

Material Characterization Lab Core Labs Summer Training Program 2024

Hamad Bin Khalifa University (HBKU)

Hands-on training



Training Overview:

The Summer 2024 Internship at the Material Characterization Lab within Core Labs offers a dynamic learning experience for interns. This program integrates both theoretical and hands-on training, exposing participants to a diverse array of characterization techniques, including Optical Microscopy, Electron Microscopy, Surface Science, X-ray, NMR, and Spectroscopy. The training program encompasses various tasks and activities, fostering a comprehensive understanding of laboratory operations.

Materials Core Labs will be glad to host four (4) students for a 6-week period this summer. The training will be focused on the areas of:

- Electron Microscopy (1 student)
- XRD/XRF (1 student)
- NMR and Spectroscopy (1 student)
- Thermal Analysis (1 student)

Training Date

- Batch 1: May15th- June 27th
- Batch 2: July 30- August 15th.



Recommended Tasks and Activities

- Theoretical (reading material) and experimental training on a wide range of characterization techniques available in Core Labs, such as: Optical Microscopy, Electron Microscopy, Surface Science, X-ray, NMR and Spectroscopy.
- Contributing to routine Core Labs activities that may involve sample preparation, accompanying Core Labs staff during experimental characterization, contributing to data analysis and report writing.
- Performing job-related tasks specified by Core Labs staff, such as: quick literature review, data processing, data entry, etc.
- Attending Core Labs meetings on a regular basis

Required Skills

- **Preferred fields of study:** Materials Science & Engineering; Chemistry; Physics; Chemical Engineering; Petroleum Engineering; Mechanical Engineering.
- **Preferred Intern Academic Level:** Junior level (3rd year Undergraduate and beyond)
- **Learning Opportunities:** Hands-on training on various materials characterization techniques

Mentors

Dr. Said Mansour: smansour@hbku.edu.qa

Dr. Kamal Mroue: kmroue@hbku.edu.qa

Dr. Anas Abutaha: aabutaha@hbku.edu.qa

Dr. Ayman Samara: asamara@hbku.edu.qa

Dr. Atef Zekri: azekri@hbku.edu.qa

Omar Al Hassan: oalhassan@hbku.edu.qa



عظــــو فــن مؤسســـه فظـــر Member of Cotor Foundation