

Geochemistry Laboratory



The Geochemistry Laboratory in the Department of Environmental and Applied Geology provides many services to undergraduate and graduate students, faculty members in the college, university and the local community. It contains many different types of chemicals, acids, small devices and ovens, in addition to various glassware tools of all shapes, sizes and types that are used in various types of analysis. It also contains scientific balances that are characterized by high accuracy.

The laboratory includes the following devices:

- Three ovens for drying and burning samples at temperatures up to 250 °C.





- Muffle furnace for calculating the percentage of organic matter in samples and for calculating the percentage of loss on ignition at temperatures up to 1200°C.



- A water distiller is a device used to separate pure water from impurities and contaminants through the process of evaporation and condensation. The device works by heating water to boiling point, which causes the water to evaporate and turn into steam. This steam is collected and condensed back into pure liquid water, while the impurities and contaminants are left behind.



- Scientific balances are devices used to measure weight with high accuracy, and are essential tools in scientific laboratories. These balances are used in a variety of applications such as preparing samples for chemical analysis. One of the most important balances available in the laboratory is the digital analytical balance, which is used to measure masses with high accuracy of up to 0.001 grams and contains a glass chamber to protect the sample from air currents that may affect the measurement. It is used to prepare solutions accurately and determine weights in precise chemical analysis.



- A fume hood is a vital piece of laboratory equipment designed to provide a safe working environment when handling hazardous chemicals or volatile substances. It acts as a ventilation system, containing and exhausting toxic fumes, vapors, and dust to protect the laboratory workers from exposure. The laboratory has two fume hoods.





***The geochemistry laboratory contains many small devices that support and facilitate the simple analysis process, such as:**

- 1- Samples shaker.**
- 2-Samples centrifuge.**
- 3- Hot plates with magnetic stirrer.**