

Ion Cyclotron Systems Integrator Technical Officer

CHD-066

Reports to Line Manager:	Ion Radio Frequency Section Leader, H&CD Division, Department for CODAC & IT, Heating & CD, Diagnostics	Job Code:	CHD-066
Direct Employment:	Required	Grade:	G4

Purpose

To support the design and engineering coordination of the Ion Cyclotron (IC) System including the power supplies, sources, transmission lines, antennae and auxiliary systems. The technical officer will share responsibility in coordinating the design work with the Domestic Agencies (DA) providing in-kind procurement of components. He/she will also share the integration of these components into the overall Ion Cyclotron (IC) System which will include the use of reliability engineering. In addition, the individual will assist in the preparation of technical specifications, detailed design descriptions, contract monitoring and Quality Assurance (QA) support.

china

eu

india

japan

korea

ru^ssia

usa

Major Duties/Responsibilities

- Provides engineering support for the integration of the subsystems (including auxiliaries) into the overall IC plant design;
- Evaluates the design of the subsystems in regards to the RF propagation, thermal-mechanical properties and system integration;
- Defines technical specifications and provides associated documentation of the IC subsystems;
- Provides reliability assessment and optimization of the IC plant and its subsystems;
- Coordinates engineering design activities both at the ITER site and the DAs;
- Follows-up with the manufacturing and procurement progress;
- Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.

Qualifications and Experience

- **Education:**
 - Degree equivalent to 3 years of study after the High School Diploma in Microwave Engineering;
 - A strong background in Thermal-Mechanical Engineering is highly desirable.
- **Technical experience:**
 - At least 8 years' experience with designing and/or installing EC systems, working on all EC plant sub-systems (e.g. launchers, transmission lines, gyrotrons...), and specific areas (e.g. microwave properties, thermo-mechanical studies, etc.);
 - Experience working on international projects and coordinating IC system design activities between multiple institutions is desirable;

- Ability to adapt changes in the implementation of subsystems and auxiliaries, associated with an IC plant;
 - Experience in QA would be useful.
- ***Social Skills:***
 - Ability to work effectively in a multi-cultural environment and to adapt to a wide variety of cultures;
 - Ability to work in a team and to promote team work;
 - Capable of demonstrating individual leadership.
- ***Language requirements:***
 - Fluent in English (written and spoken);
 - Fluency in either Russian or Japanese is useful but not essential.
- ***Computer and IT skills:***
 - Experience with Microsoft products is required;
 - Experience with CATIA, ANSYS and MATLAB (or equivalent) is useful.

Direct Supervisor and Interfaces

- Reports to the Section Leader of the RF Section;
- Acts as an interface between the ITER Organization (IO) and the DAs in developing/monitoring/evaluating contracts and task agreements.

Authority / Approval Levels

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

Measures of Effectiveness

- Successfully manages the outsourcing of engineering tasks to other IO Divisions and DAs;
- Successfully describes the IC specifications technical requirements within the allocated procurement packages;
- Successfully manages the interfaces between the IC subsystems;
- Successfully manages procurement of systems and/or components through procurement packages;
- Successfully monitors the DAs design and testing activities of IC subsystems;
- Successfully supports the IC project needs.