

As a flagship research center in nanoscience and nanotechnology, our mission is to open and explore new frontiers of knowledge at the nanoscale, and bring value to society in the form of new understanding, capabilities and innovation, while inspiring and providing broad training to the next generations of researchers.

Our research lines focus on the newly-discovered physical and chemical properties that arise from the behaviour of matter at the nanoscale. ICN2 has been awarded with the Severo Ochoa Center of Excellence distinction for three consecutive periods (2014-2018 and 2018-2022 and 2023-2026). 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: Electron microscopy Scientist**

#### **Research area or group: Electron Microscopy Division**

#### **Description of Group/Project:**

We are looking for a highly motivated electron microscopist 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), ICN2, UAB and ALBA, with contributions also from BIST and Microsoft. This microscope has been installed in the Joint Electron Microscopy Center (JEMCA) in the ALBA-CELLS synchrotron facilities.

The electron microscopy scientist 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 UX FIB and a range of sample preparation equipment. The recently installed Thermofisher Spectra 300, featuring a monochromator and 4D-STEM among others, allows the direct visualization of the structure, chemical composition and electronic structure of materials down to the atomic scale.

#### **Main Tasks and responsibilities:**

- Providing technical scientific support by characterizing samples from both consortium and external users, including public and private institutions
- Developing and implementing novel electron microscopy techniques
- Acting as a technical interface with the specialist maintenance/repair engineers of the supplying company
- Training frequent 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

#### **Requirements:**

- **Education:** PhD in Materials Science, Physics, Nanoscience or similar.
- **Knowledge and professional experience:**  
Proven experience in aberration corrected TEM, atomic scale spectroscopy and monochromated EELS. Experience in 4D-STEM will be valued.

Over 5 years experience in aberration corrected electron microscopy.

- **Personal Competences:**

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
- Location: Bellaterra (Barcelona)
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.
- Life Insurance.

Estimated Incorporation date: August 2024

**How to apply:**

All applications must be made via the ICN2 website and include the following:

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

Deadline for applications: 27 July 2024

**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.