

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. One beamline is in operation (X-Ray Absorption) and one beamline (Infrared) will become operational at mid-2018) while two further will follow in 2019 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 Mechanical Engineer to support and guarantee the reliable operation of the mechanical facilities and its service infrastructure including cooling and HVAC system

Responsibilities

- Technical evaluation and understanding of proposed modifications/improvements to existing systems including technical report production.
- Specification generation and tender analysis of medium sized installation contracts including pre tender and post contract Project Management, planning, cost control, payment certification, witnessing of tests, etc. including close liaison with Procurement department.
- Problem solving and fault diagnosis on all site mechanical services, including air conditioning, chilled water, process cooling water, hot and cold water systems, MTHW/LTHW systems, compressed air, refrigeration, drainage, industrial gases (including liquid nitrogen), associated control systems, etc.
- Advise scientific equipment owners/users on compliance with the Pressure Systems Safety Regulations 2000 (PSSR), developing procedures including testing and change control (training will be provided).
- Liaison and supervision of external consultants, contractors, service engineers and suppliers. This includes supervision of “design and build” contracts
- Commissioning management/supervision for small to medium sized projects to ensure compliance to relevant building services codes of practice.
- The development of building services operational systems and advising senior management of advantageous/disadvantageous for relevant proposals.
- To keep up to date records of all QA documentation.
- To operate the Change Control Procedures for all mechanical installations..
- To carry out safety risk assessments and prepare method statements and/or evaluation of third party safety submissions.
- Participation in Health and Safety and Quality Assurance procedures as appropriate to the post.
- To undertake other related duties to meet the needs of the Installation and Facilities Management Group.
- Flexible approach to the working conditions and environment
- The job may require some travel and on call shift even occasionally during the night
- The Job may require Technician

Essential Qualifications

- B.Sc. degree in Mechanical/Electrical Engineering. Two to five years of experience in development and operation of mechanical installation for large industrial facilities.
- Knowledge of instrumentation and industrial controls .
- Basic computer literacy in either Windows or LINUX.
- 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.
- Skills in organizing resources and establishing priorities.
- Ability to learn and support new systems and applications, including support for the operational need of the facility (i.e. manning machine shifts)
- Ability to perform technician tasks whenever necessary, including instruments installation, calibration, tubes hoses installation.

Desired Qualifications

- Experience in Schneider TAC Vista BMS.
- Experience with proper wiring, cabling, testing, and termination techniques of different cables-types.
- Previous work in a scientific research lab or a synchrotron facility.
- Skills in troubleshooting, diagnostics, and problem-solving.
- Experience in compressed AirNet
- Experience in DIW systems Instruments and operation.
- Experience in HVAC design for confined places (optical and experimental Hutches), taking into account noise and vibration issues effect.

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 operation including nights, Sundays and public holidays stand-by duty, as required.
- Ability in careful follow up with contractors performing maintenance/testing services for the system.
- Excellent Team work abilities and ability to establish positive interactions with colleagues.