

Radiation Protection Technician for the Elettra and FERMI facilities.

Deadline: 9 October 2022

Ref: EA/22/27

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 Radiation Protection team of Elettra Sincrotrone Trieste performs several duties ranging from personnel risk evaluation and environmental radiation monitoring to shielding calculations, and oversees the design and implementation of personnel safety systems. The successful candidate will be involved in the activities of the radiation protection team for aspects concerning radiometric measurements of dose rate, surface contamination, environmental TLD dosimetry, and radiation protection assistance to personnel working in the Elettra and FERMI facilities. He/She will also be involved in the execution of the radiation protection checklists for hutches and on the personal safety system; in addition, he/she will collaborate in the drafting of radiation protection procedures and reports.

Qualifications

A technical diploma in electronics, computer science, electrical installation or equivalent is required together with at least 1 year of experience in radiation protection. A bachelor's degree in physics, chemistry, or engineering would be considered a plus. Proven experience in the following topics is expected:

- Experience in dose rate measurements and related instrumentation;
- Experience in radiation protection assistance in workplaces.

The following qualifications would be considered as additional assets:

- Experience in TLD dosimetry,
- Experience in radioactive contamination measurements,
- Experience in electronics or electrical installation,
- Experience with Personnel Safety Systems in radiological facilities.
- Basic knowledge of Italian legislative decree n. 101/2020.

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

Good time management skills and ability to prioritize are expected, together with the capacity to interact with staff and to





work as part of a multi-disciplinary team.

The appointment envisioned is a fixed term contract with a duration of 24 months and starting date 1st January 2023. The salary will be commensurate with previous experience and qualifications of the candidate.

Applications should include full curriculum vitae signed by the applicant (preferably using the European Curriculum Vitae Format in PDF), with the names and contact information (including electronic mail) of at least two professional references.

Due to the situation related to the COVID-19, the interviews may be performed through video conferencing.

The deadline for the submission of the application is October 9, 2022.

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 Giovanni Scian (email: giovanni.scian@elettra.eu).

To apply for this position please visit the following link: https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=2701

