

TITLE: Senior Scientific Officer, Transport and Confinement Physics		FST 010
Fusion Science and Technology / Science		
REPORTS TO LINE MANAGER: Ass.DDG/ DDG for Fusion Science and Technology		
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE RANGE: P4-P5
DATE WRITTEN: 25 October 2006	DATE REVISED: 05 December 2006	DATE REVISED:

Purpose:

Supports the Ass.DDG/ DDG for Fusion Science and Technology through co-ordination of and contributions to the analysis of all areas of transport and confinement physics for ITER and by the definition of relevant physics requirements to meet the ITER operational and performance specifications. This involves close interaction with the ITER Parties in the specification, implementation and monitoring of relevant activities.

Major Duties/Responsibilities:

- Definition and management of a programme of experimental and modelling R&D activities on the analysis of transport and confinement physics in ITER plasma scenarios.
- Major contributions to the definition of ITER requirements for an integrated plasma modelling capability for the analysis of ITER plasma operation scenarios through a leading role in the definition of plasma transport processes.
- Major contributions to the specification and analysis of ITER plasma operation scenarios through a leading role in the definition of plasma transport processes and fusion performance.
- Leading contributions to the planning for ITER plasma commissioning and operation.
- Integration of R&D results and analysis from the ITER Parties on all aspects of plasma transport and confinement physics and the analysis of their implications for ITER plasma operation scenarios.
- Interaction with and co-ordination of experts in the ITER Parties in the definition, implementation and monitoring of activities in this area.
- Contributions to the preparation of documentation defining operational performance requirements for ITER plasma scenarios and synthesizing predictions of ITER performance.
- Provision of support to the management of the FS&T Department in liaising with ITER construction activities.
- Supervision of ITER staff and visiting researchers contributing to activities in the area of plasma transport and confinement analysis.
- Shows strong commitment to the ITER safety programme and enforces it through individual behaviour and in his organisation.
- Maintains a strong commitment to the implementation and perpetuation of ITER values and ethics.

Qualifications Required:

- PhD in a relevant area.
- Outstanding expertise in experimental and theoretical aspects of fusion physics.

- At least 10 years experience in fusion research, with significant project management experience and proven technical leadership abilities.
- Extensive experience in managing international collaborations and demonstrated ability to represent an international organization such as ITER.
- Excellent written and verbal communication skills.

Work Direction and Interfaces:

- Reports to the Ass.DDG/DDG for Fusion Science and Technology.
- Supervises a small group of technical experts contributing to the analysis of ITER plasma transport, confinement physics and fusion performance.
- Interacts with project divisions responsible for the ITER construction activities as required.
- Liaises with experts in the international fusion community in the area of plasma transport and confinement physics.

Authority/Approval Levels:

Has authority and approval levels defined by the Ass.DDG/DDG for Fusion Science and Technology.

Measures of Effectiveness:

- Successfully implements R&D programme supporting the analysis of plasma transport and confinement physics and effectively supports the definition of ITER plasma operation scenarios and the planning for ITER plasma operation.
- Successfully develops a team activity in these areas of ITER physics and maintains effective support for ITER construction activities in related areas.
- Successfully develops R&D activities within the international fusion community in this area in support of ITER construction and the preparations for operation.