

Job Title: Blanket Analyst TED-237

Req ID 1145 - Posted 14/12/2019 - (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.

Application deadline: 31/01/2020

Domain: Engineering

Department: Engineering Design

Division: Internal Components

Section: Blanket

Job Family: Project Engineering

Job Role: Engineer - 1

Job Grade: P2

Language requirements: Fluent in English (written & spoken)

Contract duration: Up to 5 years

Purpose

As Blanket Analyst, you will be responsible for Blanket design analysis.

You will work in a team for the finalization of the design of the Blanket System and, as the scope of work evolves with the procurement process, to assess proposed design changes.

You will also monitor the procurement of the Blanket components and their delivery to the ITER site, in line with the given interfaces, scope, budget and schedule requirements.

Major Duties/Roles & Responsibilities

- Develops the specification of the design requirements, definition of the protocols for the Blanket design supporting analysis, and ensures their proper implementation (typically including thermomechanical, electromagnetic, hydraulic and neutronic analysis, etc.);
- Reviews and follows up on the design analysis work carried out by the Domestic Agencies (DAs) in preparation for the procurement of the Blanket components, as well as during the procurement phase;
- Manages design analysis contracts placed by the ITER Organization for the different Blanket components;
- Executes thermomechanical analyses of Blanket components using finite element code on an as-needed basis and issues technical reports accordingly;
- Records and maintains up to date design analysis documentation;
- Contributes, in close liaison with the concerned Technical Responsible Officers, to the surveillance and technical control of the Blanket procurement activities;

- 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.

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

- On-time completion of the design analysis of the Blanket components within the prescribed specifications;
- Generation and maintenance of coherent, comprehensive and understandable design analysis documentation for the Blanket System;
- Manages efficiently contract activities within the defined quality, cost and schedule;
- Contributes efficiently to the surveillance and technical control of the Blanket procurement activities;
- Establishes and maintains effective collaboration with all the stakeholders.

Experience & Profile

- **Professional Experience:**
 - At least 5 years' experience on thermal and structural analysis, as well as on structural design.
- **Education:**
 - Master's degree or equivalent in Mechanical Engineering or other relevant field;
 - 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 and demonstrated Competencies in:**
 - Performing thermal and structural analyses for complex systems;
 - Good command of finite element analysis codes like ANSYS and/or ABAQUS;
 - Electromagnetic, neutronic and hydraulic analysis would be highly advantageous;
 - Experience in the design analysis of plasma-facing components in a tokamak magnetic confinement would be an asset;
 - Management of contract and support of procurement process related to mechanical components;
 - Applying basic knowledge of mechanical manufacturing techniques and/or Ultra High Vacuum (UHV) applications and/or nuclear devices would be an asset;
 - Good command of the Microsoft Office package;
 - Basic knowledge of the Computer Aided Design (CAD systems) would be an asset.
- **Behavioural Competencies:**
 - Collaborate: Ability to 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 with high level of reliability and autonomy;

- **Manage Complexity:** Ability to gather multiple and diverse sources of information to define problems accurately will the ability to set priorities and meet deadlines 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 lline management and that may jeopardize the achievement of the Project's objectives.