th November 2024

Location: Kempinski Royal Maxim Hotel First Settlement, New Cairo City. Join us in Cairo to explore groundbreaking opportunities in solar energy, mining tech, and data mining. This premier B2B event is your gateway to the latest advancements in technology and an unparalleled investment opportunity. Network with industry leaders and discover how your company can benefit from the future of extracting and processing raw

materials. Don't miss this chance to invest in the future of mining at the premier international forum for mining and technology in 2024.

Highlights of the event include:

- **Exploring the potential of mineral resources in the Arab world and maximizing investment opportunities.**
- **Enhancing the value of raw materials through advanced preparation and manufacturing techniques.**
- **Showcasing progress and development in the mining and quarrying sectors, including solar energy innovations and data mining technologies.**
- **Understanding global market dynamics affecting mining and quarrying products.**
- **Featuring cutting-edge technologies in mineral exploration, extraction, processing, and logistics.**

#Invest #Extracting #Egypt #International #Mining #SolarEnergy



ORGANIZED BY MINISTRY OF MINES

MINTEX

MINING AND TECHNOLOGY EXPO 2024



NOV 23 - 26, 2024

AT MILLENNIUM HALL ADDIS ABABA, ETHIOPIA

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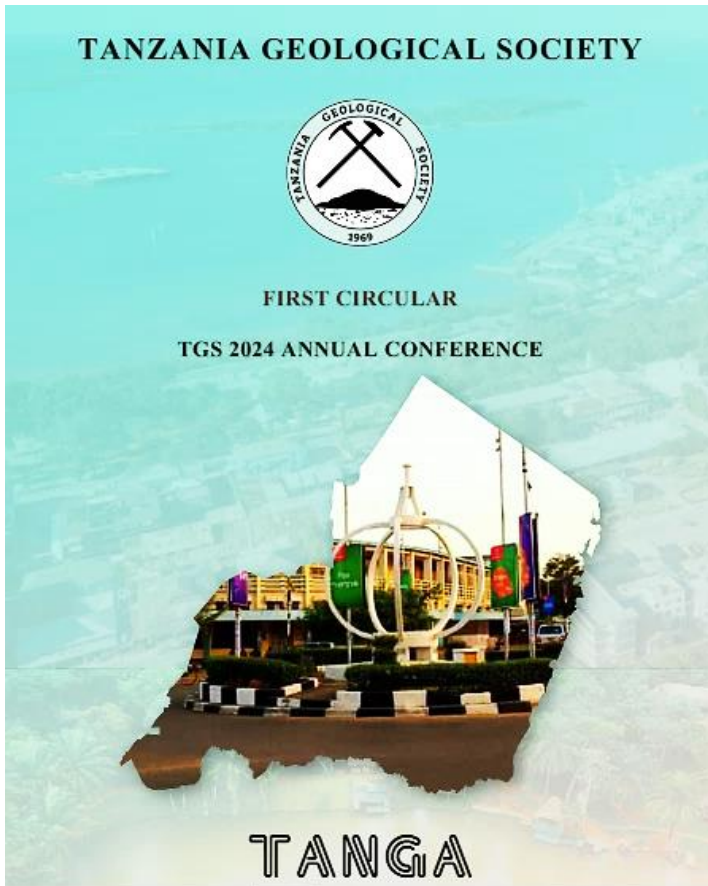
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Ministry of Mines

MINTEX 2024 MINING AND TECHNOLOGY EXPO

Expanding Horizons for Ethiopia's Mining Sector November 23rd to 26th 2024. Millennium Hall, Addis Ababa, Ethiopia Organized by Ministry of Mines



TANZANIA GEOLOGICAL SOCIETY (TGS) ANNUAL CONFERENCE 2024

This year annual meeting will be held in Tanga, Tanzania from 1st to 06th of December 2024 with the leading theme “Harnessing Tanzania Mineral Wealth for Sustainable Economic Growth and Smooth Energy Transition”

New Courses



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

- 1 Gemstone/Mineral Estimation and Valuation
- 2 Jewelry Design
- 3 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 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 (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



Mineral Processing and Small-scale Mining Department (MPSSMD)		
Practical Mineral Processing and The Basic Mineral Processing Flowsheet	2 Weeks	\$800
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 Extraction and Purification Processes	2 Weeks	\$800
Environmental Management in Mining	1 Week	\$400
Geo-information Department (GID)		
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
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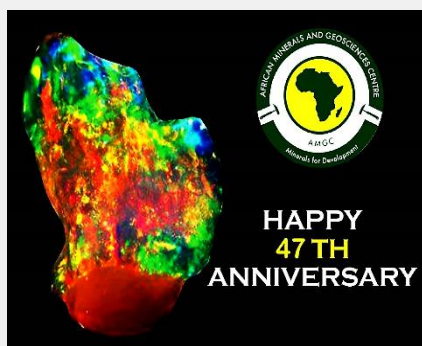
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***Minerals for
Development***

Find us on the Web:

www.seamic.org



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
- ✓ Gemstone identification and grading
- ✓ Specialized training in Gemmology, Gemstone Cutting and Polishing and Mineralogical and Petrological Sample preparation and Analytical Techniques.



Petrography and Gemmological Microscopes

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



Polishing Machine for Polished Mount Preparation

TRAINING SERVICES

- ✓ Mineralogical and petrological sample preparation and analytical techniques
- ✓ Gemstone Characterization, Identification and Value Addition
- ✓ Gemstone Identification Techniques
- ✓ Gemstone Value Addition Techniques (Gem Cutting)
- ✓ Gemstone Cabochon making and Carving
- ✓ Gemstone Faceting
- ✓ Gemstone Identification, Value Addition and Trading



Contacts

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