

IO1982 Radio Frequency Engineer - TED-154

General information

Job category	Standard
Status	Confirmed
Department	TED / Tokamak Engineering Department
Division	TED / Heating & Current Drive Division
Section	TED / HCD / Ion Cyclotron & Lower Hybrid Section

Job description

Main job	Technology - Generalist
Title of the position	Radio Frequency Engineer - TED-154
Job family	Engineer - 2
Grade	P3
Direct employment	No
Purpose	<p>To perform and check parametric studies and optimizing response of the Radio Frequency (RF) components in order to evaluate, verify and ensure that the RF design of components and subsystems are fully ITER compliant.</p> <p>To perform development of RF model of the structures for the Ion Cyclotron Resonance Heating (ICRH) antenna and other transmission line components.</p> <p>To assist the team in the circuit modelling of part or whole of the radiofrequency systems</p> <p>To contribute with the Domestic Agency (DA) to the integration of the closed loop controls of the ICRH system.</p> <p>To prepare the commissioning procedure of the matching system and antenna.</p> <p>To take part the preparation of the IC operation which includes operation procedure, interface with operation actors (CODAC, Plasma Control System, etc.).</p>
Main duties / Responsibilities	<p>Analyses and reviews RF modelling of the ICRH antenna;</p> <p>Develops RF models of some transmission line components;</p> <p>Develops RF circuit modelling of part (like the matching system) or whole of the ICRH system;</p> <p>Contributes to the preparation and reviews of related documentation, which includes procurement arrangements, interface management, schedule, and technical specifications;</p> <p>Supports the preparation of the IC operation in particular assists with the work performed as part of the data acquisition and operation interface;</p> <p>Reports variances on all technical, cost and schedule aspects and proposes recovery actions when necessary;</p> <p>Supports effective risk identification, mitigation and management;</p> <p>May be required to work outside normal working hours, including nights, weekends and public holidays;</p> <p>May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Reports to Ion Cyclotron Lower Hybrid Section Leader;</p> <p>In response to requests from the Director-General (DG) and/or Tokamak Engineering Department (TED) Head, or proactively, informs the DG/ TED Head of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p>
Measures of effectiveness	<p>Manages efficiently the development of RF models within the defined cost, quality and schedule;</p> <p>Efficiently assesses the antenna RF design;</p> <p>Provides electrical RF circuit models of ICRF system within the defined cost, quality and schedule;</p> <p>Maintains effective communications with all Parties delivering ICRF subsystems.</p>

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Physics, Science or Engineering
Level of experience	At least 8 years
Technical experience/knowledge	<p>At least 8 years' experience including an expertise in RF modelling and operation of high power RF system;</p> <p>Successfully demonstrated mastering of modelling of RF structures in the MHz range of frequencies;</p> <p>Experience in effective Quality Assurance (QA) management and implementation would be an advantage;</p> <p>Qualifications and experience in an RF environment and knowledge/expertise in the use of HFSS would be an advantage;</p> <p>Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit, Ability to communicate effectively, Ability to work under pressure, Ability to effectively multi-task
General skills	<p>Ability to facilitate dialogue with a wide variety of contributors and stakeholders;</p> <p>Ability to adjust communication content and style to deliver messages;</p> <p>Ability to persist in the face of challenges to meet deadlines with high standards;</p> <p>Ability to model high standards of team mindset, trust, excellence, loyalty and integrity.</p>
Languages	English (Fluent)
Specific skills	MS Office professional (Access, Project, Publisher, Visio), MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<p>Microsoft Office software required;</p> <p>Experience with HFSS or equivalent is required</p>