

## Technician for Elettra and FERMI beamlines

Deadline: 21 March 2024

Ref: DB/24/10

## **Background**

Elettra Sincrotrone Trieste is an international multidisciplinary research center operated as a user facility, featuring a 2.0/2.4 GeV, third-generation synchrotron light source (Elettra), a new free-electron laser light source (FERMI) and a variety of support laboratories. The extremely high quality of the machines and beamlines has set new performance records and has been producing results of great scientific and technological interest. In order to allow the laboratory to remain competitive in the next 20 years, an entirely new source - Elettra 2.0 - belonging to the new generation of storage rings (DLSR or Diffraction Limited Storage Ring) is being developed. The new source will exhibit a major increase in the brilliance and coherence fraction of the photon beams. The Elettra 2.0 optics is based on our enhanced symmetric six bend achromat structure (S6BA-E) with a 12-fold symmetry and an emittance of 200 pm-rad at 2.4 GeV. The new structure creates also straight sections in the arcs permitting the installation of additional insertion devices, thus increasing the number of beamlines. Existing beamlines will have to be upgraded and new beamlines developed to take full advantage of the characteristics of Elettra 2.0. The new machine is scheduled for commissioning in the second half of 2026. See http://www.elettra.eu for more information.

## Job description

The successful candidate will provide technical support for the development, operation and maintenance of the diverse experimental set-ups utilised at the Elettra and FERMI beamlines. The role entails overseeing the operation and maintenance of vacuum systems and scientific instrumentation at the state-of-the-art. Additionally, the successful candidate will be involved in the design and manufacturing of mechanical components. She/he will work closely with the beamline staff and engage with national and international users of the facility to ensure effective collaboration.

## Qualifications

A Diploma degree awarded by an industrial institute with specialization in mechanics or equivalent is required, together with at least 2 years of relevant professional experience in laboratories or research centers where synchrotron or FEL radiation is utilised.

Proven experience in the following areas is essential:

- 1) High-vacuum systems and instrumentation;
- 2) Design and manufacturing of mechanical components for optical systems;
- 3) Motion control and sample manipulation;
- 4) Brazing and spot-welding;
- 5) Use of drill, lathe, and milling cutter;
- 6) Use of CAD software (CATIA preferred) and programs of the Microsoft Office suite (Word, Excel);
- 7) Crane operation for lifting and transporting loads.

Good time management skills and ability to prioritize are expected, together with the ability to interact with the facility staff and international users at all levels and to work as part of a multi-disciplinary team.

Good oral and written communication skills in English and Italian are expected.

The appointment envisioned is a permanent position. The salary will be commensurate with previous experience and



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qualifications of the candidate.

Applications should include the full curriculum vitae, the names and contact information (including electronic mail) of up to two references.

The interviews may be held via video conferencing.

The deadline for the submission of the application is March 21, 2024.

In accordance with the provisions of article 21 of the Italian legislative decree no. 39/2013 and in conjunction with article 53 (subsection16ter) of Italian legislative decree no. 165/2001, employees or former employees of any Italian Public Entity who have exercised authority over Elettra Sincrotrone Trieste S.C.p.A. or have negotiated with Elettra - Sincrotrone Trieste S.C.p.A. within the last three years will be excluded from the present selection procedure. We thank all applicants in advance.

For more information, please contact Andrea Locatelli (email: andrea.locatelli@elettra.eu).

To apply for this position please visit the following link: https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=3863