

Neutral Beam Scientist

CHD-068

Reports to Line Manager:	Neutral Beam (NB) Section Leader, Heating and Current Drive Division, Department for CODAC & IT, Heating & CD, Diagnostics	Job Code:	CHD-068
Direct Employment:	Not Required	Grade:	P4

Purpose

The candidate will work in the field of Neutral Beam (NB) Heating and will be responsible for activities leading to the procurement of the NB heating and current drive injectors and the diagnostic NB injector.

The scientist will work closely with the Neutral Beam Heating Section Leader, to ensure that the R&D necessary for the successful realisation of the ITER NB injection system is carried out; to coordinate, direct and design R&D activities for the ITER NB system and to prepare ITER task agreements, interface documentation and procurement arrangement documentation.

china

eu

india

japan

korea

ruusia

usa

Major Duties/Responsibilities

- Keeps abreast of worldwide developments in NB injection technology and also gains and sustains thorough knowledge of the ITER NB system including all the associated technology and interfaces;
- Prepares documentation for procurement arrangements for the ITER NB system including interface documentation;
- Interacts with ITER or the Domestic Agency (DA) staff responsible for NB system interfaces;
- Develops and writes the ITER task agreements for design and R&D activities needed to create the ITER NB injectors;
- Coordinates R&D and design activities carried out under ITER task agreements and contracts;
- Assist the Section Leader in the daily supervision and direction of the group, contractors and DA staff working on neutral beams;
- Maintains a strong commitment to the implementation and perpetuation of ITER safety program, values and ethics.

Qualifications and Experience

- **Education:**
 - Degree at least equivalent to 8 years of study after the High School Diploma in Physics or Engineering (e.g. PhD).
- **Technical experience:**
 - At least 10 years' experience with High Power Neutral Beam Systems, especially in their design and operation of which 5 at international level;
 - Extensive knowledge of NB Injector Physics and Engineering;
 - Thorough knowledge of negative ion beam production.
 - Knowledge of project management tools.

- ***Social Skills:***
 - Capability to work in a multi-disciplinary environment;
 - Ability to work effectively in a multi-cultural environment;
 - Capacity to work in a team and to promote team work.
- ***Language requirements:***
 - Fluent in English (written and spoken);
 - Ability to communicate in French is an advantage.
- ***Computer and IT skills:***
 - Good working knowledge of word processing and spreadsheet software;
 - Knowledge of Project management tools.

Direct Supervisor and Interfaces

- Reports directly to the NB Section Leader who reports to the Heating and Current Drive Division Head.

Authority / Approval Levels

This position has authority and approval levels defined by the Section Leader for his/her scope of work.

Measures of Effectiveness

- Successfully manages procurement arrangements with the DA's;
- Effectively carries out the R&D or design work done by him/herself or others under his/her supervision;
- Successfully completes ITER tasks and contracts on time;
- Successfully maintains good team spirit within the NB group and good relations with the interfacing systems.