Job Title: Radiological Monitoring Resp. Officer IO0725

Requisition ID **4220** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems** - **New Posting**

The ITER Organization brings together people from all over the world to be part of a thrilling human adventure in southern France—building the ITER Tokamak. We require the best people in every domain.

We offer challenging full-time assignments in a wide range of areas and encourage applications from candidates with all levels of experience, from recent graduates to experienced professionals. Applications from under-represented ITER Members and from female candidates are strongly encouraged as the ITER Organization supports diversity and gender equality in the workplace.

Our working environment is truly multi-cultural, with 29 different nationalities represented among staff. The ITER Organization Code of Conduct gives guidance in matters of professional ethics to all staff and serves as a reference for the public with regards to the standards of conduct that third parties are entitled to expect when dealing with the ITER Organization.

The south of France is blessed with a very privileged living environment and a mild and sunny climate. The ITER Project is based in Saint Paul-lez-Durance, located between the southern Alps and the Mediterranean Sea—an area offering every conceivable sporting, leisure, and cultural opportunity.

To see why ITER is a great place to work, please look at this video

Application deadline: 08/08/2021
Domain: Engineering
Department: Engineering Design
Division: Fuel Cycle
Section: Tritium Plant
Job Family: Project Engineering
Job Role: Coordinating Engineer
Job Grade: P4
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As Radiological Monitoring Responsible Officer, you will manage all design aspects, procurement and contract management of the ITER Radiological and Environmental Monitoring System (REMS) package. This task covers not only specific design work associated with radiological aspects (neutrons, activated material, tritium, X-rays, etc.), but shall also account for other industrial hazards encountered in ITER such as beryllium, magnetic fields, cryogenic liquids etc.

Background

The Tritium Plant Section is responsible for the delivery of two Plant Systems at ITER – the Tritium Plant and the Radiological & Environmental Monitoring System. This delivery responsibility ranges from performing concept and preliminary design through to technical surveillance of final design and fabrication and then supporting commissioning of the systems. A broad range of monitors and instrumentation will be needed, from samplers to monitors within the facility and in the wider environment including associated data collection systems. Such devices will be used to support the Nuclear Safety, Worker Protection and the Environmental Compliance Programmes, hence the need for a qualified Responsible Officer to design, co-ordinate and contribute to the delivery of the Radiological and Environmental Monitoring system.

Major Duties/Responsibilities

- Implements the requirements of the French regulatory authorities for radiological instrumentation standards, environmental monitoring and occupational safety hazards in conjunction with the ITER

Safety & Quality Department;
- Develops and documents the radiological and environmental monitoring program requirements for all ITER facilities in liaison with the Safety & Quality Department;
- Is responsible for performing updates and revisions of the ITER Design Description Document and System Design Review related to REMS, following value engineering methods and in light of the construction schedule;
- Participates in the ITER building designs reviews during Conceptual, Preliminary and Final Design Reviews to revise the requirements for REMS instrumentation as needed;
- Produces interface documents with other ITER groups involved in the implementation of the ITER REMS, including data acquisition, alarm handling, power supplies, buildings, ventilation, and other services;
- Produces assembly and installation plans of the REMS instruments and equipment in collaboration with other ITER groups;
- Produces technical specifications for the ITER REMS laboratory and associated equipment in conjunction with the ITER Safety & Quality Department;
- Oversees the procurement of all REMS required by the ITER project;
- Manages R&D related to REMS;
- Supervises assembly, installation and commissioning of REMS equipment;
- May be requested to be part of any of the project/construction teams and to perform other duties;
- May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays.

Special notice: May be requested to work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization.

Measures of Effectiveness

- Work Products: Completes assignments as specified, on time and within budget – particular attention will be given to progress on REMS value engineering, including definition and harmonization of functions and requirements, on REMS interface descriptions and on operational plans; progress will include collection of written and verbal information, coordination, analysis, synthesis, clash resolution, and communication of results;
- Team Contributions: Provides and receives contributions from fellow team members, contributes to an overall productive work environment, and liaises successfully with the Safety & Quality Department;
- Safety and Security: Performs work, generates designs and oversees the work of others with proper attention to safety and security; ensures integration of REMS related activities into the licensing process.

Qualifications and Experience

- ***Professional Experience:***
  - At least 10 years' experience in the design and implementation of radiological instrumentation and environmental monitoring systems in a large nuclear or radioactive isotope handling facility.
- ***Education:***
  - Master's Degree or equivalent in Nuclear engineering or relevant disciplines;
  - The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
- ***Language:***
  - Fluent in English (written and spoken);
  - Working knowledge in French for interacting with French Nuclear Regulator is advantageous.
- ***Technical competencies and demonstrated experience in:***
  - Specialized domain of work and technical expertise in radiological instrumentation design is required;

- Project management: including writing & reviewing specifications for equipment's technical development, execution and delivery follow-up, and implementation within contractual requirements;
- Interface management; identify, resolve and maintain technical and functional interfaces;
- Handling communication with nuclear regulators would be advantageous;
- Leading multidisciplinary projects and interacting with experts in many scientific or technical disciplines;
- CAD software (i.e. AVEVA tools) & data acquisition and control would be advantageous;
- Familiarity with the monitoring of other industrial hazards such as beryllium, air quality, magnetic fields etc.

- ***Behavioral Competencies:***
  - Collaborate: Ability to facilitate dialogue with a wide variety of contributors and stakeholders;
  - Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;
  - Drive results: Ability to persist in the face of challenges to meet deadlines with high standards;
  - Manage Complexity: Ability to analyze multiple and diverse sources of information to understand/define problems accurately before moving to proposals;
  - Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.

The following important information shall apply to all jobs at ITER Organization:

- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, ITER Values (Trust; Loyalty; Integrity; Excellence; Team mind set; Diversity and Inclusiveness) and Code of Conduct;
- ITER Core technical competencies of 1) Nuclear Safety, environment, radioprotection and pressured equipment 2) Occupational Health, safety & security 3) Quality assurance processes. Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members;
- Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;
- May be requested to work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- Informs the IO Director-General, Domain Head, or Department/Office Head of any important and urgent issues that cannot be handled by line management and that may jeopardize the achievement of the Project's objectives.