



SESAME

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

<b>Notice No:</b>	SS/24/01
<b>Position:</b>	Postdoctoral fellow for the BM02-IR beamline
<b>Sector:</b>	Scientific
<b>Duty Station:</b>	Allan, Al-Salt, Jordan
<b>Issue Date:</b>	June 13, 2024
<b>Duration of Fellowship:</b>	3 years, initial contract will be 18 months and may be followed by a second contract for 18 months. The Fellowship is non-renewable.
<b>Start Date:</b>	December 2024-January, 2025
<b>Application Deadline:</b>	September 15, 2024 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 SESAME BM02-IR beamline was designed and implemented in the framework of a partnership between SESAME and SOLEIL Synchrotron facility in France. It came into operation in November 2018 to serve users of the infrared scientific community. It is located at the bending magnet BM02 of SESAME's storage ring and utilises both edge and constant field radiation ranging from 2 to 25  $\mu\text{m}$  in wavelength. The beamline is currently equipped with a new endstation of Bruker Vertex 70v FTIR spectrometer coupled to Hyperion 3000 IR-vis Microscope, and is also giving access to a second offline endstation (Global IR source) equipped of 8700 Thermo Scientific FTIR spectrometer coupled with a Thermo Scientific Nicolet Continuum XL IR Microscope. The beamline core research areas include life sciences, pharmaceuticals, environmental science, materials science, archaeology, cultural heritage, and art restoration, amongst others.

### Assignment

Under the overall authority of the Scientific Director, and the specific supervision of the IR beamline Principal Scientist, the main responsibilities of the incumbent will be to:

- collaborate to further developing the IR beamline capabilities in order to advance the experimental program.
- provide daily high-quality support to external users.
- develop an independent research program, scientific collaborations, and successful scientific publication record.

### Education and Experience

- PhD in Physics, Chemistry, Biology, or related field with a maximum of 3 years' experience in relevant research from the date of PhD award.
- Solid understanding of the IR microspectroscopy methods.
- Proven experimental experience in laboratory instrumentation in the following:
  - IR Spectroscopy, or microscopy/imaging
  - Data acquisition, processing, and analysis (spectroscopy, mapping, and/or imaging)
- Research experience in a field relevant to the beamline scientific program, such as:

- Physics, Chemistry, biochemistry, biology, medicine, etc.,
- Material sciences, catalysis, mineralogy, environmental science,
- Cultural heritage and bioarchaeology.
- Experience with SR methods 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,
- Prioritise 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 EU-project SUNSTONE with grant agreement No. 101177314.
- The Postdoctoral fellow will receive a monthly salary 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 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 IR beamline team. Candidates from SESAME Members with equal qualification will be given preference.

### **For further Information**

Consult the SESAME web site: [www.sesame.org.jo](http://www.sesame.org.jo)