



Elettra Sincrotrone Trieste

Manager of the Mechanical Design Unit at Elettra

Deadline: 30 August 2024

Ref: RA/24/38

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 become the Manager of the Mechanical Design Unit (Attività Progettazione e Calcolo) in charge of mechanical design activities and manufacturing design of mechanical systems. As part of the Mechanics, Vacuum and Optics Group (MVO) she/he will report to the MVO Group Coordinator.

Main duties and responsibilities will be:

- developing strategic plans and goals for the Mechanical Design Unit according to the organization's objectives;
- overseeing the design of mechanical initiatives and projects;
- participating in organizational meetings;
- managing the team by motivating employees, addressing and resolving problems if any.
- management of the Unit budget, effective allocation of resources;
- providing technical guidance and tutoring to junior engineers and technicians.
- providing effective and efficient engineering support during the conceptual design, detailed design, integration, and testing phases of a product development program;
- verify that engineering projects meet requirements and are completed on time and on budget;
- converting technical evaluations of analysis results and requirements into technical recommendations;
- producing technical documentation (design requirements, technical reports, procurement documents);
- evaluating prototypes from the standpoint of conformance to design specifications and technical feasibility;

The successful candidate is expected to carry out the above duties in compliance with the scheduled objectives and deadlines of Company projects, leading to the timely production of project deliverables.

The successful candidate will work in close collaboration with the MVO Group Coordinator. The place of work will be Elettra - Sincrotrone Trieste, but travel to other research laboratories and supplier premises for technical meetings and factory acceptance tests (FATs) is expected.

Elettra - Sincrotrone Trieste S.C.p.A.

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www.elettra.eu

Iscritta al Registro delle Imprese di Trieste
Società di interesse nazionale
ai sensi dell'art. 10, comma 4,
L. 19 ottobre 1999 n. 370

CERTIFIED
MANAGEMENT SYSTEM



UNI EN ISO 9001:2015
UNI ISO 45001:2018
UNI CEI EN ISO 50001:2018



Qualifications

A Master Degree in Mechanical Engineering or equivalent is required, together with at least five years of experience in manufacturing processes and knowledge of international rules about drawing dimensions and tolerances (UNI and ISO standards).

The following technical skills would be positively evaluated:

- Previous experience in managing public and technical procurement practices according to 'Italian Public Contract Code';
- Ability to manage and motivate a team and demonstrate good leadership qualities.
- Solid knowledge of mechanical design principles and engineering mechanics;
- Extensive hands-on-experience in the use of CAD software (knowledge of CATIA and PDM systems would be considered a plus as well the knowledge of mechanical design in High Vacuum (HV) and Ultra High Vacuum (UHV) environment);
- Experience of FEA tools;
- Experience in installation, commissioning, fabrication follow-up;
- Knowledge of mechanical manufacturing processes;

Good oral and written communication skills in English and Italian language are required.

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

General information

The appointment envisioned is a permanent position in accordance with the National Metalworkers' Union Collective Labour Agreement and the Company Union Agreement dated 28th March 2024.

Salary and level will be commensurate with experience and qualifications of the candidate.

Applications should include a full curriculum vitae, description as well as any evidence of the qualifications declared, and, if possible, the names and contact information (including electronic mail) of two references.

The deadline for the submission of the application is August 30, 2024.

Permanent employees of Elettra Sincrotrone Trieste S.C.p.A. and 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, in accordance with the provisions of article 21 of the Italian legislative decree no. 39/2013 and in conjunction with article 53 (subsection 16ter) of Italian legislative decree no. 165/2001. We thank all applicants in advance.

For more information, please contact Edoardo Busetto (email: edoardo.busetto@elettra.eu) or Ivan Cudin (email: ivan.cudin@elettra.eu).

To apply for this position please visit the following link:

<https://www.elettra.trieste.it/it/about/careers/working-withus.html?id=4211>

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