



SESAME

Synchrotron-light for Experimental Science & Applications in the Middle East

Vacancy Notice No:	SS/20/01.
Position and Grade:	MS Second Beamline Scientist (P2, Step I).
Sector:	Scientific.
Duty Station:	Allan, Jordan.
Issue Date:	November 15 th , 2020.
Type/Duration of Appointment:	Fixed term for 3 years and renewable (first 12 months are probation period).
Date for entry on duty:	April 2021, or as soon as possible after this.
Application Deadline:	February 16 th , 2021 or until a suitable candidate is found.

Organization Setting

The Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) has been established in Jordan, under the auspices of UNESCO. Its mission is to promote international collaboration in the Middle East and neighboring countries 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 2.5 GeV synchrotron light source that has been constructed and is operated by the Members of SESAME with the support of the international community. SESAME is an international scientific and technological center of excellence open to all qualified scientists worldwide. Three beamlines (XAFS/XRF, IR and MS) are currently in operation and open to external users. A fourth and fifth beamline (for X-ray tomography and soft X-ray spectroscopy) are under construction and are expected to come into operation in 2022. The MS beamline is the first beamline at SESAME to use an insertion device as source, and its three-element optical configuration (collimating mirror / double crystal monochromator with sagittal focusing / bendable focussing mirror) deliver photon flux in excess of 10^{12} photons/s in the range between 5 and 25 keV. The experimental station is based on a 2-circles diffractometer coupled to a Pilatus 300k detector for fast data collection and time-resolved experiments.

Assignment

Under the supervision of the Scientific Director and of the scientist responsible for the beamline, and in close collaboration with other Scientific and Technical staff, the main responsibilities of the candidate will be:

- Contribute to user assistance as well to the in house research activities.
- Involved in the study of materials using Powder Diffraction.
- Provide daily high-quality support to external users, by guiding the users in the preparation phase, insuring optimal experimental conditions during the experiment, and offering the analytical help and scientific discussion during the

analysis phase.

- Collaborate to further developing the MS experimental station in order to accomplish the experimental program.
- Build his/her own research program.
- Involved in submitting proposals to suitable funding agencies, and establish new research collaborations.
- Carrying out any other relevant tasks/duties as requested by the Scientific Director and/or senior beamlines scientists.

Education and Experience

- PhD in Physics, Chemistry or related field.
- Good knowledge of powder diffraction methods.
- Proved experience with powder diffraction data analysis packages.
- Proved experience with maintaining or operating x-ray powder diffraction instrumentation and/or sample environments for diffraction.
- Experience with synchrotron radiation beamline instrumentation and/or other complementary SR methods would be an asset.

Knowledge, Skills and Abilities

- Available to work in Jordan.
- Available to work under pressure.
- Excellent knowledge of English (oral and written).
- High degree of multi-tasking and time management capability.
- Available to travel abroad, including periods away from home.
- Available to work occasional shifts.
- Team spirit and good communication skills.

Remuneration

Appointment is made by SESAME Director. Normally, MS Second Beamline Scientist is hired at P2 – Step I level (**30 kUSD/year, tax-exempted**). Exceptionally, higher Step may be offered based on the candidate's qualifications and experience.

How to apply

A detailed C.V. in English including the name, affiliation and e-mail address of 3 referees, and a motivation letter should be addressed to the Administrative Director by filling the Online Submission Form on the announcement page. Candidates from SESAME Members with equal qualification will be given preference.

For further Information

Consult the SESAME web site: www.sesame.org.io