TITLE: Scientific Officer, Heating and Current Drive Physics Science		FST-021
REPORTS TO LINE MANAGER: ADDG (Assistant to the DDG) /DDG (Deputy Director General) for Department for Fusion Science and Technology		
DIRECT EMPLOYMENT: NOT REQUIRED		**GRADE RANGE:** P3-P4
Date Written: July 2008	**Date Revised:**	**Date Revised:**

Purpose:

- To support the Assistant to the DDG/ DDG for Fusion Science and Technology through co-ordination 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 have close interaction with the ITER Members' fusion communities in the specification, implementation and monitoring of relevant activities.

Major Duties/Responsibilities:

- 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.
- 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.
- 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.
- Co-ordinates and interacts with experts in the ITER Parties in the definition, implementation and monitoring of activities in this area.
- Contributes to the preparation of documentation defining operational performance requirements for ITER plasma scenarios and synthesizing predictions of ITER performance, with particular reference to requirements for H&CD systems.
- Contributes to the planning for ITER plasma commissioning and operation.
- Provides support to the management of the Department for Fusion Science and Technology in liaising with ITER construction activities.
- Supervises ITER staff and visiting researchers contributing to activities in the area of H&CD physics.
- Co-ordinates and interacts with experts in the ITER Members' fusion communities in the definition, implementation and monitoring of activities in this area.
- Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.

Qualifications and Experience:

- **Education:** PhD or equivalent research experience in a relevant area.
- **Experience:**
  - Outstanding expertise in experimental and theoretical aspects of fusion physics, with extensive experience in physics aspects of plasma H&CD.
  - At least 5 years' experience in fusion research, with evidence of technical leadership abilities.
  - Experience in managing international collaborations and demonstrated ability to represent an international organization such as ITER.
- **Language requirements:** Excellent written and verbal communication skills in English.

Work Direction and Interfaces:

- Reports to the Assistant DDG / DDG for Fusion Science and Technology.
- Interacts with staff of Fusion Science and Technology in the development of plasma operation scenarios and integrated modelling capabilities, and in support of the department physics research program.
- Interacts with project divisions responsible for the procurement of components and sub-systems, in particular in relation to the H&CD and measurement systems.
- Liaises with experts in the international fusion community, in particular in the modelling of H&CD physics in fusion plasma scenarios and in integrated modelling.

Authority/Approval Levels:

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

Measures of Effectiveness:

- 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.
- Successfully 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 and the preparations for operation.