

Domain

Micro and nano technology

Contract

Permanent position

Job title

Materials and device characterization by SIMS M/F

Job description

You will join the team of SIMS analysts in the surface and interface analysis laboratory at the CEA-Leti in Grenoble. You will be responsible for SIMS analysis on materials and devices from the technology development teams at the CEA-Leti. The following mission

- Interface with device and process engineers to understand the analytical question and define the appropriate techniques and protocols in order to perform the analysis within the requested time,
- Perform measurements on the four recent (TOF)-SIMS instruments. Treat and interpret the acquired data, mainly using commercial software, but eventually using Python if required. Produce analysis reports that may be presented orally at technical review meetings,
- Develop the advanced, innovative protocols to meet the needs of current and future projects of the CEA-Leti. With this aim, you will be an integral part of characterization projects at the national, European and international levels. You may also participate in the definition of internships and PhD subjects as well as supervision,
- Participate in the evolution of the sample reference library in ad equation with the development of new analysis protocols,
- Contribute to the day to day running of the instruments : monitoring of instrument performance, and first-level maintenance in liaison with the maintenance team or vendor,
- Anticipate future needs and improvements to instruments as part of the yearly technical roadmap exercise. This will require staying up-to-date on literature in the field as well as maintaining a professional network in the domain,
- Communicate results both internally and externally via national and international conferences, scientific and technical networks, journal articles and patents.

This job opening will require the ability to analyze a wide range of samples from the different technologies developed at the CEA-Leti and necessitate interactions with the teams involved. To fulfill these missions you will need to be independent, highly motivated, curious, and able to take initiatives, with good interpersonal skills. The working environment is fast-paced, multicultural and ambitious, with permanent interactions with young researchers (interns, PhDs students and post-docs), senior experts and international partners of the CEA-Leti.

Profile

Master's Degree (Bac+5) in physics, materials science or microelectronics and if possible a PhD. Ideally you will have an initial experience in R&D (academic or industrial) in microelectronics or materials analysis. A good practical knowledge of (TOF)-SIMS techniques is required. You should be at ease speaking, writing and listening to English. IT/Programming skills and knowledge of Python would be appreciated.

The ability to work in a team, to be rigorous, methodic, conscientious are required for this job. A sense of service, a taste for innovation, autonomy, pedagogy, communication skills and the reflex to patent are also important.

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