

Job Title: Tokamak Program Engineer IO0834

Requisition ID **7181** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Construction and Installation - 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.

ITER Organization (IO) is an Equal Opportunity/Inclusive organization committed to diversity in the workplace, with diversity and Inclusiveness being one of the ITER Values.

As IO attracts and retains people coming from a vast array of different backgrounds and cultures, bias and exclusion cannot be tolerated. IO believes it is our diverse perspectives and backgrounds that gives unique strength and value to the ITER mission, regardless of race, member nation, gender, religion, status, sexual orientation, or disability - all are welcome and respected at ITER.

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: 19/11/2023

Department: ITER Construction Project

Program: Tokamak

Job Family: Construction

Job Role: Construction Expert

Job Grade: P5

Language Requirements: Fluent in English (written & spoken)

Contract Duration: Up to 5 years

Purpose

As Program Engineer in the Tokamak Program, you will work with the Program Manager, project leaders and associated staff on different topics related in particular to superconducting magnets and feeders. Contributions to other projects such as Vacuum Vessel, Thermal Shield or Cryostat might be required as well.

Background

The Tokamak Program, under the leadership of the ITER Construction Project Head shall be responsible for ensuring the delivery of Tokamak Components to be assembled by the Machine Assembly Program.

The Tokamak Program covers the delivery of all Sectors as well as Thermal Shields and Magnets for Machine Assembly. The Tokamak Program has to assure all engineering activities support to validate the proposal for moving VV out of PED Directive and ESPN Rules and validate the new approach in Machine Assembly.

The Tokamak Program works in close cooperation with the other Programs and Domestic Agencies within the ITER Project Team, interfacing with its scope of activities, in order to ensure compliance with requirements and interfaces

Key Duties, Scope, and Level of Accountability

- Takes proactive leadership role in advising the Program Manager and project leaders on the technical risks related to superconducting magnets and feeders.
- Working as a leading expert for the procurement of the superconducting feeders.
- Working as a senior adviser for the different groups within the magnet delivery project team.
- Supports the definition of the strategy of the commissioning activities related to the superconducting magnets and feeders.
- Supports as senior adviser the preparation of the cold test of the superconducting magnets.
- Participates effectively in assuring that IO goals are achieved in a timely and effective manner to meet safety, quality, cost and schedule targets along with the mandate of the Plant System Program Manager;
- Advises the Program Manager and project leaders on how to maximize human capital and staff commitment to achieving the IO goals;
- Advises the Program Manager on how to maintain harmonious and productive relationships with internal and external stakeholders;
- Ensures, along with the Program Manager and project leaders, that updates of baseline documentation are completed, as required;
- When required, reviews project changes requests as per the revised technical baseline and studies impacts on Tokamak Program;
- May be requested to perform other duties in support of ITER;
- May be required to work outside the ITER Organization (IO) reference working hours, including nights, week-ends and public holidays.

Measures of Effectiveness

- Advises on implementation of guidelines and directions received from ITER senior management;
- Ensures, along with the Program Manager, that progress on Tokamak Program are achieved according to the Detailed Work Schedule and Strategic Management Plan;
- Ensures, along with the Program Manager, that procurement, installation and testing are achieved in line with the ITER Research Plan;
- Ensures, along with the Program Manager, that deliverables meet safety, quality, schedule and cost requirements;
- Ensures that nuclear safety, nuclear regulation and other safety standards have been respected, complied with, and implemented for Tokamak Program.

Experience & Profile

- **Professional Experience:**
 - At least 15 years' experience in superconducting magnets design, production and tests, working as senior engineer and as leader of projects.
- **Education :**
 - At least Master's degree or higher or equivalent in engineering or equivalent;
 - 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 experience in:**
 - All technologies associated to superconducting magnets is required;
 - Design, manufacturing in the following topics with proven high level technical competencies is considered essential;
 - Procurement of superconducting magnets components;
 - Technical project management in superconducting magnets projects;
 - Management experience in high technology projects with multi-national collaboration, in-kind procurement, planning, measuring progress, managing risks and costs, and reporting on progress to manage programs or initiatives within the constraints of human and financial constraints;
 - Strong analytical, problem solving, and negotiation skills;

- Driving a project culture that underpins and maintains safe and secure working conditions and enforces the highest standard of safe, healthy, and secure work practice;
- **IO Core 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 (Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members) :
 - 1) Nuclear Safety, Environment, Radioprotection and Pressured Equipment
 - 2) Occupational Health, Safety & Security
 - 3) Quality Assurance Processes
- 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 or Department 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.
- For staff expected to perform on-call, shift hours, or other work outside ITER Organization reference working hours, including nights, weekends, and public holidays, the possession of a driving license valid in France is required. No commuting vehicle will be provided by the ITER Organization.