

Ion Cyclotron Heating & Current Drive Antenna Technical Officer

CHD-064

Reports to Line Manager:	Radio Frequency (RF) Section Leader, Heating & Current Drive Division, Department for CODAC & IT, Heating & CD, Diagnostics	Job Code:	CHD-064
Direct Employment:	Required	Grade:	G3

Purpose

The Ion Cyclotron (IC) system is designed to inject 20 MW of power into the plasma (frequency range 40 to 55 MHz) and will comprise several sub-systems for the transmission of high radio-frequency power (\sim 3MW) from the sources to the plasma.

This technical assistant will participate in the procurement of IC sub-systems and, in particular, of IC antennae. In addition, he/she will interact with each Domestic Agency (DA) in charge of procurement to ensure compliance and prepare the parts integration.

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eu	Major Duties/Responsibilities
india japan korea russia usa	 Assists with the development, specification, procurement and installation of the IC Heating & Current Drive (H&CD) parts; Develops some of the interfaces of the IC H&CD subsystems, especially those with Radio Frequency sources. Coordinate the R&D and RF aspects of the IC antennae. Assists to identify and require needed services to the IC system (e.g. electrical power and cooling); Assists in the development of an optimum IC systems layout in the Radio Frequency (RF) Building
	 Assists in the conception of an IC subsystems installation plan; Assists in the preparation of the IC systems installation on ITER; Shows strong commitment to the ITER safety program and enforces it through individual behaviour and in his/her organization; Maintains a strong commitment to the implementation and perpetuation of ITER values and ethics.

Qualifications and Experience

- Education:
 - Degree equivalent 3 years of study after the High School Diploma in a relevant area;
- Technical experience:
 - Experience with the design construction and integration of high frequency or complex systems, power electrical systems is required;



- Familiarity with some aspects of mechanical and/or electrical engineering design for Tokamak systems would be an advantage (e.g. transmission line routing, high power antennas, vacuum systems, microwave and cabled electrical transmission, water cooling systems and mechanical handling schemes);

• Project experience:

- At least 5 years' experience of working on a project of similar technical complexity to that of the ITER IC H&CD system.
- Social Skills:
 - Ability to work effectively in a multi-cultural environment;
 - Ability to work in a team and to promote team work.
- Language requirements:
 - Fluent in English (written and spoken).
- Computer and IT skills:
 - Microsoft office programs.

Direct Supervisor and Interfaces

• Reports to the RF Section Leader.

Authority / Approval Levels

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

Measures of Effectiveness

- Successful development of the specification, procurement and installation of ITER IC system allocated parts;
- Successfully develops some of the IC system interfaces;
- Successfully develops the specification and provision of the services to the IC such as electrical power and cooling;
- Successfully supports the IC project needs.