



Elettra Sincrotrone Trieste

Senior Scientist for XRD2 (X-Ray Diffraction 2) beamline at ELETTRA

Deadline: 14 May 2020

Ref: DA/20/21

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. See <http://www.elettra.eu> for more information.

Beamline/Activity/Project description

The XRD2 beamline is dedicated to macromolecular crystallography (MX) measurements using x-ray diffraction. The beamline is operated in the framework of a scientific partnership between Elettra-Sincrotrone Trieste and the Indian Institute of Science and Technology. The photon beam is produced by a superconducting wiggler and a double crystal monochromator provides photons in the in the 8-20 keV range for MX experiments. A focusing systems allows production of a beam 20 to 100 μm in size at the sample position. The endstation is equipped with a a MD2S diffractometer and a Pilatus 6M detector. The automated sample changer consists of a Staubli arm coupled with a dewar holding up to 196 samples in different types of containers (unipuck, ESRF, plates). Data acquisition software and other web portals are integrated at the beamline enabling remote data collection and easy access to experimental set-ups before and after data collections. More information can be found at: <https://www.elettra.trieste.it/elettra-beamlines/xrd2.html>

Job description

The successful candidate will lead the beamline activities. She/he will contribute to the management, operation, optimization, maintenance and upgrade of the beamline and its experimental station in order to continue meeting the requirements of the large scientific community related to MX science at Elettra. She/he will supervise all staff directly assigned to the beamline, manage the budget, and ensure reporting. She/he will be responsible of the scientific and technical relations with the Indian partners of XRD2, under the coordination of the Elettra Chief Scientific Officer.

She/he is expected to stay updated on the technical/scientific evolution in fields relevant to the beamline and to develop her/his own research program and foster both scientific collaborations and industrial-oriented activities. She/he will be involved in the Elettra 2.0 upgrade program, by contributing to the definition of the beamline specifications for enhanced performances, in order to meet the high expectations of the user community.

She/he is expected to provide daily high-quality support to external users fulfilling the role of local contact, thus gaining opportunities for collaborative work at the frontiers of the field and contributing to the definition and execution of *in-house* research activities. She/he is expected to establish outreach programs to promote the capabilities and scientific accomplishments of the beamline.

Qualifications

A PhD in Chemistry, Physics, Biology, Life Science or related discipline with at least 15 years of experience in synchrotron techniques, specifically in single crystal x-ray diffraction are required. Excellent working knowledge of diffraction data analysis programs (single crystal diffraction) and experience in working with several types of samples, proteins, DNA, RNA, and fibers are essential. A suitable scientific publication record and proven ability to work with user groups having different scientific backgrounds are required. A working knowledge of Python programming language is also required. A working knowledge of the MySQL database and of the TANGO control system are desirable. Experience in the construction and commissioning of MX beamline(s) would be considered as additional assets.

Good oral and written communication skills in English are essential. A working knowledge of Italian would be desirable, but is not required.

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

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Good time management skills together with the ability to interact with staff and facility users and to lead a multi-disciplinary team is expected.

The appointment is for 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 May 14, 2020.

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, 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 Lisa Vaccari (email: lisa.vaccari@elettra.eu).

To apply for this position please visit the following link:

<https://www.elettra.trieste.it/it/about/careers/working-withus.html?ref=DA%2F20%2F21>

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