

TITLE: Chief Scientific Officer, Integrated Modelling Fusion Science and Technology / Science		FST 009
REPORTS TO LINE MANAGER: Ass.DDG/ DDG for Fusion Science and Technology		
DIRECT EMPLOYMENT: NOT REQUIRED		GRADE RANGE: 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 development of a comprehensive integrated tokamak plasma modelling capability for ITER and by the definition of relevant physics and code requirements to meet ITER needs. This involves close interaction with the ITER Parties in the specification, implementation and monitoring of relevant activities.

Major Duties/Responsibilities:

- Leading contributions to the definition of ITER requirements for an integrated plasma modelling capability for the analysis of ITER plasma operation scenarios and of physics processes determining plasma behaviour and fusion performance.
- Definition and management of a programme of modelling and theory R&D activities to support the development of a comprehensive integrated modelling capability for tokamak plasmas.
- Major contributions to the specification and analysis of ITER plasma operation scenarios through a leading role in the provision of an integrated plasma modelling capability.
- Major 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 integrated plasma modelling and the exploitation of the results for the enhancement of ITER's integrated plasma modelling capability.
- 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 integrated tokamak plasma modelling.
- 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 modelling and theory aspects of fusion physics.
- At least 15 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 development of an integrated plasma modelling capability for ITER and to the analysis of ITER plasma scenarios 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 integrated fusion plasma modelling and associated areas of fusion 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 development of a comprehensive integrated fusion plasma modelling capability for ITER 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.