# OPPORTUNITIES TO LIVE, WORK, AND STUDY AT KAUST

# Staff Scientist – Plasma 'Dry' Etching

The KAUST Nanofabrication Core Lab (NCL) is seeking an experienced plasma 'dry' etching scientist with project management and team-building skills. NCL is a multidisciplinary laboratory supporting research in micro- and nanofabrication and microfluidics. NCL is equipped with a 2,000-square-meter cleanroom, consisting of both Class 100 and Class 1000 areas, and a wide range of tools at the forefront of nanotechnology, providing a high level of versatility and support for micro- and nanofabrication.

The successful candidate will support research at KAUST and throughout the region by sharing their scientific expertise in plasma 'dry' etching processes with staff, students, researchers, and external users of the cleanroom. He/she will perform routine laboratory duties as well as ensure a high standard of experimental research.

NCL is service- and support-oriented; therefore, it is important that the successful candidate meets deadlines and works effectively both independently and in collaboration with team members, lab users, and service providers.

#### **Major Responsibilities**

- Perform plasma 'dry' etching processes, including inductively coupled plasma reactive ion etching (ICP-RIE), deep reactive ion etching (DRIE), and chemically assisted ion beam etching (CAIBE), and maintain related equipment
- · Provide training and expert advice to staff, researchers, students, and external users
- · Optimize and maintain standard processes, including regular monitoring and data recording
- Document procedures for equipment operation, regularly maintain and review standard operating procedures (SOP), and perform risk assessments
- · Propose and manage new projects to develop new processes, techniques, and materials

### **Qualifications & Competencies**

- · Ph.D. degree in a relevant scientific/engineering field
- At least five years of semiconductor or micro- and nanofabrication experience in a cleanroom environment with demonstrable experience in plasma 'dry' etching of semiconductor materials
- Experience developing processes for silicon and compound semiconductor etching is required
- Experience of lithography processes and use of electron beam lithography systems is preferred
- Experience with statistical process control (SPC) is preferred
- · Ability to work effectively and efficiently in a diverse, multicultural environment
- · Excellent written and oral communication in English

e-mail : gheorghe.iordache@kaust.edu.sa & anton.oltar@kaust.edu.sa



## About King Abdullah University of Science and Technology

Founded in 2009, King Abdullah University of Science and Technology (KAUST) is a top-ranking graduate research university located on the shores of the Red Sea in Saudi Arabia. The University is dedicated to solving global challenges in the areas of food, water, energy, the environment, health and digital.

KAUST employees enjoy exceptional packages, including competitive salaries and relocation allowances, fully furnished on-campus accommodation, and comprehensive health insurance coverage.KAUST also provides international schools (IB program) and a wide variety of recreation facilities.

The Core Labs at KAUST is a shared research facility comprised of 12 laboratories run by over 240 staff. Its mandate is to promote the scientific ambitions of KAUST and Saudi Arabia by stewarding and developing state-of-the-art facilities and technical expertise and delivering research support, training, collaboration and services to KAUST faculty, students, researchers and partners.



جامعة الملك عبدالله للعلوم والتقنية King Abdullah University of Science and Technology

Learn more about KAUST: www.kaust.edu.sa Learn more about Core Labs: corelabs.kaust.edu.sa

@kaust\_corelabs
company/kaust-core-labs