

IO1589 Scientific Officer - SCOD-009

General information

Job category	Standard
Status	Published
Department	SCOD / Science & Operations Department
Division	SCOD / Science Division
Section	SCOD / SCD / Stability & Control Section

Job description

Main job	Science - Plasma physics
Title of the position	Scientific Officer - SCOD-009
Job family	Scientist-2
Grade	P3
Direct employment	Not required
Purpose	<p>To support the analysis of ITER requirements and performance through coordination of and contribution to the analysis of heating and current drive (H&CD) physics for ITER scenarios, and by the definition of relevant physics requirements to meet the ITER operational and performance specifications; to contribute to the development of the Integrated Modelling Applications Suite by integration of simulation codes for fusion plasma scenario simulation, in particular, for simulation of heating and current drive processes in burning plasmas.</p> <p>To have close interaction with the ITER Members' fusion communities in the specification, implementation and monitoring of relevant activities.</p>
Main duties / Responsibilities	<p>Contributes to the specification and analysis of ITER plasma operation scenarios through a leading role in specifying plasma processes involving H&CD physics for ITER;</p> <p>Contributes to the definition of ITER requirements for an integrated plasma modelling capability for plasma simulation through a major role in specifying plasma processes involving H&CD physics for ITER;</p> <p>Supports the development of the ITER Plasma Control System, in particular in relation to the control and exploitation of H&CD systems;</p> <p>Integrates R&D results and analysis from the ITER Members' fusion communities on all aspects of H&CD physics, and the analysis of their implications for ITER plasma operation scenarios;</p> <p>Coordinates and interacts with experts in the ITER Members in the definition, implementation and monitoring of activities in this area;</p> <p>Prepares and reviews documentation defining operational performance requirements for ITER plasma scenarios and synthesizing predictions of ITER performance, with particular reference to requirements for H&CD systems;</p> <p>Proposes the planning for ITER plasma commissioning and operations;</p> <p>Provides support to the management of the Science and Operations Department in liaising with ITER construction activities;</p> <p>Supervises the activities of ITER staff and visiting researchers contributing to activities in H&CD physics;</p> <p>Coordinates and interacts with experts in the ITER Members' fusion communities in the definition, implementation and monitoring of activities in this area;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan & upon management request;</p> <p>May be requested to be part of any of the project teams dealing with the above activities and perform other duties upon management request;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Reports to the Stability and Control Section Leader;</p> <p>Interacts with staff of the Science and Operations Department in the development of plasma operation scenarios and integrated modeling capabilities in support of the ITER physics research program;</p> <p>Interacts with project divisions responsible for the procurement of components and sub-</p>

Measures of effectiveness	systems, in particular in relation to the H&CD and measurement systems;
	Liaises with experts in the international fusion community, in particular in the modeling of H&CD physics in fusion plasma scenarios and in integrated modeling;
	In response to requests from the Director-General and/or the Science and Operations Department (SCOD) Head, or proactively, informs the DG/SCOD Head 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.
	Contributes effectively to the analysis of H&CD physics and performance in ITER plasma scenarios, leading to operational performance specification for related ITER systems and to the definition of ITER plasma operation scenarios;
	Supports the planning for ITER operation; Successfully contributes to the team activity in these areas of ITER physics and maintains effective support for ITER construction activities in related areas; Successfully develops R&D and modelling activities within the international fusion community in this area in support of ITER construction, the development of the Integrated Modelling Applications Suite and the preparations for operation.
SAP ID: 50001007	
Project Construction Phase	

Applicant criteria

Technical experience/knowledge	Level of study	PhD or equivalent degree
	Diploma	Fusion plasma physics;
	Level of experience	At least 6 years
		PhD level or equivalent research experience in fusion plasma physics; Scientist expert in modeling fusion plasma scenarios with emphasis on heating and current drive physics.
		At least 6 years' experience in fusion research, with evidence of technical leadership abilities; Outstanding expertise in experimental and/or theoretical aspects of fusion physics, with extensive experience in physics aspects of plasma H&CD; Experience in international collaborations and demonstrated ability to represent an international organization such as ITER.
		Project experience: Demonstrated successful completion of projects in fusion plasma scenarios with emphasis on H&CD physics; Basic Project Management experience is required.
	Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
	Languages	English (Fluent)
	Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
	Others	Ability to work effectively in multiple software languages with emphasis on scientific modeling and data analysis;