Elettra Sincrotrone Trieste

Radiation Protection Technician

Deadline: 15 November 2025
Ref: EA/25/32

Background

Elettra Sincrotrone Trieste is an international multidisciplinary research center offering international users access to synchrotron and free-electron laser radiation for the characterization and processing of matter. The extremely high quality of the light sources 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 synchrotron radiation source - Elettra 2.0 - belonging to the new generation of storage rings (DLSR or Diffraction Limited Storage Ring) is being installed. The new source, based on our enhanced symmetric six bend achromat structure (S6BA-E) with 12-fold symmetry, will exhibit a major increase in the brilliance and coherence fraction of the photon beams. Existing beamlines are being upgraded and new beamlines constructed to take full advantage of the characteristics of the new source. Elettra 2.0 will enter service in the second half of 2026 and join the already operating free-electron laser (FEL) user facility FERMI. FERMI is currently unique in the international FEL panorama in exploiting external seeding to achieve unparallaled pulse stability, reproducibility and operational flexibility. See http://www.elettra.eu for more information.

Job description

The Radiation Protection Team (RPT) 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 RPT concerning radiometric measurements of dose rate, surface contamination, environmental thermoluminescence dosimetry, and radiation protection assistance to personnel. He/She will also be involved in the implementation of the radiation protection checklists for hutches and for the personnel safety system; in addition, he/she will collaborate in the drafting of radiation protection procedures and reports.

Qualifications

A technical diploma with specialization in electronics, computer science, in mechanics, electrical installation or equivalent is required together with at least 2 years of recent experience in radiation protection. A bachelor's degree in physics, chemistry, or engineering would be considered a plus.

Basic knowledge of Italian Legislative Decree no. 101/2020 is required together with proven experience of at least 2 years in the following areas:

- dose rate and surface contamination measurements, including the use of related instrumentation;
- calibration of thermoluminescent dosimeters using gamma sources and preparing calibration reports.
- environmental dosimetry measurements using thermoluminescent dosimeters;
- maintenance and verification of radiation protection and electronic instrumentation.

The following qualifications will be considered as additional assets:

- Experience in the installation of electronic and electrical components for personnel safety systems on X-ray generators;
- Recent experience with Personnel Safety Systems in radiological facilities;
- Proven experience in using equipment for reading thermoluminescent (TLDs) dosimeters, specifically the Mirion-RE2000 and GR-200/Solaro systems or equivalent instrumentation;
- Experience in gamma spectrometry measurements using Ortec and Mirion/Camberra Aegis HPGe spectrometers.

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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.

General information

The appointment envisioned is a permanent staff position, with a 3 months trial period.

The salary will be commensurate with the previous experience and qualifications of the selected candidate.

Applications must include a complete *curriculum vitae* and the contact details (including e-mail addresses) of at least two referees.

The ranking of suitable candidates resulting from this selection process may be used within the following 24 months.

The interviews may be held via video conferencing.

Permanent employees of Elettra Sincrotrone Trieste S.C.p.A. will be excluded from the present selection procedure. 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 also be excluded from the present selection procedure, 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.

The deadline for the submission of the application is November 15, 2025.

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=4270