

Radiation Safety Engineer/Physicist

Organization

SESAME is the first synchrotron light source built in the Middle East, located in Allan (Jordan). The facility consists of a 20 MeV Microtron, an 800 MeV Booster synchrotron and a 2.5 GeV electron storage ring. Two beamlines are in operation (X-Ray Absorption and Infrared), while three further beamlines will follow in the next two years, to carry out world-class research in virtually all fields of Science.

SESAME offers a vibrating and stimulating international environment with great possibility of scientific and technical growth. SESAME is seeking to recruit a motivated Engineer or Physicist to support the radiation protection of the facility under all operating conditions.

SESAME uses state-of-the-art instrumentation, codes, techniques and policies to ensure the safe operation of the three accelerators and running beamlines including calculations, dose measurements, the provision of training for staff and users, compliance with radiation protection best practices and dealing with activated materials.

Assignment

I Organizational setting of the post

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| 1. Post grade: | Flexible. Two to five years experience required. Candidates with proven extensive experience can be considered for appointment to senior position. |
| 2. Title of the post: | Radiation safety Engineer/Physicist
(Vacancy notice number TC/16/2) |
| 3. SESAME Sector | Technical Sector |
| 4. Unit/section: | Machine Operation |
| 4. Duty Station: | SESAME site, Allan, Jordan |
| 6. Annual salary range: | 23 k – 24 k US\$ (SESAME salaries are tax exempted) |
| 7. Benefits: | Health insurance, Life and disability insurance, Rental subsidies, Education grant. |
| 8. Type of contract: | Fixed term, 3 years (first 12 months are probation period). |

II Responsibilities

- Participation in the detailed design of SESAME shielding walls and protections as need arise for new beamlines and new injector projects.
- Support the construction series of shielding walls and protections of the accelerator complex.
- Follow-up personal absorbed doses for staff and users,
- Dealing with both active and passive radiation monitoring systems
- Participation in the accelerator daily operation.
- Available for advice and assistance on radiation safety matters.
- Monitor, evaluate, and continually improve the effective implementation of the Radiation Safety programme by operating the instruments used in the program for measuring radiation levels and interpreting the resulting measurements.
- Support the Health and Safety Office in dealing with radiation protection matters
- Carrying out any other tasks/duties as requested by the line manager and/or SESAME Technical Director.

III Essential Qualifications

- B.Sc. degree in Engineering or Physics. Higher degree candidates are also encouraged to apply.
- Two to five years work experience in development and operation of instrumentation and different kinds of radiation monitors (including maintenance, calibration and so on)
- Basic knowledge in radiation dosimetry
- Basic knowledge of the physics of radiation-matter interaction.
- Knowledge of laboratory instrumentation and measurements, data analysis and presentation
- Basic computer literacy in either Windows or LINUX.
- Ability to learn and support new systems and applications, including support for the operational need of the facility (i.e. manning machine shifts)

IV Desired Qualifications

- Basic experience in FLUKA or an equivalent Monte Carlo shielding simulation codes
- Previous experience with EPICS.
- Good skills in using laboratory electrical/mechanical tools for the installation of equipment and performing troubleshooting and repairing if required
- Experience with basic laboratory instrumentation including wiring, cabling, testing of equipment.
- Skills in troubleshooting, diagnostics, and problem-solving.

V Other skills and abilities:

- Very good level of English, reading and writing.

- Available to travel abroad, including periods away from home.
- Available to work occasional shifts during machine development periods.
- Identifying and resolving problems in a timely manner.
- Working in an environment that requires multi-tasks skills
- Working in a team but also capable of working independent without direct supervision.
- Excellent communication skills, both oral and written.

VI Application closing date

The search will start immediately and will continue until a suitable candidate is found

Employment Conditions

1. The work provisional starting date is as soon as possible
2. The work location is in Jordan
3. The candidate should be willing to travel abroad to attend training, workshops and seminars.
4. The position requires full time commitment.
5. The entry level and salary will be based upon the qualifications, experience and the level of responsibility of the post.
6. In addition to the basic salary the incumbent is entitled to other allowances (installation grant, education grant, housing subsidy, etc.).
7. For more information please consult (www.sesame.org.jo/jobs/employmentconditions.aspx)
8. The candidate should ideally be a national of a Member or Observer of SESAME.
9. SESAME is an equal opportunity employer

How to apply

A detailed C.V. in English, a cover letter and a list and contact details of at least two referees should be addressed to SESAME Administration and submitted to the online form on this link: http://www.sesame.org.jo/sesame_2018/node/260