

IO1227 Stability & Control Section Leader POP-028

General information

Job category	Standard
Status	Published
Department	DIP/Department for ITER Project
Division	POP / Science
Section	POP / SD / Stability and Control

Job description

Main job	Science - Plasma physics
Title of the position	Stability & Control Section Leader POP-028
Job family	Section Leader
Grade	P5
Direct employment	Required
Purpose	<p>To lead and manage the activities of the Stability & Control Section (SCS) within Plasma Operation Directorate relating to the analysis of Magnetohydrodynamic (MHD) instabilities and their control in ITER, development of the Plasma Control System (PCS) for ITER and development of integrated plasma scenarios for ITER operation;</p> <p>To play a significant role in the definition of the physics design and R&D activities associated with these areas of ITER physics;</p> <p>To manage the activities of the staff members of the SCS to ensure that the Section provides the required support to ITER construction and the preparation for ITER operation;</p> <p>These responsibilities involve close interaction with relevant operating units of the ITER Organization and with the ITER Members in the identification of priorities and in the specification, implementation and monitoring of relevant activities.</p>
Main duties / Responsibilities	<p>Manages the activities of the SCS within the Plasma Operation Directorate relating to the analysis of MHD instabilities and their control, the characterization of disruptions and the provision of physics support to the development of the ITER Disruption Mitigation System (DMS), the development of the ITER Plasma Control System and the development of integrated plasma scenarios for ITER;</p> <p>Manages the day-to-day activities of the staff of the SCS, providing leadership and guidance in the execution of their responsibilities;</p> <p>Provides overall leadership in safety and for the definition of the ITER R&D programs relating to MHD stability and control in ITER, and the development, validation and control of plasma scenarios for ITER;</p> <p>Ensures that the SCS's activities support the achievement of the goals of the Strategic Management Plan and, in particular, that the development of the PCS satisfies the agreed Detailed Work Schedule;</p> <p>Leads the integration of R&D results and analysis from the ITER Members' fusion programs in these areas of fusion physics and provides assessments of their implications for ITER design and operation;</p> <p>Interacts with, and co-ordinates experts, in the ITER Members' fusion communities in the definition, implementation and monitoring of relevant activities in these areas;</p> <p>Plays a significant role in the planning for ITER plasma commissioning and operation;</p> <p>Executes and delivers the Detailed Work Schedule in support of the Strategic Management Plan for scope budget and schedule of the systems in the Section and contributes to the staffing of the Section;</p> <p>Assures that IO's goals are achieved in a timely and effective manner, which meets safety, quality, cost and schedule targets;</p> <p>Maximizes human capital and people's commitment to achieving the IO goals;</p> <p>Builds and maintains relationship with internal and external stakeholders;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>

Measures of effectiveness	<p>Reports to the Plasma Operation Directorate Director;</p> <p>Interacts closely with relevant operating units of the ITER Organization and with the ITER Members in the specification, implementation and monitoring of relevant activities;</p> <p>Interacts with project divisions contributing to ITER commissioning and operations planning;</p> <p>Liaises with experts in the international fusion community in areas relating to the responsibilities of SCS;</p> <p>In response to requests from the Director-general (DG) and/or Department for ITER Project Director (DIP), or proactively, informs the DG/ Director for DIP of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p>
	<p>Defines a comprehensive work program for SCS in support of ITER construction activities and the preparations for ITER operation</p> <p>Manages the activities of SCS effectively in providing timely support to the ITER construction activities and the planning for ITER operation;</p> <p>Ensures that the development of the ITER Plasma Control System progresses as defined within the agreed DWS;</p> <p>Leads the definition and implementation of the necessary program of R&D activities with the Members' fusion programs to support ITER construction and the preparation for operation;</p> <p>Establishes effective international collaborations with experts in the Members' fusion communities;</p> <p>Ensures timely preparation of necessary documentation relating to SCS's areas of responsibility which integrates R&D results, specifies ITER performance requirements or defines operational scenarios;</p> <p>Responsible for Section deliverables that meet safety standards, quality schedule and cost requirements;</p> <p>Responsible for implementation of safety nuclear regulation and other safety standards of the section's work;</p> <p>Responsible for adherence to technical standards.</p> <p>SAP ID: 50000806</p>

Applicant criteria

Level of study	PhD or equivalent degree
Diploma	fusion plasma physics
Level of experience	At least 10 years
Technical experience	<p>Expertise in experimental and/or modelling aspects of fusion physics, with extensive experience relating to MHD stability of fusion plasmas and/or plasma control; international experience would be an advantage;</p> <p>Extensive list of publications in recognized scientific journals.</p>
General skills	<p>Basic Project Management would be an advantage.</p> <p>At least 5 years' experience in supervising a team would be an advantage;</p> <p>Ability to provide effective leadership;</p> <p>Ability to motivate and develop the team members' skills and experience.</p> <p>Ability to work effectively in an international environment;</p> <p>Ability to work in a team and to promote team work;</p> <p>Ability to negotiate with influence and convince internal and external stakeholders.</p>
Languages	English (Working)
Specific skills	<p>Normal skills in use of PCs, including office software and operating systems;</p> <p>Ability to develop plasma simulation and analysis codes in one or more scientific programming languages (e.g. Fortran) would be advantageous.</p>