



Elettra Sincrotrone Trieste

SYRMEP PostDoc Research Associate at Elettra

Deadline: 15 March 2020

Ref: DA/20/9

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 SYRMEP beamline at Elettra has been operating since more than 20 years in the application of advanced hard X-ray imaging techniques to the field of biomedicine, biology and materials science.

The beamline setup allows for the use of absorption and phase contrast techniques for micro-tomography studies in a wide resolution range, from the micron scale to several tens of microns, according to sample sizes and needed spatial resolution.

Dynamic micro-tomography scans are applicable for *in-situ* and real-time studies with specific environmental conditions (high temperature, controlled atmosphere, mechanical stress, etc...). Low dose dynamic imaging protocols are developed for pre-clinical research requiring *in-vivo* imaging on small animals.

The research activities are exploiting the capabilities presently offered by the SYRMEP beamline; further developments are foreseen thanks to new funded projects aiming to improve the beamline potentials and performances.

See <http://www.elettra.eu/elettra-beamlines/syrmep.html> for more information.

Job description

The successful candidate will collaborate with the beamline staff in the scientific activities as well as in the technical upgrade of the beamline instrumentation to meet the requirements of the user community in the field of biomedical and biological research.

He/she is expected to provide a high-quality support to the beamline users, from proposals preparation to beamtime assistance and data analysis.

New standardized imaging protocols will be developed to facilitate the use of the micro-CT facilities by non-expert users as well as tutorials for beamline operation, image acquisition, data reconstruction processing and analysis.

The candidate should possess strong personal skills to pursue collaborative research programs in a team-oriented environment and to become part of existing research collaborations.

Qualifications

A PhD in Physics or related disciplines and a proven experience in phase contrast imaging and X-ray tomography are required. Proven experience in handling imaging experiments with synchrotron radiation using phase contrast and phase retrieval algorithms is mandatory. Knowledge of 3D image processing tools will be an asset. Programming skills in MathLab or Python are desirable.

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 as part of a multi-disciplinary team.

Good oral and written communication skills in English are essential.

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

S.S. 14 Km 163,5 in Area Science Park
34149 Basovizza, Trieste, Italy
T. +39 040 37581
F. +39 040 938 0903

P.IVA e C.F. IT00697920320
Cap. Soc. € 47.632.663,00 i.v.
PEC: sincrotrone.trieste.elettra@legalmail.it
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





Elettra Sincrotrone Trieste

The deadline for the submission of the application is March 15, 2020.

The appointment envisioned is a fixed term contract with an initial duration of 12 months, renewable for other 12 months upon agreement by the parties.

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.

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 Giuliana Tromba (email: giuliana.tromba@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%2F9>

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

S.S. 14 Km 163,5 in Area Science Park
34149 Basovizza, Trieste, Italy
T. +39 040 37581
F. +39 040 938 0903

P.IVA e C.F. IT00697920320
Cap. Soc. € 47.632.663,00 i.v.
PEC: sincrotrone.trieste.elettra@legalmail.it
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

