

Scientific Officer, Plasma Stability and Control

Reports to Line Manager:	Deputy Director General (DDG), Department for Fusion Science and Technology (FS&T)	Job Code:	FST-026
Direct Employment:	Not Required	Grade:	Р3

Purpose

japan

usa

To support the Assistant Deputy Director General (ADDG) and/or the DDG for Fusion Science and Technology, by contributing to the analysis of plasma stability and control in ITER, and also by defining the relevant physics requirements to meet the ITER operational and performance specifications. This involves close interaction with the ITER Members' fusion communities in the specification, implementation and monitoring of relevant activities.

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eu	•	Contributes	to	analyzing	the	ITER	plasma	stability	and	to	specifying	the	plasma	control
ndia		requirements	;											

- Contributes to integrated plasma control studies in ITER and to evaluating control algorithms for all aspects of plasma control in ITER;
- Integrates R&D results and analyses from the ITER Members' fusion communities relating to stability and control issues, and evaluates their implications for ITER plasma operation scenarios;
- Interacts with and co-ordinates experts from the ITER Members to define, implement and monitor activities in the area of Plasma Stability and Control;
 - Contributes to preparing documentation which defines the operational performance requirements for the ITER plasma control system, and also contributes to defining the planning schedule for ITER plasma commissioning and operation;
 - Provides support to the management of the FS&T Department in liaison with the ITER construction activities;
 - Supervises ITER staff and visiting researchers contributing to activities in the area of plasma stability and control;
 - Shows strong commitment to the ITER Safety Program and enforces it through his/ her individual behaviour;
 - Maintains a strong commitment to the implementation and perpetuation of ITER values and ethics.

Qualifications and Experience

- Education:
 - Degree at least equivalent to 8 years of study after the High School Diploma (e.g. PHD), in Physics or Engineering research.



- Technical experience:
 - At least 5 years' experience in fusion research, with evidence of technical leadership abilities;
 - Outstanding expertise in experimental or modelling aspects of magnetically confined plasmas, with extensive experience in plasma stability and control analysis;
 - Experience in managing international collaborations and demonstrated ability to represent an international organization such as ITER;
- Social Skills:
 - Ability to work effectively in a multi-cultural environment;
 - Ability to work in a team and to promote team work.
- Language requirements:
 - Fluent in English (written and spoken).
- Computer and IT skills:
 - Experience in the application of state-of-the-art control methodology.

Direct Supervisor and Interfaces

- Reports to the DDG of the Department for Fusion Science and Technology;
- Interacts with Fusion Science and Technology staff in the analysis of ITER plasma control requirements and the development of the plasma control algorithms, and in support of the Department's physics research program;
- Interacts with the Project Divisions responsible for the definition and procurement of components and sub-systems relevant to the plasma control system;
- Interfaces with experts within the international fusion community, in particular as concerns the analysis and R&D carried out on plasma stability and control issues for ITER.

Authority / Approval Levels

This position has authority and approval levels defined by the DDG for the Fusion Science and Technology Department.

Measures of Effectiveness

- Contributes effectively to the analysis of plasma stability in the ITER plasma scenarios, leading to the specification of plasma control requirements and the development of control schemes for ITER plasmas;
- Successfully supports the planning for ITER operation;
- Successfully contributes to the team activity in these ITER physics areas and maintains effective support of the ITER construction activities in related areas;
- Successfully develops R&D and modelling activities within the international fusion community in this area in support of the ITER construction and the preparations for operation.