Vacancy Notice No:	**SS/25/02**
Position and Grade:	**Powder Diffraction Beamline Scientist, GP2,** (Step will be compatible with his/her experience.)
Sector:	**Scientific**
Duty Station:	**Allan, Jordan**
Issue Date:	**September 28, 2025**
Type/Duration of Appointment:	**3 years (first 12 months are probation period).**
Date for entry on duty:	**As soon as possible**
Application Deadline:	**October 28, 2025 or until a suitable candidate is found**

Organization Setting

SESAME is the first synchrotron light source in the Middle East and neighbouring countries. It is located in Allan (Jordan). The Facility was officially inaugurated in May 2017. It consists of a 20 MeV Microtron, an 800 MeV Booster synchrotron and a 2.5 GeV electron storage ring. Five beamlines are in operation and hosting users. They are the BM02-IR (Infrared) spectromicroscopy beamline, BM08-XAFS/XRF (X-ray Absorption Fine Structure/X-ray Fluorescence) spectroscopy beamline, the ID09 - MS/XPD (Materials Science/X-ray Powder Diffraction) beamline, the ID10-BEATS (BEAmline for Tomography at SESAME) beamline, and the soft X-ray ID11L-HESEB (HElmholtz-SEsame Beamline) beamline. A sixth beamline, the Turkish X-ray PhotoElectron Spectroscopy beamline ID11R-TXPES is to be inaugurated on 8 December 2025. This suite of beamlines, from the eight planned for Phase I, allow world-class research in virtually all fields of science.

The SESAME ID09-MS/XPD beamline is based on the MS beamline donated by PSI and previously installed at the Swiss Light Source. It came into operation in December 2020 to use the high-intensity and high collimation of the X-ray radiation produced by the synchrotron to investigate the properties of polycrystalline materials. The source is a multi-pole wiggler installed in the ID09 straight section of SESAME's storage ring. The beamline monochromator covers a wide energy range from 8 to 25 keV. The experimental station is based on a theta-2theta diffractometer equipped with a position sensitive detector mounted on the 2theta arm. A hot blower and an LN2 gas cooler are available to control the temperature for measurements in transmission mode with samples in capillary. The beamline core research areas include Material Science and Engineering, Environment, and Cultural Heritage, amongst others.

More information about the ID09-MS/XPD beamline can be found in the following link: https://www.sesame.org.jo/beamlines/ms

Assignment

Under the supervision of the MS/XPD Principal Scientist, the Supervisor of X-Ray Beamlines Group and the overall authority of the Scientific Director, the main responsibilities of the incumbent will be to:

- **Provide Operational Support:** collaborate to further developing the MS/XPD beamline capabilities in order to advance the experimental program.
- **Serve as Local Contact:** Act as the primary point of contact for beamline users experiments, and provide daily high-quality support to external users.
- **Collaborate on Beamline Upgrades and Development:** Work closely with the technical staff to contribute to beamline improvements and development projects.
- **Develop Independent Research:** develop an independent research program, scientific collaborations, and successful scientific publication record.

Education and Experience

- PhD in Physics, Chemistry, Engineering or related field,
- Proven experience in powder diffractometry instrumentation, as well as data acquisition
- Proven experience with data analysis packages for X-ray Powder diffraction
- Research experience in a field relevant to the beamline scientific program, such as Physics, Chemistry, Material sciences, Catalysis, Earth Science, Environmental Science, Cultural Heritage.
- Good programming skills in languages (e.g., python, Java, etc.) are required.
- Experience in 2D area detectors data processing for X-ray powder diffraction would represent a plus.
- Experience with SR methods would represent a plus.
- Experience in supporting Scientists in the conduct of research in a synchrotron or equivalent facility would represent a plus.

Knowledge, Skills and Abilities

- Skills in troubleshooting, diagnosing, and problem-solving with the ability to document and report independently.
- Ability to make decisions in a timely manner,
- Capable of working independently in an environment that requires multi-tasking skills without direct supervision,
- Strong interpersonal skills and ability to work in diverse and multi-disciplinary teams,
- Available to travel abroad to attend meetings, training sessions, workshops and seminars, including extended periods away from home.
- Flexibility to work in different working hours, modes, and conditions,
- Proficiency in English.

Employment Conditions

- Appointment is made by SESAME Director. The Beamline Scientist will be hired at the Grade P2, and the Step will be compatible with his/her experience.
- The work location is in Allan, Jordan.
- The position requires full time commitment.

- In addition to the basic salary the incumbent is entitled to other allowances (as stated in SESAME provisional Staff Rules and SESAME Staff Regulations).
- SESAME is an equal opportunity employer.

How to apply

A detailed C.V. in English and a cover letter should be addressed to the Administrative Director by filling the Online Submission Form on the announcement page. The cover letter should highlight the candidate's strong points, and the reasons why she or he will strengthen the SESAME beamlines team. Candidates from SESAME Members with equal qualification will be given preference.

For further Information

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