

The mission of the Catalan Institute of Nanoscience and Nanotechnology (ICN2) is to achieve the highest level of scientific and technological excellence in Nanoscience and Nanotechnology. Its research lines focus on the newly-discovered physical and chemical properties that arise from the behavior of matter at the nanoscale. ICN2 has been awarded the Severo Ochoa Center of Excellence distinction for two consecutive periods (2014-2018 and 2018-2022). ICN2 comprises 19 Research Groups, 7 Technical Development and Support Units and Facilities, and 2 Research Platforms, covering different areas of nanoscience and nanotechnology.

Job Title: Research Engineer in Electron Microscopy

Research area or group: Electron Microscopy Division

Description of Group/Project:

The research engineer will be a member of the ICN2 Electron Microscopy Unit, with over 200 annual users, which provides scientific-technical support to ICN2 scientific groups but also external institutions as well as several industries in the region. The facilities of the Unit currently include an FEI Quanta 650F environmental SEM, a FEI Magellan 400L HRSEM, a FEI Tecnai F20 HRTEM, a brand new Thermofisher Helios 5 UX FIB and a range of sample preparation equipment. The recently acquired Thermofisher Spectra 300, featuring a monochromator, a double aberration corrected system, HR EELS and 4D-STEM among others, will allow the direct visualization of the structure, chemical composition and electronic structure of materials down to the atomic scale.

Main Tasks and responsibilities:

We are looking for a highly motivated research engineer to be in charge of the day-to-day operation and maintenance of the recently acquired state-of-the-art Thermofisher Spectra 300, a joint initiative of several institutions of international prestige that have established a collaboration agreement, specifically the ICN2, CSIC (and its ICMAB-CSIC center), UAB and ALBA, with contributions also from BIST and Microsoft. This microscope will be installed in the newly created Advanced Electron Microscopy Platform in the ALBA-CELLS synchrotron facilities during June 2022.

Responsibilities:

- Commissioning of the instrument and perform cutting-edge experiments
- Developing and implementing novel electron microscopy techniques
- Acting as a technical interface with the specialist maintenance/repair engineers of the supplying company
- Providing technical scientific service by characterizing samples from both consortium and external users, including public and private institutions;
- Training regular users in the hands-on operation of the equipment
- Carrying out dissemination activities of the infrastructure's activity, such as demonstrations for school visits or for the general public

Education, Experience, Knowledge and Competences required:

- Education
 - PhD in Materials Science, Physics, Nanoscience or similar
- Professional Experience and knowledge:
 - Proven experience in aberration corrected (S)TEM and atomic scale spectroscopy. Experience in 4D-STEM and monochromated EELS will be valued.

- **Competences**

- Candidates must be able to work independently and should have excellent laboratory skills.
- Excellent knowledge of English (written and spoken), proactivity, team working and strong communication skills are essential.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: Temporary (2 years)
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.
- Life Insurance.

Estimated Incorporation date: May-June 2022

How to apply:

All applications must be made via the ICN2 website <https://jobs.icn2.cat/job-openings/378/research-engineer-in-electron-microscopy> and include the following:

1. A cover letter.
2. A full CV including contact details.
3. 2 Reference letters or referee contacts.

Applications will be continuously reviewed. Shortlisted candidates will be invited for interview.

Equal opportunities:

ICN2 is an equal opportunity employer committed to diversity and inclusion of people with disabilities.

ICN2 is following the procedure for contract of people with disabilities according with article 59 of the Royal Decree 1/2015, of 30 of October.