

Position: **Technician at the Electron Microscopy Service**

Place: **Institute of Marine Sciences of Barcelona (ICM-CSIC)**

The Institute of Marine Sciences of Barcelona (ICM) is one of the largest research centers of the Spanish National Research Council (CSIC) and the largest dedicated to marine research. It is a multidisciplinary center that promotes the transfer of knowledge and technology on its main topics of study, such as the interaction between the ocean and the climate, the conservation and sustainable use of marine life and ecosystems, and the mitigation of natural and anthropogenic impacts.

The Electron Microscopy Service of the Institute of Marine Sciences of Barcelona is a service integrated into the Scientific and Technical Services of the CSIC and is open to the entire scientific community of the CSIC, OPIs and private companies.

The service has two scanning electron microscopes, one conventional (SEM) and one field emission (FE-SEM). Both instruments are equipped with X-ray microanalyses and in addition the SEM has a cryo-SEM unit. The Service also has the necessary equipment for sample preparation: critical point drying, metallizers (metallization with Au, Cr and Ir) and Carbon evaporation.

The Service specializes in the study of biological samples, especially from marine origin. Observations are also made of geological samples, both marine and terrestrial.

Requirements:

- Academic qualification: Degree in Biology, Marine Sciences, Physics, Environmental Sciences or similar.
- Minimum work experience in scanning electron microscopy and X-ray microanalysis.
- Knowledge of the preparation of samples of marine organisms for observation by scanning electron microscopy: dehydration, critical point drying and metallization.
- Skills in laboratory management.
- Knowledge of Word, Excel, Access.



- Languages: Catalan, Spanish and English.
- It will be necessary to register to the CSIC [Job Bank](https://www.bolsatrabajo.csic.es/bolsa_trabajo/) (https://www.bolsatrabajo.csic.es/bolsa_trabajo/).

Job functions:

- Adjustment and fine-tuning of the conventional SEM and the FE-SEM to carry out the observations using the type of detector most suitable for the kind of user samples, to obtain the desired information.
- Preparation of samples of marine organisms for observation by scanning electron microscopy: dehydration, critical point drying, metallization.
- Preparation of biological samples and gels for observation using cryo-SEM.
- Qualitative and quantitative elemental analysis using energy dispersive X-ray spectroscopy (XRMA).
- Basic maintenance of electron microscopy laboratory equipment (SEM filament change, critical point drying equipment, metallization equipment).
- Advice to researchers for the observation and analysis of different kinds of samples.
- Management and maintenance of the laboratory based on occupational safety regulations.
- Service management.

Conditions :

- Full time work.
- Salary according to training and experience (€26,000 - €32,000 gross).

Contact:

Interested persons should send their CV by e-mail to jmanuel@icm.csic.es (José Manuel Fortuño) and mariona@icm.csic.es (Mariona Segura), Responsible for the Electron Microscopy Service of the ICM.