



SCIENTIFIC NEWSLETTER

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Saudi Geological Survey Marks 25th Anniversary

On October 25, 2024, the Saudi Geological Survey (SGS) proudly celebrates its 25th anniversary, marking 25 years of excellence in geological research and exploration. Since its founding, SGS has played a crucial role in advancing the geological sciences within Saudi Arabia, contributing significantly to national development and sustainable resource management.

The SGS community, under the leadership of its current CEO, Eng. Abdullah Al Shamrani, will commemorate this milestone on October 24, 2024. The event will feature special guests who have been instrumental in SGS's journey, highlighting their experiences and insights from their time with the organization. Eng. Al Shamrani's leadership underscores the importance of honoring these outstanding contributors, reinforcing the SGS's commitment to recognizing those who have shaped such a great success. The main celebration will take place on November 24, 2024, and promises to be a grand event. Numerous distinguished personalities from the geological community and various sectors will attend to honor this milestone.

The event will showcase SGS's achievements over the years and highlight its future initiatives aimed at furthering geological research and innovation. Attendees can look forward to a memorable evening filled with reflections on past successes and exciting plans for the future.

SGS remains committed to its mission of supporting the Kingdom's growth and development through innovative geological studies and exploration activities.

Celebrating 25 Years of Geological Excellence: The Impact of SGS on



His Excellency Bandar Alkhorayef, Minister of Industry and Mineral Resources, along with Eng. Khalid bin Saleh Al-Mudaifer, Vice Minister of Industry and Mineral Resources for Mining Affairs, and Eng. Abdullah Bin Moftar Al Shamrani, CEO of the Saudi Geological Survey (SGS), officially inaugurating the first location of the Exploration Acceleration Initiative in the Khnaiguiyah area.

Saudi Arabia's Future

The Saudi Geological Survey (SGS) is a global leader in earth sciences research. It conducts comprehensive surveys of natural resources and monitors geological activities to ensure a safe society. Its mission is to facilitate the Kingdom's efficient utilization of its natural resources by providing invaluable geological data and expertise. SGS is committed to developing sustainable mineral and water resources, protecting

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ربع قرن من معرفة جيولوجية أرضنا 25 Years of Understanding Our Geology

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Dr. Mohammed Assad Tawfiq, former president of the Saudi Geological Survey, participated in a roundtable meeting with representatives of the Saudi Civil Defence during a Workshop on Disaster Planning for Earthquakes in November 1999.

the environment and monitoring geohazards, and supporting economic growth to secure a better life in our future

For the past 25 years, the Saudi Geological Survey (SGS) has produced approximately 2,000 reports and maps. These contributions add to a vast collection of preserved geological reports and maps created by various geological surveys since the 1960s. These documents are invaluable to future investors in the mining industry, as they contain detailed studies of the Kingdom of Saudi Arabia's mineral resources. This extensive body of research offers earth scientists and explorationists unparalleled insights into the geology of Saudi Arabia, particularly the Arabian Shield. These reports include geological maps, prospect and mineral-belt re-



Dr. Zohair Nawab, former president of the Saudi Geological Survey, during the scientific expedition to the Rub' al Khali in February 2013, alongside with SGS geologists Saleh Serfy and Omar Mourabet.

ports, and studies on geologic structures, tectonics, geochronology, and hydrogeology. They also cover issues related to geohazards and engineering geology and provide detailed analyses of water quality and monitoring of the Zamzam Well.

The Saudi Geological Survey (SGS) is currently leading major initiatives under the Accelerated Exploration Program in the Arabian Shield as part of the National Industrial Development and Logistics Program (NIDLP). These initiatives include comprehensive geophysical and geochemical surveys, as well as detailed geological mapping of the Arabian Shield. The projects are being carried out in cooperation with our technical partners from the Finland Geological Survey and International Geoscience Services, along with our contractors, the China



SGS convoy during the second scientific expedition to the Ar Rub' Al-Khali (Empty Quadters) in February 2013.





25 Years of Understanding Our Geology



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Geological Survey, Sander Geophysics Arabia Ltd, and Xcalibur Multiphysics Pty. SGS is working to advance exploration efforts in the Kingdom. These efforts align with Vision 2023, aiming to bolster the Kingdom's economic growth and development.

Completing these projects will provide highly accurate regional geological data, significantly boosting investment in the mining sector, which is set to become one of Saudi Arabia's main economic pillars. Offering new data and identifying promising reservoirs and mineral deposits in the Arabian Shield will enhance confidence in exploration activities and outcomes. These efforts will also help develop and grow national expertise in geological surveying.

Foundations of Saudi Arabian Geology: Early Contributions of USGS and BRGM

In the early days of geological exploration in the Kingdom of Saudi Arabia, the U.S. Geological Survey (USGS) and France's Bureau de Recherches Géologiques et Minières (BRGM) played critical roles in mapping and studying the kingdom's geology. Their work laid the foundation for the development of Saudi Arabia's vast mineral and oil resources. USGS began its involvement in Saudi Arabia in the early 1960s, focusing on mineral exploration and geological mapping. A significant part of their efforts involved studying the Arabian Shield, a region rich in Precambrian rocks. They conducted reconnaissance surveys and identified key rock formations, which contributed to a better understanding of the kingdom's mineral wealth, including deposits of gold, copper, and other metals. This early research provided the groundwork for the future extraction of these resources.

Meanwhile, BRGM began collaborating with Saudi Arabia in the 1970s, complementing the work of the USGS. Their studies extended to various regions of the country, focusing on sedimentary basins and hydrogeology. BRGM's contributions were vital in identifying groundwater reserves and assessing the environmental aspects of mining and other geological activities.

Together, the deliverables of these organizations helped modernize Saudi Arabia's geological understanding and laid the groundwork for the creation of the Saudi Geological Survey (SGS) in 1999, which continues to oversee geological activities across the Kingdom.



Delegates from the BRGM, led by Chief of Mission François Le Lann, and the USGS delegation, headed by Chief of Mission Ronald Worl, alongside with Dr. Mohammed Assad Tawfiq and DMMR representative Abdulaziz Baghdadi.