

"Scientist in Physical Characterization at Imaging and Characterization Core Lab"

King Abdullah University of Science and Technology (KAUST), Saudi Arabia

Position Summary

- The individual serves the IAC mission to support research at KAUST and regionally by providing expertise for advanced and routine physical characterization analysis in a user-driven environment.
- The scientist serves this mission in his/her main area of expertise, which is physical characterization using X-ray Diffractometer (XRD) and Raman spectroscopy.
- In addition, the scientist is expected to fulfil a multitude of laboratory and university-related tasks.

Major Responsibilities

- Work in a team of scientists to conduct both routine and advanced research-grade sample analyses for different clients, guided by the Team Leader and IAC management.
- Provide training to researchers, students and other lab staff on techniques and newly developed methods in area of expertise.
- Develop and implement instrumental analytical methods and improvements to existing methods, including associated Standard Operating Procedures (SOP).
- Manage projects for internal and external clients.
- Provide expert help and advice to KAUST researchers and external partners in the specific area of expertise.
- Keep up to date on the most advanced techniques in the specific area of expertise.
- Ensure good laboratory practice and safety in the assigned work area at all times.
- Ensure maintenance status and maximum uptime of assigned instruments (plan, perform and oversee preventative and corrective maintenance, purchase consumables, etc.).
- Deliver high quality results at all times in a timely manner. Communicate problems to the supervisor.
- Identify areas for improvement in lab operations and suggests solutions for the same.
- Perform routine laboratory duties and maintenance, including administrative, procurement, service on task forces and committees.
- Other duties as assigned by the team lead and lab director.

Competencies

- Demonstrable experience with a range of XRD techniques, such as powder XRD, thin film XRD, single-crystal XRD, etc., and/or Raman spectroscopy.
- Strong background in structure determination for small molecule crystal and ability to develop methods as instructed by the Team Leader and validate them, by using XRD techniques; strong theoretical background in Raman spectroscopy is a suitable alternative.
- Strong problem solving skills. For example, the incumbent should be able to troubleshoot and conduct simple repairs independently or remotely (the latter using guidance by maintenance engineers).
- Some supervisory and organizational skills as well as ability to work effectively and efficiently in a multi-cultural environment, and collaborate with team members, lab users, and external service providers.
- Excellent written and oral communication skills.

Qualifications

A PhD degree with at least 2 years of lab experience, in physics, chemistry, crystallography, materials science, or a related field.

Contact

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