

#### SESAME

#### Synchrotron-light for Experimental Science and Applications in the Middle East

Notice No:	SS/25/02
Position:	Postdoctoral fellow for the ID11L-HESEB
	beamline
Sector:	Scientific
Duty Station:	Allan, Al-Salt, Jordan
Issue Date:	May 11 2025
Duration of Fellowship:	3 years, initial contract will be 18 months and
	may be followed by a second contract for 18
	months. The Fellowship is non-renewable.
Start Date:	As soon as possible
Application Deadline:	June 30, 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 ID11L-HESEB (Helmholtz SESAME Beamline) beamline is a new state-of-the-art beamline in the soft x-ray regime at the synchrotron radiation facility SESAME that has been opened to users in February 2024. The beamline is based on an APPLE II undulator and a grating monochromator for soft X-ray radiation in the energy range of 70–1800 eV and it offers a high energy resolution with a high intensity of photons. It allows absorption spectroscopy with polarized soft X-rays using fluorescence or electron yield spectroscopy. A unique feature is the possibility to operate under ambient pressure conditions. The beamline core research areas are i) materials and surfaces, ii) archeology and cultural heritage, iii) environmental and earth sciences, iv) chemical reaction under process conditions.

## Assignment

Under the overall authority of the Scientific Director, and the general supervision of the HESEB Principal Scientist, the main responsibilities of the incumbent will be to:

- manage the continuous technical upgrade and development of the instrument together with the other beamline scientists, engineers and post-docs, so as to meet the high expectations of the user community.
- support users through the role of local contact, thus gaining opportunities for collaborative work at the frontiers of the field.
- develop your own research program exploiting HESEB unique technical possibilities.

## Education and Experience

- Ph.D. in a relevant scientific discipline with a maximum of 5 years of experience in relevant research from the date of PhD award
- Experience in UHV systems
- Experience in Soft X Ray related techniques
- Experience in laboratory instrumentation and/or data acquisition, processing, visualization, and analysis

# 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,
- Priorities commitments according to deadlines and milestones,
- 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.
- Programming skills would represent a plus.

# **General Conditions**

- Contracting will be based on SESAME Postdoctoral Rules and will be funded by EUproject SUNSTONE.
- The Postdoctoral fellow will receive a monthly stipend of US\$2500.
- In addition to the above salary, SESAME will pay a monthly expatriation allowance equivalent to the family allowances in SESAME Staff Regulations as well as health insurance for the postdoc, spouse and at most three dependent children.
- Post doc fellow's salary is non-pensionable
- The Postdoctoral fellow will receive up to six months specialized training at the Synchrotron Radiation Facility ALBA's BL29 – BOREAS, the Soft X-ray beamline dedicated to polarization-dependent spectroscopic investigations. (Spain). The training details will be tailored based on the postdoctoral fellow's experience and the requirements of the ID11-L HESEB beamline. The fellow will receive US\$800/month during the training period as extra-allowance for housing.
- The work location is in Allan, Al-Salt, Jordan
- The position requires full time commitment.
- 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' strong points, and the reasons why she or he will strengthen the ID11-L HESEB beamline team. Candidates from SESAME Members with equal qualification will be given preference.

# For further Information

Consult the SESAME web site: <u>www.sesame.org.jo</u>