

BEATS 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, 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.

SESAME is partner of the BEATS project whose aim is building a Beamline for Tomography at its premises. Moreover, 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. 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.

Both the XAFS/XRF and IR beamlines started their user activity in 2018.

Assignment

I Organizational setting of the post

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| 1. Post grade: | P1 |
| 2. Title of the post: | BEATS beamline scientist
(Vacancy notice number SS/18/3) |
| 3. SESAME Sector | Scientific Sector |
| 4. Unit/section: | BEATS beamline |
| 5. Duty Station: | SESAME site, Allan, Jordan |
| 6. Benefits: | Health insurance, Life and disability insurance, Rental subsidies, Education grant. |
| 7. Type of contract: | Fixed term, 3 years (first 12 months are probation period).
Based on the performance of the selected candidate, the position can be extended. |

II Mission

The microtomography (BEATS) beamline is the fifth beamline to be installed at SESAME. Its construction is supported by the EU, under the H2020 framework, project ID 822535. It is a ID/Superbend based beamline, with double multilayer broad band monochromator.

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 the partners of the BEATS project and is expected to travel frequently to the partners' sites in Europe alone or together with other technical and scientific staff for technical meetings, training at existing similar facilities, instrumentation testing and other project related activities. The successful candidate is expected to contribute to user assistance as well to the in house research activities, agreed with Scientific Director.

III Qualifications

- PhD in Physics, Chemistry or related field.
- At least two years hands-on experience with SR based imaging/tomography methods or related scientific fields.
- 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, in close collaboration with the BEATS partners, and with other SESAME Scientific and Technical staff, the main responsibilities of the successful candidate will be:

1. Writing a Conceptual Design Report, in which the main research areas will be highlighted.
2. Writing, on the basis of the existing equipment at SESAME, a Technical Design Report, emphasizing technical solutions to adapt the existing instrumentation to the SESAME ring and to the need of the perspective user community.
3. Coordinating the construction of the Beamline.
4. Proposing and coordinate an in-house scientific program
5. Identifying strategic scientific partners and users in the SESAME members
6. Proposing possible funding opportunity
7. Assisting external users in their measurements at SESAME
8. 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 January 1st, 2019
2. The work location is in Jordan with several journeys
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. The candidate should ideally be a national of a Member of SESAME.
8. 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/beats-beamline-scientist