



SESAME

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

Vacancy Notice No:	<b>SS/22/02</b>
Position and Grade:	<b>Electrical Technician</b> , (Grade T1 –T2, based on the experience)
Sector:	<b>Scientific</b>
Duty Station:	<b>Allan, Jordan</b>
Issue Date:	<b>April 24<sup>th</sup>, 2022</b>
Type/Duration of Appointment:	<b>Fixed term for 3 years and renewable</b> (first 12 months are probation period).
Date for entry on duty:	<b>As soon as possible</b>
Application Deadline:	<b>July 31<sup>st</sup>, 2022 or until a suitable candidate is found</b>

### **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 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 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 and two more beamlines (for X-ray tomography and soft X-ray spectroscopy) are under construction.

### **Assignment**

Under the supervision of the Scientific Director, and in close collaboration with the Electronics and instrumentation Group, SESAME Synchrotron Light Source is seeking an electrical technician to perform skilled work on the installation and operation of the SESAME beamlines. Such as cabling, rack assembly and wiring. As well as to install and maintain different types of motion systems as required. The Electronics and instrumentation Group serves the beamlines at SESAME, one of their main responsibilities is the motion system. The Electronics and instrumentation Group have designed and built SESAME MOTION BOX, a standardized 8-axes motor control system that can be configured to control both stepper and servo motors.

The main responsibilities of the candidate will be:

- PCB assembly from schematics with little guidance.
- Assembling and handling motion system sub-racks.
- Plans, troubleshoots, repair and calibrate existing beamline motion systems.
- Build, install, and commission new beamline motion systems.

- General electrical work including cabling, cable-termination and design/build of simple electrical/electronic devices.
- Follow the work plan, quality assurance procedures, and safe work guidelines.
- Contacting the local market for the purchasing of the required components.
- Supervision of subcontracted work.
- All other duties as required.

### **Education and Experience**

- Minimum education required is High school diploma or equivalent, Electronics Diploma degree is preferred but applicants with equivalent work experience (1-2 years) will also be considered.
- Relevant work experience in an Electronics Support role in an industrial or scientific facility.
- Proven experience in at least one of the following areas: soldering, cabling, cable-termination, and PCB Assembly.
- Experience in supervising work of out-source staff/contractors.
- Experience in working with manual equipment and different mechanical tools, such as drill, saws, etc.

### **Knowledge, Skills and Abilities**

- Available to work in Jordan.
- Basic knowledge in the principle of operation of different electric and electronic devices.
- Ability to understand what is required and perform it efficiently.
- Ability to understand and produce simple engineering drawings, wiring diagrams and schematics.
- Ability to carry out a variety of light mechanical and electrical tasks, including soldering, cables termination and rack wiring.
- Ability to use standard electronic measurement instruments including multi meters, oscilloscopes, bench power supplies and function generators.
- Ability to use measuring instruments such as gauges, calipers and micrometers.
- Ability to work in tight and high spaces with the proper safety considerations.
- Ability to work flexibly when there are periods of intense activities or on-call emergency.
- Basic knowledge of English language (official working language at SESAME).
- Good communication skills (oral and writing).
- Basic computer skills (Windows and Office).
- Good planning and organizing skills.
- Effective team player.
- Ability and initiative to maintain individual workflow in the absence of direct supervision
- Able to clearly understand verbal and written instructions and visual aids.

**Remuneration**

Appointment is made by SESAME Director. The Electrical Technician will be hired at the Grade and Step compatible with his/her experience.

**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. 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)