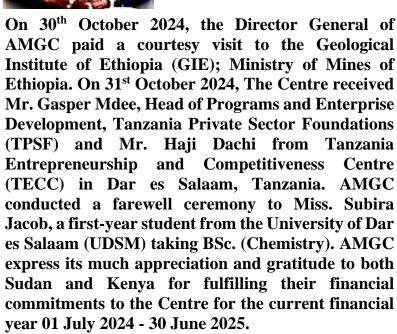
October 2024 African Minerals and Geosciences Centre | +255 22 2650347



AMGC Director General's Message



During the month of October 2024, the African Minerals and Geosciences Centre (AMGC) was invited as a special guest and exhibitor of its ceramic products during the summit, which was organized by the Women in Mining Operation (WIMO) in Dar es salaam, Tanzania on 16thOctober, 2024. On 22nd October 2024 the Director General of AMGC was invited and sponsored to attend the final meeting of the PanAfGeo project-2 which was held in Livingstone, Zambia.



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AMGC welcomed Mr. Gasper Mdee, Head of Tanzania Private Sector Foundations and Mr. Haji Dachi from Tanzania Entrepreneurship and Competitiveness Centre, Dar es Salaam, Tanzania. Page 6

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On 16th October, 2024, the African Minerals and Geosciences Centre (AMGC) was honored to be invited as a special guest, a keynote speaker and exhibitor of its ceramic products during the summit, which was organized by the Women in Mining Operation (WIMO) in Tanzania. The Summit was held at the Diamond Jubilee Hall, Dar es Salaam, Tanzania. Since it is beneficial to hear what AMGC is doing in value addition of development minerals particularly gemstones and simple ceramic technology to promote partnership to advance mineral beneficiation, the presence of AMGC and insights on beneficiation of development minerals would add immense value to the event.









Furthermore, AMGC have shared thoughts, to inspire attendees, enrich the discussions on mining local value addition, promote sustainable economic development network with industry peers, and help shape the future of women in mining. This Summit was a groundbreaking event dedicated to promoting gender diversity, leadership, and innovation in the mining industry. The Summit was designed to empower women in the mining sector by facilitating discussions on best practices, challenges, and opportunities for women in mining operations. The event featured thought leaders, industry experts, stakeholders, and policymakers who shared their insights on how to advance women's roles in mining.



On 22nd October 2024 the Director General of African minerals and geosciences Centre (AMGC) as a member of the Advisory Board of the PanAfGeo Project, was invited and sponsored to attend final meeting of the PanAfGeo Project-2 which was held in Livingstone, Zambia.

The PanAfGeo is a cooperation project between Africa and Europe through the technical collaboration between the EuroGeoSurveys (EGS) and Organization of African Geological Surveys (OAGS). The project targeted the human capacity building of African geologists and more than 1000 trainees from 49 African countries.

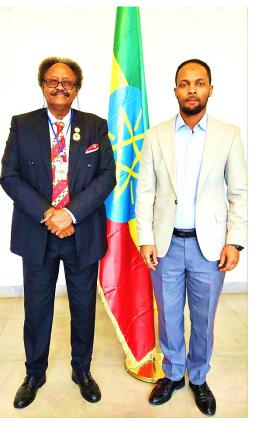






On 30th October 2024, Mr. Ibrahim Shaddad, The Director General of the African Minerals & Geosciences Centre (AMGC) paid a courtesy visit to the Geological Institute of Ethiopia (GIE); Ministry of Mines of Ethiopia. A meeting was held with Mr. Hijara Tesfaye, the Director General of GIE, as well as the Chairman of AMGC Board of Directors. Mr. Shaddad briefed Mr. Hijara Tesfaye regarding a number of issues including external and internal challenges facing the Centre, the need to maximize Ethiopia's benefits from the mineral services provided by the AMGC and payment of Ethiopia to its smoothing financial commitments to the Centre.

AMGC sincerely recognizes the outstanding commitments and obligations of the Government of Ethiopia to the Centre that enabled it to implement its activities to its highest peak. Ethiopia is one of the main founders of the Centre when it was established 44 years ago in 1977. The financial contribution to the Centre was apportioned according to some criteria like the size, economy, and other



factors of the country. Ethiopia and Tanzania (the host of the Centre) were apportioned to contribute the highest, and each of the two countries was paying on average about US\$130,000 per year starting from 1978/79. In 1998, the Centre was restructured, and members' contribution was set to be equal for all member states, and the contribution was set US\$62,000 per year. Ethiopia was unreservedly supporting the Centre until 2018/19, and the total contributions made by Ethiopia was US\$ 2,819,209.87.

AMGC looks forward for Ethiopia to continue supporting the Centre as well as to maximize its benefit and enjoy the 40% cost reduction from all mineral services provided by the Centre, including training, analyses, and consultancy. The Centre is ready to respond to any service requests in-house as well as direct cost sharing outreach capacity building service from Ethiopia. AMGC is ready to provide whatever Ethiopia needs in mineral services, particularly outreach cost sharing on job specialized trainings to be conducted GIE's premises in Addis Ababa. The Centre is willing to cooperate with GIE to provide assistantship in supporting the Ethiopian Gemological Centre. A Memorandum of Understanding (MoU) is proposed between selected academic institutes in Ethiopia and AMGC to go







into partnership for joint research and development, experience sharing, consultancy projects as well as capacity building. Out of the six Directors General managing the Centre since 1977, Ethiopia was elected twice to manage the Centre, the first Director General was Mr. Mahadi 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.

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 Tadesse, former Director General of the GSE. In 2006, an Ethiopian



Director General, Mr. Ketema Tadesse was appointed, and the Chairperson post was transferred to another member state (Angola). When the term of Mr. Ketema ended in 2015, Ethiopia resumed back its Chairperson position for the Board of Directors and is serving with this post up to now. From 2015 to 2019, the Board of Directors chaired by Mr. Masresha Gebreselassie, former Director General of the GSE and from 2019 to Jan 2022 by Ms. Enatfenta Melkau Gebre, former Director General of the GSE, and from December 28, 2022 to November 8, 2023 by Dr. Dejene Hailemariam, former Director General of GIE, and then until now by Mr. Hijara Tesfaye, the current Director General of the GIE.

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.







On 31st October 2024, The African Minerals and Geosciences Centre (AMGC) has received Mr. Gasper Mdee, Head of Programs and Enterprise Development, Tanzania Private Sector Foundations (TPSF), Dar es Salaam, Tanzania. Mr. Mdee was accompanied by Mr. Haji Dachi from Tanzania Entrepreneurship and Competitiveness Centre (TECC), Dar es Salaam, Tanzania. The aims of their visit were to familiarize with the activities of AMGC and to seek collaboration with AMGC on addressing critical minerals such as graphite, rare earth elements, lithium, cobalt and nickel for sustainable development.





On 31st October 2024, The African Minerals and Geosciences Centre (AMGC), an ISO 9001:2015 Certified conducted a farewell ceremony to Miss. Subira Jacob, a first-year student from the University of Dar es Salaam (UDSM) taking BSc. (Chemistry). Miss. Subira has been volunteering in the Chemical and Environmental Department of AMGC for capacity building in the area of analytical chemistry from 16 September 2024 to 31 October 2024. The Centre has continued to offer this opportunity to young scientists especially women in order to contribute in the skills development for sustainability.

























APPRECIATION & GRATITUDE

The African Minerals and Geosciences Centre (AMGC) would like to express its much appreciation and gratitude to the Sudan for fulfilling its financial commitments to the Centre. Mr. Ibrahim Shaddad, the Director General of the African Minerals and Geosciences Centre (AMGC) paid a courtesy visit to H.E. Mr. Asm Mustafa, the Charge' d'affairs of the Sudan Embassy in Dar es Salaam, Tanzania on 6th September 2024 to express much appreciation and gratitude for the arrangement which have been done to send the annual subscription of Ministry of Minerals on behalf of the Government of the Sudan through the Ministry of Foreign Affairs of Sudan to the Centre, H.E. Mr. Asm Mustafa assures the sustainable support of the Sudan to AMGC and expressed his high concern to enhance the existing excellent and fruitful relationship and cooperation that the Sudan and AMGC share for strengthening beneficial partnerships to push for the Centre's mission and mandate in serving the Mining Sector and Geosciences community in the Sudan and African Countries. It is worth mentioning that the Sudan is the last member state to join the work force of AMGC in August 2010. The Sudan chaired the AMGC 33rd and 39th Governing Council Meetings hosted in Khartoum in 2013 and 2019 respectively. Sincerely recognizes the outstanding commitments and obligations of the Government of Sudan to the Centre that enable it to



The Sudan has been unreserved Supporting the Centre in overcoming repeated financial constrain that the Centre is facing. The Sudan is ranking the second after Tanzania the host country of AMGC in utilizing the AMGC's mineral services and in this regard the Sudan contributes honorably in the 40% annual operational budget to be generated by the Centre. The Sudan is leading in timely fulfilling its annual subscription to the Centre and injecting additional funds through maximizing its beneficiation from mineral services particularly paid training courses provided by the Centre. Since Mr. Ibrahim Shaddad, the current Director General of AMGC has been fully on board in July 2015, a total of 440 paid training opportunities were provided to Sudanese professionals from Geological Research Authority of Sudan (GRAS), Sudanese Mineral Resources Company (SMRC), Ariab Mining Company (AMC) and Sudan's Gold Refinery. The Sudanese professionals have been trained in various on-job-training courses at the AMGC based in Dar es Salaam, Tanzania and one paid outreach training course held at the premises of GRAS in Khartoum.











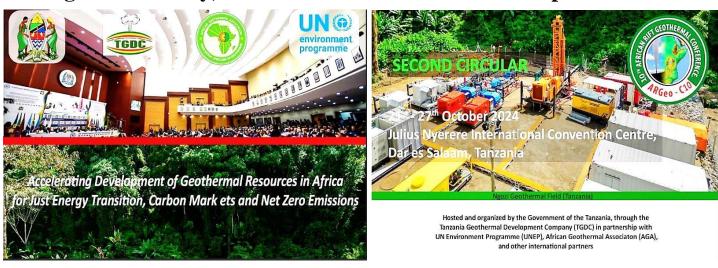
APPRECIATION & GRATITUDE

The African Minerals and Geosciences Centre (AMGC) would like to express its much appreciation and gratitude to Kenya for fulfilling its financial commitments for the current financial year 01 July 2024 - 30 June 2025 to the Centre. 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 H.E Hassan Ali Joho, the Cabinet Secretary for Mining, Blue Economy and Maritime Affairs in the Government of Kenya.

EVENTS



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



SECOND CIRCULAR

 10^{th} African Rift Geothermal Conference (ARGeo-C10), that will take place on 21^{st} to 27^{th} 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: The event has been postponed, a new date will be announced soon.

Location: Kempinski Roval Maxim Hotel First Settlement, New Cairo City. Join in Cairo IIS explore to groundbreaking opportunities in solar energy, mining tech, and data mining. This premier B2B event is your gateway advancements to the latest technology and unparalleled an 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 #Solar Energy

















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. Join us at the Mining and Technology Expo (MINETEX) from November 23-26, 2024, at the Millennium Hall, and be part of the mining industry's most significant event of the year! This is your chance to connect with leading international companies and explore cutting-edge innovations in the mining and technology sectors. Don't miss out on this unparalleled opportunity to showcase your products and services to a global audience. Organized by the Minister of Mines, this expo promises to elevate your business to new heights. Secure your spot today!

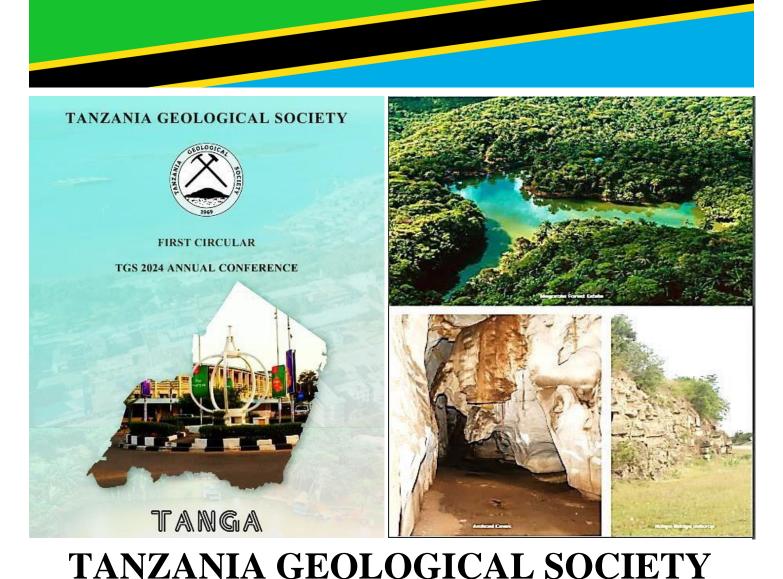
About MINTEX

Originating in 2022, MINTEX has quickly become a cornerstone event for the mining industry, aiming to position Ethiopia as a global hub for mining investments and technological advancements. Scheduled from November 23-26, 2024, at Millennium Hall in Addis Ababa, MINTEX 2024 will bring together global mining visionaries, industry leaders, and stakeholders to explore the latest trends, innovations, and investment opportunities.

The event will feature a comprehensive showcase of cutting-edge solutions from international exhibitors, including an International Heavy Machinery Pavilion, dynamic live technology demonstrations, and exclusive site visits. Enhanced speaker sessions and structured networking opportunities will facilitate in-depth discussions on industry trends and best practices, while educational workshops will provide hands-on experience with the latest advancements. By fostering strategic alliances and promoting sustainable mining practices, MINTEX 2024 aims to elevate Ethiopia's role in the international mining arena, offering unparalleled exposure and engagement opportunities for sponsors and exhibitors.

Contact

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(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

- 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. NetCash 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 fiscalregimes 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	



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	



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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

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



Petrography and Gemmological Microscopes

ANALYTICAL SERVICES

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

TRAINING SERVICES

- $\begin{tabular}{ll} \hline \mathscr{S} Gemstone Characterization, Identification and Value Addition \\ \hline \end{tabular}$

- $\ensuremath{\mathscr{L}}$ Gemstone Cabochon making and Carving

Polishing Machine for Polished Mount Preparation

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