Job Title: Instrumentation Technician IO0190 / IO0199 / IO0214

Requisition ID **8060** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems - New Posting**

Fusion, the nuclear reaction that powers the sun and the stars, is a promising long-term option for a sustainable, non-carbon emitting global energy supply.

The ITER Organization (IO), based in the southern France, welcomes best talents who can together prepare the way to this new energy in a truly multi-cultural work environment.

We offer challenging assignments in a wide range of areas and encourage applications from candidates will all levels of experience. Applications from under-represented ITER Members' nations and women candidates are strongly encouraged, as IO strongly believes that a diversified, equitable, and inclusive workplace is crucial in solving one of the most complex scientific and engineering projects in the world today.

As the IO attracts and retains people coming from a vast array of different backgrounds and cultures, discrimination and exclusion cannot be tolerated. The IO believes it is our diverse perspectives and background 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.
The IO is committed to fostering a fair and equitable environment across all areas of the project, including compensation and benefits.
ITER CARE Values (Collaboration / Accountability / Respect / Excellence):
We perform our work with care, we care for the well-being of colleagues, our families and ourselves, and we care about the health of the planet for generations to come. CARE drives our work and our behaviors at ITER.

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

Application Deadline: 15/10/2025
Department: Engineering Services Department
Division / Program: Assembly & Commissioning Support Div.
Section / Project:
Job Grade: G4/G5 (SALARY SIMULATOR)
Language Requirements: Fluent in English (written & spoken)
Contract Duration: Initial Employment Contract up to five years with possibility for extension

*The ITER Organization is opening multiple vacancies. The selection process will be conducted with the objective of filling **multiple vacant positions** with also the purpose of drawing up a reserve list of rostered candidates for future vacant positions. The reserve list initially remains valid for two years, with the possibility of extension at the Director General's discretion.*

Please note that the entry grade of this position begins at G4 and the final grade offered to the selected candidate is subject to the decision of the IO Director General.

Overview

Are you looking for an exciting opportunity at the heart of an ambitious fusion energy project? Join our Assembly and Commissioning Support Division within the Engineering Service Department (ESD) as an Instrumentation Technician.

As an **Instrumentation Technician,** your goals will include:
- Performing on site instrumentation assembly activities such as installation, testing, commissioning, maintenance and operation of the entire measurement chain of different instrumentation systems.
- Supporting the resolution of onsite engineering changes, and installation non-conformances per the assigned scope.
- Completing activities and/or ensuring deliverables are produced by the Contractors, according to project schedule and budget, within a quality-assured environment that requires rigor and a systematic way of working.
- Developing, under the leadership of your discipline manager, your skills and experience for the benefit of the Project.

The Assembly and Commissioning Support Division aims to provide resources and services for the assembly of the machine and the plant systems, site coordination and in-field engineering support to installation activities and component/system commissioning.
The ESD provides the required skilled engineering resources or services, which are necessary for the successful completion of the ITER Project.

Key Duties & Responsibilities

Primary Responsibilities
- Performs installation, cabling, testing and commissioning of instrumentation components (such as sensors, junction boxes, connectors) across the entire ITER machine (coils, feeders, cryostat, thermal shield etc.).
- Performs and supports on site testing (Receiving and Inspection Tests (RITs), 2- and 4-wire resistance measurements, …) and supervises contractors as required.
- Prepares technical documentation, installation reports and completes assembly reports accurately.
- Maintains normal operation of tools and equipment in the Instrumentation workshop, and controls the inventories of equipment, tooling, parts, components, and consumables.
- Contributes to the development of plans and procedures for the activities to be performed, including reporting on contractor activities on site and at the factory.
- Contributes to the investigations and troubleshooting of issues by performing necessary tests and subsequently analyses the results to propose solutions to the problem.

Additional Responsibilities
- Witnesses Type and Factory Acceptance Tests at the premises of the component manufacturers.

Please note that job descriptions cannot be exhaustive, and the staff member may be required to undertake other duties, which are broadly in line with the above primary responsibilities.

This position may require shift rotation and/or availability during evening and night shifts, as well as weekends and holidays, depending upon project needs.

Experience & Competencies

Essential:
- **Proven experience** in the installation, testing, commissioning, maintenance, and troubleshooting of instrumentation, within complex and highly regulated environments or projects, for components such as strain gages, accelerometers, temperature sensors...

- **Assembly and Wiring:** Applying dexterity to precisely wire and assemble small, fragile instrumentation connectors and components.
- **Drawings/Diagrams**: Experienced in interpreting cabling and wiring diagrams.
- **Instrumentation Systems:** General understanding of instrumentation systems employing specific techniques to probe properties of machines such as strain, acceleration, temperature, pressure and assembly of small and fragile instrumentation components, connectors, optical fibres.
- **Continuous Improvement:** proposing changes to processes and systems to enhance efficiency, quality, and productivity over time.
- **Quality Management Systems (QMS):** apply the applicable procedures related to your field of activity.

Desirable:
- **Optical Fibres:** Experience of installation, handling, testing and splicing of optical fibres.
- **Rules and Regulations:** Awareness of safety regulations and cabling best practices.
- **Managing Complexity and Problem Solving:** Ability to analyse multiple and diverse sources of information to understand/define problems accurately before moving to proposals.
- **Quality Control:** techniques and activities, including monitoring, inspection and corrective measures, to ensure that components, products and services comply with all applicable requirements and standards.
- **Optimizes Work Processes:** knowing or identifying the most effective and efficient processes to get things done, with a focus on continuous improvement.

Qualifications

Essential:
- Bachelor’s degree or equivalent in the field of instrumentation or electrical systems or other relevant disciplines.

Desirable:
- Electrical qualifications or certifications.
- *The required education degree(s) may be substituted by professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.*

The following items apply to all jobs and job holders for the duration of tenure at ITER Organization:

- **The CARE Values are a framework of principles that guide our actions and define the culture and spirit of the ITER Project:**
  Collaboration: We collaborate with commitment and flexibility using the power of teamwork, building partnerships, and working with others to reach shared objectives;
  Accountability: We are accountable for the whole project - we take responsibility for our specific actions and are transparent in our daily work, holding self (ourselves) and others accountable to meet commitments;
  Respect: We treat each other with respect and dignity at all times, knowing that all of us belong here. We appreciate the value that our multicultural and diverse community brings to the ITER Project;
  Excellence: We are driven by excellence; we are agile and innovative while maintaining the highest standards of safety, quality and integrity;

- **ITER Core Technical Competencies**:
  1) **Nuclear Safety, Environment, Radioprotection and Pressured Equipment**
  2) **Occupational Health, Safety & Security**
  3) **Quality Control & 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 perform other duties in support of the project as defined by your line manager, and when relevant upon the request of the matrix manager;
- May be requested to work outside the ITER Organization reference working hours, including nights, weekends and public holidays, due to business needs - this may include on-call, shift work, etc.
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- 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.**
- Informs management of any important and urgent issues that cannot be handled by line or matrix management and that may jeopardize the achievement of the Project’s objectives;

The ITER Organization (IO) is an Equal Opportunity organization committed to diversity and inclusive in the workplace.