

XAFS/XRF second beamline scientist

Organization

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, the Palestinian Authority, 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. SESAME is partner of OPEN SESAME (<http://www.opensesame-h2020.eu/en/>), a EU supported project supporting, among other activities, staff exchanges between SESAME and various European Institutions.

Technical Background

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 and a fifth beamline for microtomography is foreseen in the coming years. The XAFS/XRF beamline started its experimental activity in November 2017, while the IR beamline is in the commissioning phase.

Assignment

I Organizational setting of the post

1. Post grade: P-1
2. Title of the post: XAFS/XRF second scientist
(Vacancy notice number SS/18/1)
3. SESAME Sector: Scientific Sector
4. Unit/section: XAFS/XRF beamline
4. Duty Station: SESAME site, Allan, Jordan

5. Type of contract: Fixed term, 3 years (first 12 months are probation period).

II Mission

The XAFS/XRF beamline is the first beamline which came into operation at SESAME. It is a bending magnet beamline based on a Double Crystal Monochromator with bendable collimating and refocussing mirrors. It is equipped with an experimental station for adsorption and fluorescence spectroscopies. A novel high sensitivity/high dynamics detector is being developed through a collaboration with Italian National Institute of Nuclear Physics (INFN).

We look for a highly motivated second beamline scientist who will work under the direct supervision of the Scientific Director to provide Middle East with excellent research opportunities. The successful candidate is expected to contribute to user assistance as well to the in house research activities, agreed with Scientific Director and the more senior staff on the beamline.

III Qualifications

- PhD in Physics, Chemistry or related field.
- At least one year hands-on experience with XAFS/XRF spectroscopy or related SR techniques
- Experience with other complementary SR methods would represent a plus.
- Experience in the setting up of scientific equipment relevant to synchrotron beamlines.
- Knowledge of data analysis software packages
- Availability to travel and spend extended periods in other Countries
- Good oral and written communication skills in English are essential.

IV Responsibilities

Under the supervision of the Scientific Director of SESAME, and in close collaboration with other Scientific and Technical staff, in particular with the senior staff on the BL, the successful candidate will be involved in the study of materials using X-ray absorption spectroscopy. He/she will collaborate to further developing the XAFS/XRF beamline and experimental station in order to accomplish the experimental program. Also, he/she is expected to provide daily high-quality support to external users. He/she is also expected to be involved in submitting proposals to suitable funding agencies and establish new research collaborations. The successful candidate will spend extended periods of time (up to a few months) for training at the laboratories of the European partners of OPEN SESAME (<http://www.opensesame-h2020.eu/en/>). The detailed training program will be

tailored on the SESAME needs, on the availability of the hosting institution and the scientific/technical experience of the candidate.
He/she will be carrying 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 as soon as possible
2. The work location is in Jordan
3. The candidate should be willing to travel abroad to attend training, 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 by filling the Online Submission Form on the announcement page.
For further Information: Consult the SESAME website: www.sesame.org.jo