Elettra Sincrotrone Trieste

Control Room Operator

Deadline: 27 November 2025
Ref: CA/25/35

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 and will join the already operating free-electron source FERMI in the second half of 2026. 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 are being upgraded and new beamlines constructed to take full advantage of the characteristics of Elettra 2.0. Seehttp://www.elettra.eufor more information.

Beamline/Activity/Project description

The control room operator task is to supervise the operation of the two advanced facilties, the electron storage ringand the free-electron laser (FEL)FERMI, which supply light continuously (H24) to more than 30 experimental stations. In addition, the control room operators provide support to the analysis of the performance and contribute to the maintenance and further development of the two facilities.

Job description

The successful candidate will be part of the team that operates the two facilities Elettra 2.0 and FERMI. on a rotating shift schedule (24/7). He/she will be required to perform complex and diversified duties during the scheduled machine runs. He/she will perform all of the actions necessary to ensure the stability of the electron beam in the accelerators and the achievement of the specifications required by users' experiments. During this process, he/she will identify any equipment malfunction and participate and assist in the correction. Documentation of activities, as well as communication with users and maintenance support groups are important aspects of the job.

He/she will participate in the machine physics studies to tune and operate the facilities and in the maintenance and troubleshooting of the accelerator subsystems - including electromechanical devices, power supplies, radiofrequency plants, vacuum system, computer controls, beam diagnostics, etc. - and will be involved in the related upgrade activities. This work will be carried out in close cooperation with the technical support groups.

Qualifications

A secondary school diploma, such as an Industrial Technician/Technologist diploma (diploma di Perito Industriale) or a Scientific High School diploma (diploma di Liceo Scientifico), is the minimum requirement, together with knowledge of standard electronic instrumentation, ability to perform laboratory measurements, and use of MS Office suite or equivalent. Good communication and problem-solving skills are essential, as is the ability to work both independently and as part of a team. Oral and written communication skills in Italian and English are expected.

The following aspects will be considered as additional assets:

- specialization in one of the following fields: electronics, electrical engineering, telecommunications or information technology;
- familiarity with subsystems of particle accelerators and related technologies;
- knowledge of advanced informatics tools (for example, CATIA, Labview, Matlab, Python, C++, etc.)

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General information

The appointment will be a fixed-term employment contract of an initial duration of 12 months, extendable by agreement of both parties. The salary will be commensurate with previous experience and qualifications of the candidate.

Applications should include full curriculum vitae, and, if available, contact information (including electronic mail) of at least two references.

The interviews could be performed through video conferencing.

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

Employees or former employees of Elettra Sincrotrone Trieste S.C.p.A. or temporaryand staff leasing employees or former employees with working experience atthe companywill 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 27, 2025.

We thank all applicants in advance.
For more information, please contact Simone Di Mitri (email: simone.dimitri@elettra.eu).

To apply for this position please visit the following link:
https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=4273