

Electronic Engineer for the Elettra 2.0 Injection System

Deadline: 7 July 2024

Ref: GA/24/25

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 be part of the team responsible for the injection circuits of Elettra 2.0 supporting activities concerning the implementation of the injection system, such as:

- development, prototyping, assembly of sub-systems and drafting of related documentation;
- test & measurements on electrical and magnetic components;
- purchasing of magnets, electronic components and devices, instrumentation, etc. related to the injection system;
- interfacing with members of other teams involved in the Elettra 2.0 project by managing the exchanges of information necessary for project implementation;
- attend scheduled meetings.

Qualifications

The following qualifications and technical skills are required:

- Master degree in Electronic Engineer or Physics (with electronic or radio frequency specialization);
- knowledge of software tools for simulations, calculations, programming, etc.

Good time management skills and ability to prioritize are expected, together with the ability to interact with project partners and work as part of a multidisciplinary team.

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

General information

The deadline for the submission of the application is July 7, 2024.

The appointment will be a fixed term contract with an initial duration of 24 months in accordance with the National Metalworkers' Union Collective Labour Agreement and the Company Union Agreement dated 28th March 2024,ex. art. 8 of the Decree Law 138/2011





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

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

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

The interviews may be held via video conferencing.

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 Piergiorgio Tosolini (email: piergiorgio.tosolini@elettra.eu).

To apply for this position please visit the following link: https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=4141