May 2024 African Minerals and Geosciences Centre | +255 22 2650347



AMGC Director General's Message





During the month of May the **Director General of AMGC** has the honour to congratulate H.E. Amb. Claver Gatete for being appointed as new Executive Secretary of the United **Nations Economic** Commission for **Africa** (UNECA) in Addis Ababa, Ethiopia. On 8th May 2024 AMGC was visited by 10 undergraduate students from

Department of Geosciences, School of Mines and Geosciences, University of Dar es Salaam. On 13th May 2024 AMGC started a two weeks training course on Geodatabase Development for Web Mapping and Geostatistical Mineral Resources Estimation. On 15th of May 2024 H.E. Sherif A. Ismail, the Ambassador of the Arab Republic of Egypt in Tanzania accompanied by Mr. Ahmed Amer, the Head of the Political Section at the Embassy paid a fimilization visit to AMGC. On May 21st 2024 a training certificate handover ceremony was held at AMGC for 6 undergraduate students taking Bachelor of Science in **Chemistry Mwenge** Catholic University at (MWECAU) in Tanzania. The Centre had the honour to invite H.E. Ricardo Mtumbuida, the High Commissioner of Mozambique in Tanzania as Guest of Honour to visit the Centre for officiating the handing over of training certificates to two professionals from Instituto Nancional De Minas (INAMI), Maputo. On 15th May 2024 Mr. Mazin, the General Manager of Tajuj Group of companies registered in Tanzania paid a familiarization visit to AMGC.

Contents

The Director General has the honour to congratulate H.E. Amb. Claver Gatete for being appointed as new Executive Secretary of the United Nations Economic Commission for Africa (UNECA) in Addis Ababa, Ethiopia. Page 1

On 8th May 2024 AMGC was visited by 10 undergraduate students from Department of Geosciences, School of Mines and Geosciences, University of Dar es Salaam. Page 2-3

On 13th May 2024 AMGC started a two weeks training course on Geodatabase Development for Web Mapping and Geostatistical Mineral Resources Estimation. Page 4

On 15th of May 2024, H.E. Sherif A. Ismail, the Ambassador of the Arab Republic of Egypt in Tanzania accompanied by Mr. Ahmed Amer, the Head of the Political Section at the Embassy paid a fimilrization visit to AMGC. Page 5-7

On May 21st 2024 a training certificate handover ceremony was held at AMGC for 6 undergraduate students taking Bachelor of Science in Chemistry at Mwenge Catholic University (MWECAU) in Tanzania. Page 8

AMGC had the honour to invite H.E. Ricardo Mtumbuida, the High Commissioner of Mozambique in Tanzania as Guest of Honour to visit the Centre for officiating the handing over of training certificates to two professionals from Instituto Nancional De Minas (INAMI), Maputo.

Page 9-10

On 15th May 2024Mr. Mazin, the General Manager of Tajuj Group of companies registered in Tanzania paid a familiarization visit to AMGC.

Events Page 12

Training Courses Page 13-17













CONGRATULATIONS

The African Minerals Geosciences Centre (AMGC) has the honor to congratulate H.E. Amb. Claver Gatete for appointed being as new Executive Secretary of the **Nations** Economic United Commission for **Africa** (UNECA) in Addis Ababa, Ethiopia. 47 years ago, in 1977, UNECA established in Africa, five Regional Mineral Centres including SEAMIC/AMGC to harmonize regional geological and to provide surveying **exploration** minerals and consulting services. The only survived Centre that SEAMIC/AMGC due to **Commitment from its member**

states Ethiopia, Tanzania, Mozambique, Uganda, Angola, Comoros, Kenya and Sudan. The Centre is an independent intergovernmental Centre of Excellence having a diplomatic status and works under the umbrella of both UNECA and the African Union Commission (AUC). UNECA is a member of the Governing Council of AMGC, and has always chaired the Standing Committee of Officials and Vice Chair of the Board of Directors of the Centre. In 2007, the Governing Council of former SEAMIC decided that membership is open to all African states, and the Centre was up scaled from regional to continental and the name SEAMIC changed to African Minerals & Geosciences Centre (AMGC) as from July 2015.





















On 8th May 2024 the African Minerals and Geosciences Centre (AMGC) was visited by 10 undergraduate students from the Department of Geosciences, School of Mines and Geosciences, University of Dar es Salaam. The visit aimed to familiarize with the mineral services provided by the Centre. The students are in 4th year taking BSc. in Geology and BSc. in Geology & Geothermal Resources. The list of students includes:

- 1. Miss. Loveness D. Chilumba
- 2. Miss. Happy A. Reuben
- 3. Mr. Basilius J. Ndimbo
- 4. Mr. Daud D. Nyangusu
- 5. Mr. Frank Chacha
- 6. Mr. Hobekela M. Mwakajumba
- 7. Mr. Kenedy Makere
- 8. Mr. Mollel K. Saruni
- 9. Mr. Samson E. Mkombo
- 10. Mr. Yamungu L. Paul







The African Minerals and Geosciences Centre (AMGC) started a two weeks training course on Geodatabase Development for Web Mapping and Geostatistical Mineral Resources Estimation. The course was conducted by the Geo-information Department of AMGC in collaboration with Mr. Japhet Fungo, a resource person from the Department of Geology at the University of Dar es salaam, Tanzania.

There are two participants from Instituto Nancional De Minas (INAMI), Maputo; Mozambique as follows:

- 1. Dr. Vicente Albino Manjate
- 2. Miss Fatma Roberto Chauque Nampete
 The training course was conducted from 13th to 24th May 2024.





























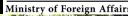
































On 15th of May 2024, H.E. Sherif A. Ismail, the Ambassador of the Arab Republic of Egypt in Tanzania paid a fimilrization visit to the African Minerals and Geosciences Centre (AMGC) so as to be acquainted with the mineral services being provided at the Centre. H.E. the Ambassador was accompanied by Mr. Ahmed Amer, the Head of the Political Section at the Embassy of Egypt in Dar es Salaam. Mr. Ibrahim Shaddad, the Director General of AMGC briefed the distinguished diplomats regarding the mandate and tasks of AMGC as a diplomatic and intergovernmental Pan-African Centre of Excellence established in 1977 in Dar es Salaam, Tanzania operating under the umbrella of the United Nations Economic Commission for Africa (UNECA) and the African Union Commission (AUC). AMGC has been created with the objective of promoting mineral resources development through provision of mineral services to support the African countries specifically in the areas of geo-information data processing and laboratory analytical services. The Centre is considered a continental key stakeholder in implementation of African Mining Vision (AMV) endorsed by the African Heads of States. The two distinguished Egyptian diplomats toured the different technical departments of AMGC, which is satisfactorily executing its duties supporting both the African geoscience community and the mining sector through provision of tailor made on-job training courses, analysis and consultancy to meet the need of the African mining industry for capacity building. It is worth mentioning that, during the 34th and 35th meetings of the Governing Council of AMGC which were held in Nairobi, Kenya on 4th June 2014 and 27th May 2015 respectively, the Ambassador of Egypt in Kenya who attended the meetings as an observer, expressed the interest of the Arab Republic of Egypt to become a member state of AMGC. In that juncture, the Ministerial Governing Council of AMGC directed the management of the Centre to pursue with the esteemed Ministry of Petroleum and Mining of Egypt to ensure confirmation of its membership to AMGC. The visit of the distinguished Egyptian diplomats is expected to pave the way for finalizing the expression of interest shown by Egypt to join the concentrated force of AMGC in serving the mining sector of our African continent.



On May 21st 2024 completion ceremony at the African Minerals and Geosciences Centre (AMGC) where a total of 6 undergraduate students taking Bachelor of Science in Chemistry at Mwenge Catholic University (MWECAU) in Tanzania, have successfully completed a 5 weeks field practical training which started on 15th April 2024. The students have gained hands-on knowledge in analytical Chemistry. The list of students included:

- 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

Having these programs at AMGC continues to contribute to the technical capacity building of the young generation in the mineral sector.













The African Minerals and Geosciences Centre (AMGC) had the honour to invite H.E. Ricardo Mtumbuida, the High Commissioner of Mozambique in Tanzania as Guest of Honour to visit the Centre for officiating the handing over of training certificates to two professionals from Instituto Nancional De Minas (INAMI), Maputo; Mozambique as follows:

- 1. Dr. Vicente Albino Manjate, and
- 2. Miss Fatma Roberto Chauque Nampete

Who had a two weeks training course on Geodatabase Development for Web Mapping and Geostatistical Mineral Resources Estimation. The course conducted by the Geo-information Department of AMGC in collaboration with Mr. Japhet Fungo, a resource person from the School of Mines and Geosciences (SoMG), University of Dar es Salaam, Tanzania. H.E. the High Commissioner of Mozambique was accompanied by his daughter Miss Ntchambelo Eduarda Ricardo Mtumbuida, a pupil at Genesis School and Mr. Josephine Milanga, Protocol Officer (Local Staff).



Mr. Mazin Ismail, the General Manager of Tajuj Group of companies registered in Tanzania

On 15th May 2024 Mr. Mazin paid a familiarization visit to the African Minerals and Geosciences Centre (AMGC). He is a Sudanese businessman, seeking advice regarding a feasibility study and analysis for a concession area for mining graphite he is intended to invest in Tanzania. Mr. Ibrahim Shaddad, the Director General of AMGC, briefed Mr. Mazin regarding the spectrum of mineral services provided by the Centre and expressed readiness of AMGC to serve the Tajuj Group of companies for mining graphite in Tanzania.

EVENTS



EXPGROUP

supports "GO GREEN" campaign across the globe. Grow a plant every weekend



AFRICA IS AN OCEAN OF OPPORTUNITIES. WHO GETS THERE FIRST GETS THE MOST



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

New Courses



The Mineralogy, Petrology and Gemology

Department is happy to announce the following

new training courses

- Gemstone/Mineral Estimation and Valuation
- 2 Jewelry Design
- Gemstone Exploration & Gem Safari's

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

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 Quality Control and Quality Assurance in Laboratories 2 Weeks \$1,500 Mineralogy, Petrology and Gemology Department (MPGD) Mineralogical and Petrological Sample Preparation and 2 Weeks \$800 Analytical Techniques 1 Week \$400 Gemstone Identification Techniques 2 Weeks \$800 Usage of Benchtop X-ray Diffraction (XRD) 2 Weeks \$800 Gemstone formation, mode of occurrences and mining methods Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 Mould Making 2 Weeks \$800	Training Topics	Duration	Fee	
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 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 Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 Mould Making 2 Weeks \$800	Finance and Administration Department (FAD)			
Chemical and Environmental Department (CED)	Leadership and Management Skills	2 Weeks	\$1,500	
Chemical and Environmental Department (CED)	Financial Management Skills	2 Weeks	\$1,500	
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 Cality 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 1 Week \$400 Gemstone Identification Techniques 2 Weeks \$800 Usage of Benchtop X-ray Diffraction (XRD) 2 Weeks \$800 Gemstone formation, mode of occurrences and mining methods \$800 Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 Mould Making 2 Weeks \$800	Executive Secretarial Skills	2 Weeks	\$1,500	
Analysis of Gold and Other Base Metals Modern Laboratory Management Method Quality Management Section (QM) Laboratory Certification and Accreditation Modern Laboratory Management Methods Quality Control and Quality Assurance in Laboratories Laboratory Safety and Security Quality Control and Petrology and Gemology Department (MPGD) Mineralogy, Petrology and Gemology Department (MPGD) Mineralogical and Petrological Sample Preparation and Analytical Techniques Gemstone Identification Techniques Gemstone Value Addition Techniques Usage of Benchtop X-ray Diffraction (XRD) Gemstone formation, mode of occurrences and mining methods Industrial Minerals Application Department (IMAD) Pottery for Beginners Q Weeks \$800 Mould Making	Chemical and Environmental Department (CED)			
Modern Laboratory Management Method2 Weeks\$1,500Quality Management Section (QM)Laboratory Certification and Accreditation2 Weeks\$1,500Modern Laboratory Management Methods2 Weeks\$1,500Quality Control and Quality Assurance in Laboratories2 Weeks\$1,500Laboratory Safety and Security2 Weeks\$1,500Mineralogy, Petrology and Gemology Department (MPGD)Mineralogical and Petrological Sample Preparation and Analytical Techniques2 Weeks\$800Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Spectrometric Methods of Analysis.	2 Weeks	\$800	
Quality Management Section (QM)Laboratory Certification and Accreditation2 Weeks\$1,500Modern Laboratory Management Methods2 Weeks\$1,500Quality Control and Quality Assurance in Laboratories2 Weeks\$1,500Laboratory Safety and Security2 Weeks\$1,500Mineralogy, Petrology and Gemology Department (MPGD)Mineralogical and Petrological Sample Preparation and Analytical Techniques2 Weeks\$800Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Analysis of Gold and Other Base Metals	2 Weeks	\$800	
Laboratory Certification and Accreditation2 Weeks\$1,500Modern Laboratory Management Methods2 Weeks\$1,500Quality Control and Quality Assurance in Laboratories2 Weeks\$1,500Laboratory Safety and Security2 Weeks\$1,500Mineralogy, Petrology and Gemology Department (MPGD)Mineralogical and Petrological Sample Preparation and Analytical Techniques2 Weeks\$800Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Modern Laboratory Management Method	2 Weeks	\$1,500	
Modern Laboratory Management Methods2 Weeks\$1,500Quality Control and Quality Assurance in Laboratories2 Weeks\$1,500Laboratory Safety and Security2 Weeks\$1,500Mineralogy, Petrology and Gemology Department (MPGD)Mineralogical and Petrological Sample Preparation and Analytical Techniques2 Weeks\$800Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Quality Management Section (QM)			
Quality Control and Quality Assurance in Laboratories2 Weeks\$1,500Laboratory Safety and Security2 Weeks\$1,500Mineralogy, Petrology and Gemology Department (MPGD)Mineralogical and Petrological Sample Preparation and Analytical Techniques2 Weeks\$800Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Laboratory Certification and Accreditation	2 Weeks	\$1,500	
Laboratory Safety and Security Mineralogy, Petrology and Gemology Department (MPGD) Mineralogical and Petrological Sample Preparation and Analytical Techniques Gemstone Identification Techniques Gemstone Value Addition Techniques Usage of Benchtop X-ray Diffraction (XRD) Gemstone formation, mode of occurrences and mining methods Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 800 800 800 800 800 800 800	Modern Laboratory Management Methods	2 Weeks	\$1,500	
Mineralogy, Petrology and Gemology Department (MPGD) Mineralogical and Petrological Sample Preparation and Analytical Techniques Gemstone Identification Techniques Gemstone Value Addition Techniques Usage of Benchtop X-ray Diffraction (XRD) Gemstone formation, mode of occurrences and mining methods Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 Mould Making	Quality Control and Quality Assurance in Laboratories	2 Weeks	\$1,500	
Mineralogical and Petrological Sample Preparation and Analytical Techniques2 Weeks\$800Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Laboratory Safety and Security	2 Weeks	\$1,500	
Analytical Techniques1 Week\$400Gemstone Identification Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Mineralogy, Petrology and Gemology Department (MPGD)			
Gemstone Identification Techniques1 Week\$400Gemstone Value Addition Techniques2 Weeks\$800Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Mineralogical and Petrological Sample Preparation and	2 Weeks	\$800	
Gemstone Value Addition Techniques Usage of Benchtop X-ray Diffraction (XRD) Gemstone formation, mode of occurrences and mining methods Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 800 2 Weeks \$800 2 Weeks \$800 2 Weeks \$800 4 Weeks \$800 2 Weeks \$800	Analytical Techniques			
Usage of Benchtop X-ray Diffraction (XRD)2 Weeks\$800Gemstone formation, mode of occurrences and mining methods2 Weeks\$800Industrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Gemstone Identification Techniques	1 Week	\$400	
Gemstone formation, mode of occurrences and mining methods Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 Mould Making 2 Weeks \$800	Gemstone Value Addition Techniques	2 Weeks	\$800	
methodsIndustrial Minerals Application Department (IMAD)Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	Usage of Benchtop X-ray Diffraction (XRD)	2 Weeks	\$800	
Industrial Minerals Application Department (IMAD) Pottery for Beginners 2 Weeks \$800 Mould Making 2 Weeks \$800	Gemstone formation, mode of occurrences and mining	2 Weeks	\$800	
Pottery for Beginners2 Weeks\$800Mould Making2 Weeks\$800	methods			
Mould Making 2 Weeks \$800	Industrial Minerals Application Department (IMAD)			
	Pottery for Beginners	2 Weeks	\$800	
	Mould Making	2 Weeks	\$800	
Forming Techniques 2 Weeks \$800	Forming Techniques	2 Weeks	\$800	
Decorations in Pottery and Ceramics 2 Weeks \$800	Decorations in Pottery and Ceramics	2 Weeks	\$800	
Bricks & Tiles Manufacturing [Clays] 2 Weeks \$800	Bricks & Tiles Manufacturing [Clays]	2 Weeks	\$800	
Glaze Formulation 2 Weeks \$800	Glaze Formulation	2 Weeks	\$800	
Body Composition Formulation2 Weeks\$800	Body Composition Formulation	2 Weeks	\$800	



Mineral Processing and Small-scale Mining Department (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	



African Minerals and Geosciences Centre (AMGC)

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



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

- Rock slabbing and polishing
- Rock core splitting
- Petrographic examination of thin sections and polished sections

- Consultation and Expert opinion

TRAINING SERVICES

- Mineralogical and petrological sample preparation and analytical techniques
- ${\it \ \ \ \ \ \ \ \ \ \ \ \ \ \ } Gemstone\ Identification\ Techniques$

Polishing Machine for Polished Mount Preparation

Contacts

Ibrahim Shaddad

Director General

ibrahimshaddad@seamic.org

Charles Buteta

Quality Manager/ Manager, Chemical and Environmental Department charles@seamic.org

Bashiri Juma

Manager, Finance and Administration Department Ag. Manager, Industrial Minerals and Application 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