

HESEB beamline scientist

Organization															
<p>The International Center for Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) is established in Jordan, under the auspices of UNESCO. Its mission is to promote international collaboration in the Middle East and the Mediterranean region using synchrotron light for basic and applied research in physics, chemistry, biology, materials science, environmental and medical investigations, archaeological studies and other research areas of relevance to the region. The centerpiece of SESAME is an advanced synchrotron light source that is being constructed and to be operated by the Members of SESAME (Cyprus, Egypt, Iran (Islamic Republic of), Israel, Jordan, Pakistan, Palestine, and Turkey) with the support of the international community. SESAME is an international scientific and technological centre of excellence open to all qualified scientists worldwide.</p> <p>The Helmholtz Association has recently approved to support the construction of a Soft X-Ray beamline at SESAME (HESEB, Helmholtz-SESAME Beamline). The beamline will have multiple end stations, the first of which will be for Soft X-Ray fluorescence spectroscopy with a focus on environment science as well as cultural heritage studies. Further experimental stations for ambient pressure photoelectron spectroscopy as well as angle resolved photoelectron spectroscopy are foreseen to be installed at a later stage, possibly with financial support from user groups.</p>															
Technical Background															
<p>The accelerator complex of SESAME consists of a 22 MeV Electron Preaccelerator, an 800 MeV Electron Booster Synchrotron, and 2.5 GeV Electron Storage Ring. The accelerator complex is fully operational. Two beamlines are presently installed at SESAME (XAFS/XRF and IR). One more beamline is being installed (Materials Science), components for a fourth beamline for Macromolecular Crystallography are being procured. Recently the European Commission (EC) approved to support the construction of a fifth beamline for microtomography (BEATS, BEamline for Tomography at SESAME). Funding for a sixth beamline for Soft X-Ray spectroscopies was approved by the German Helmholtz Association.</p> <p>Both the XAFS/XRF and IR beamlines started their user activity in 2018.</p>															
Assignment															
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II	<p>Mission</p> <p>The soft X-Ray HESEB beamline is the sixth beamline to be installed at SESAME. Its construction is supported by the German Helmholtz Association. It is based on a variable-polarization undulator and a collimated plane-grating monochromator (PGM). Its design, procurement, and construction will be carried out by a consortium of Helmholtz centers (Germany) in collaboration with SESAME.</p> <p>We look for a highly motivated beamline scientist who will work under the direct supervision of the Scientific Director to provide Middle East with excellent research opportunities. He/she will work in close contact with all the Helmholtz centers involved in the project and is expected to spend extensive periods of time in Germany (possibly up to the first three years of the project) for training and for ensuring proper exchange of information between the German groups and the SESAME groups needed for the construction and installation of the beamline. Visits to other countries are possible. He/she will also be in charge of coordinating the relations with experimental groups interested in the realization of the experimental chamber(s).</p> <p>The successful candidate is expected to contribute to user assistance as well as to the in-house research activities under the supervision of the Scientific Director.</p>														
III	<p>Qualifications</p> <ul style="list-style-type: none"> • Required qualifications: <ul style="list-style-type: none"> ○ PhD in Physics, Chemistry or related field. ○ At least two years hands-on experience with soft x-ray spectroscopies and/or microscopies ○ Availability to travel and spend extended periods in other countries 														

- Good oral and written communication skills in English
- Desired qualifications:
 - Previous experience on Soft X-Ray synchrotron beamlines
 - Experience with ultrahigh vacuum and precision mechanics,
 - Experience with electronics and IT, including control systems
 - Experience in the setting up of scientific equipment relevant to synchrotron beamlines.
 - Experience with other complementary SR methods.
 - Knowledge of data analysis software packages

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IV Responsibilities

Under the supervision of the Scientific Director of SESAME, in close collaboration with the HESEB partners, and with other SESAME Scientific and Technical staff, the main responsibilities of the successful candidate will be:

1. Writing, on the basis of the optical design of the beamline, a Technical Design Report, emphasizing technical solutions to adapt the instrumentation to the SESAME ring and to the need of the perspective user community.
2. He/she will be the main contact point for the interaction between the Helmholtz project team and the SESAME staff.
3. Development of an in-house scientific program
4. Identifying strategic scientific partners and users in the SESAME Members
5. Proposing possible extra funding opportunities
6. Assisting external users in their measurements at SESAME once the beamline is installed –
7. Carrying out any other tasks/duties as requested by direct supervisor and/or SESAME Directorate.

V Application closing Date

The search will start immediately and will continue until a suitable candidate is found

Employment Conditions

1. The work provisional starting date is March 1st, 2019
2. The work location is in Jordan and Germany
3. The candidate should be available to travel abroad to attend training, meetings, workshops and seminars.
4. The position requires full time commitment.
5. The entry level and salary will be based upon the qualifications, experience and the level of responsibility of the post.
6. In addition to the basic salary the incumbent is entitled to other allowances (installation grant, education grant, housing subsidy, etc.).
7. For more information please consult (www.sesame.org.jo/jobs/employmentconditions.aspx)
8. The candidate should ideally be a national of a Member of SESAME.
9. SESAME is an equal opportunity employer

How to apply

A detailed C.V. in English, a cover letter and a list and contact details of at least two referees should be addressed to SESAME Administration and submitted to the online form on this link:

http://www.sesame.org.jo/sesame_2018/form/heseb-beamline-scientist-