

# Job Title: Ion Cyclotron Section Leader IO0065

Requisition ID **4340** - 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:** 22/08/2021

**Domain:** Engineering

**Department:** Engineering Design

**Division:** Heating & Current Drive

**Section:** Ion Cyclotron

**Job Family:** Line Management

**Job Role:** Section Leader

**Job Grade:** P5

**Language requirements:** Fluent in English (written & spoken)

**Contract duration:** Up to 5 years

## Purpose

As the Leader of the Ion Cyclotron Section (ICNS), you will be responsible for all activities leading to the completion of the procurement of the IC Heating and Current Drive (ICH & CD) systems, their installation, commissioning and operation.

You will ensure that Research & Development (R&D) necessary for the successful realization of the ITER IC system is completed;

You will also coordinate the planning, schedule, budget and technical control of the IC systems, and prepare staff of the IC Section for the operational phases.

## Background

The Heating and Current Drive systems in ITER are comprised of the Neutral Beam system for heating (HNB) and diagnostics (DNB), ICH & CD and the Electron cyclotron for Heating and Current Drive (ECH & CD).

The ICRH system is required to provide a 20MW (IC) system operating at 40-55MHz and 3600s pulse length. The ICRH system is designed for wall conditioning, central heating& current drive. The ICRH section is responsible for the design, procurement, acceptance, installation, commissioning and operation of the ICRH System, in collaboration with the DAs in accordance with the PA scope.

## Major Duties/Roles & Responsibilities

- Manages the ICNS section's activities; providing leadership for the section members to complete the design, procurement, installation, commissioning and operation of the ITER system in line with the safety and quality requirements of ITER and the execution of the ITER research plan;
- Defines and freezes the ICH&CD systems interfaces;

- Ensures the successful integration within the tokamak environment, assuring the compliance with the project requirements, and collaborating with the different task forces managing the transverse activities;
- Ensures the delivery of 20MW of ICRH, monitoring qualification, tests, and proposing recovery actions if necessary;
- Prepares with the ICNS staff, the installation, commissioning and operation documentation required for the system;
- Supports effective risk/opportunities identification and management, identifying and implementing specific development tasks which may be needed;
- Manages the development and upgrade of ICH&CD systems as decided, based on project priorities and needs;
- Coordinates the design and procurement activities carried out for the ICH&CD systems both in the ITER Organization (IO) and in the primary procuring Domestic Agencies (DAs): IN-DA & US-DA;
- Follows-up on, proposes and integrates worldwide developments in ICH&CD relevant technology;
- Plans and manages the budget execution related to the systems;
- May be requested to be part of 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.

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

### Measures of Effectiveness

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- Efficiently manages human resources of the Section;
- Responsible for the ICH&CD systems design and implementation progresses within the defined cost and schedule meeting the safety & quality requirements;
- Ensures on schedule procurement ICH&CD which are within the defined scope;
- Ensures that deliverables of the Section meet technical standards, safety standards, quality schedule and cost requirements;
- Responsible for implementation of safety nuclear regulation and other safety standards of the section's work.

### Experience & Profile

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- **Professional Experience:**
  - At least 10 years' experience in the design and implementation of complex high power ICH&CD or similar systems.
- **Education:**
  - Master's degree or equivalent in Physics, 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 experience in:**
  - Implementing and supervising all aspects of design, procurement, installation, commissioning and operation of ICH&CD physics and/or engineering systems within a nuclear environment is required;
  - Leading and motivating technical teams, including at least managerial experience to motivate and develop team members' competencies;
  - Multi-disciplinary complex project management, including preparation of resource-loaded schedule, managing budgets, specifying and managing deliverables;
  - Developing innovative solutions to solve complex and technologically sophisticated engineering problems;

- IT tools consistent with complex project management;
- Quality Assurance and Quality Control: knowledge of requirements for international quality standards;
- ICRH plant subsystems (power supplies, RF Sources, transmission line and launchers) is considered an advantage.
- **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 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.