Job Title: Head of Science and Operation Domain IO1117

Requisition ID **4780** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Managerial** - **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: 07/11/2021
Domain: Science & Operation
Job Family: Line Management & Group Leader
Job Role: Head of Domain
Job Grade: D2
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As the Head of Science and Operation Domain (SCOP) you will support the Director-General (DG) of the ITER Organization (IO) to achieve the ITER Project's objectives, including commissioning, operation, and maintenance of the ITER Facility development and execution of the ITER Research Plan, development of the General Rules for Operation, and interaction with the ITER Members' fusion scientific communities.
This Domain has specific responsibilities for design, manufacturing, delivery, commissioning, and operation of the controls systems for nuclear safety, occupational safety, interlocks, plant control, access, and the central control system for data acquisition and control. This Domain also is the primary contact for the Science and Technology Advisory Committee, the ITER Scientific Fellows Network, the International Tokamak Physics Activity, and the ITER Operations Network.

Background

SCOP is established as one of the four Domains within the IO (see https://www.iter.org/directory on the ITER website), and is the primary domain responsible for exploitation of the ITER facility. Its responsibilities include delivery of control systems (in conjunction with DAs for plant controls), operation of systems including definition of the General Rules for Operations (with Safety and Quality Dept.), definition and execution of the research program, and participation in the design process to ensure the proper application of requirements related to the physics and operation of ITER.

Key Duties, Scope, and Level of Accountability

- Manages SCOP to fulfil its mission and responsibilities summarized in its Terms of Reference including the following major duties (Please copy/paste the following link in your web browser to review the detailed Terms of Reference);

- Develops the strategy for science and operation, in close collaboration with the Office of the Director-General in accordance with Project strategy, and implement it, in particular to takeover the ITER Machine, Tokamak Complex and Plant facilities for Systems Commissioning and following Integrated Commissioning within the approved Baseline, as well as to design the evolution of the Domain's internal structure through the Project phases;
- Manages budget, resources and provides leadership to direct reports within the Domain including contract renewal, performance and associated reward;
- Ensures the safety and quality during the implementation of the SCOP activities;
- Establishes the technical baseline for ITER research and operations, develops the operational and research plans for the ITER Operation Phase consistent with this baseline, and leads the development of the framework for execution of the scientific program during the Operation Phase;
- Approves the operational framework for the all aspects of the ITER facility, including system and integrated commissioning, machine operations, plasma operation, and maintenance activities;
- Oversees control systems and associated infrastructure required for the ITER machine and facility operation, in particular those related to all aspects of central instrumentation and control, including interlocks and safety systems, and those related to data acquisition and storage;
- Drives and communicates on a comprehensive analysis of fusion plasma behavior in ITER, especially the plasma operating scenarios, and to define and encourage R&D activities to resolve outstanding issues for the execution of the ITER Research Plan;
- Leads the commissioning of plant systems, including certification that each one satisfies the design requirements and is ready for operation;
- Ensures a good collaboration with Construction, Corporate and Engineering Domains, as well as Safety & Quality Department to support design and procurement activities by establishing physics performance specifications, defining operational requirements, defining instrumentation and control interfaces and standards, and analyzing maintenance requirements;
- Ensures that team members are developing competencies, including operators' trainings to ensure the safe and reliable operation of the ITER facility, meeting all quality and regulatory requirements;
- Strives to establish ITER as a centre of excellence in fusion research with close interaction and cooperation with the research programs of the ITER Members;
- May be requested to support any of the project/construction teams and to perform other duties in support of the project;
- May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays.

Note: 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

- Implement a robust strategy to transition and takeover from construction activities to achieve the ITER Project's objectives, with First Plasma presently at highest priority.
- Develop the Technical Baseline for operation of the facility and its implementation into the General Rules for Operation to facilitate compliance with commitments to the French regulator.
- Define the ITER Research Plan and publish intermediate research targets for the contributions of the Members' scientific and technology communities.
- Develop the high-level schedule for commissioning and operation of systems, and carry out this work in a timely and safe manner.
- Set milestones and objectives in concert with the Director-General, and reach them with expected safety, quality, and cost.
- Lead the SCOP in a harmonized manner, and collaborate with DAs and other IO Organizational Units as one team.

Experience & Profile

- ***Professional Experience:***
  - At least 20 years' experience in a fusion research or technology development project;

- At least 5 years' leadership experience managing within a large international project.

- ***Education:***
  - Masters' degree or equivalent in engineering or other relevant discipline;
  - The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
- ***Language requirements:***
  - Fluent in English (written and spoken).
- ***Technical Competencies and demonstrated competencies in:***
  - Managing staff, developing their competencies and providing leadership for following domains: Plasma physics, tokamak operation, real-time control systems.
  - Quality: Ability to lead and ensure all SCOP activities are performed at a level of quality appropriate to achieving the safety, environmental security and performance objectives of the Project defined by IO.
  - Planning: Ability to define vision and goals for the Project to lead SCOP. Ability to make decisions on scheduled cost and risks.
  - Contract Management: Ability to propose, gain approval for and implement contract strategy.
  - Construction oversight: Ability to define oversight strategy policy, ensure overall implementation of effective oversight, and allocate responsibilities to proper resources.
  - Project control and reporting: Ability to define reporting and control requirements and methodology, analyze and conclude on overall project status, define and decide actions for recovery with full transparency within the IO, and report to highest levels of stakeholders of the ITER Project.
- ***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.