Elettra Sincrotrone Trieste

Engineer for fluidic and mechanical systems

Deadline: 15 March 2022
Ref: SA/22/7

Company description

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.

Beamline/Activity/Project description

The core task of the Elettra Fluidic-Mechanical Team is the management, operation and maintenance of fluid and mechanical plants serving our present accelerators and buildings (HVAC, process cooling water, compressed air, technical gases, liquid nitrogen, fire-fighting systems, special plants, etc.) as well as the design and construction of the new fluid and mechanical systems necessary for the development of Elettra.

Job description

He/she will be involved in the management and development of fluidic and mechanical plants, both in the definition of technical aspects (technical specifications, timing, layout drawings, flow diagrams process, pipe and equipment plants for all process systems, etc.), as well as in administrative aspects (tender specifications, supplier follow-up, cost vs. benefit analysis, project planning and reporting, etc.). He/She will perform engineering evaluations and analyses, and make engineering decisions for all aspects of assigned tasks. He/she may be required to cover shifts for on-call emergencies

Qualifications

A master degree in mechanical, naval or management engineering or related disciplines is required. The successful candidate must have documented experience in managing and developing HVAC and fluidic systems, in pumping system analysis and have a basic understanding of electrical systems.

Enrollment in the official register of italian professional engineers is an essential requirement, as well as experience of at least five years in managing, maintening and designing industrial plants or centralized mechanical plants.

Previous experience in managing:

- pure water production and de-ionized water plants;
- water cooling and heating circuits;
- HVAC plants for large buildings and cleanrooms;

would be considered and advantage, as would be the following additional technical skill:

- experience in the execution of public procurement contracts (accounting, construction management, etc.);
- experience in the use of software for supervision of extended plants;

- knowledge of automation of control processes;
- basic knowledge of liquid cryogenic plants.

Very good oral and written communication skills in Italian, as well as good oral and written communication skills in English are essential.

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

The appointment envisioned is a permanent position. 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.

Due to the situation related to the COVID-19 virus, the interviews will be organized by video conference call.

The deadline for the submission of the application is March 15, 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 Dino Zangrando (email: dino.zangrando@elettra.eu).

To apply for this position please visit the following link:
https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=2461