

IO2130 Fusion Power Engineer Resp. Officer TED-202 & 233

General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Port Plugs & Diagnostics Integration Division
Section	TED / PPD / Ex-Vessel Diagnostics Section

Job description

Main job	Engineering - Diagnostics
Title of the position	Fusion Power Engineer Resp. Officer TED-202 & 233
Job family	Coordinating Engineer
Grade	P4
Direct employment	Not required Two openings
Purpose	<p>1) One position of Fusion Power Responsible Officer at P4:</p> <p>Oversee the design and implementation of ITER's neutrons systems. Lead all associated projects by specifying, monitoring and coordinating work with internal and external stakeholders as required whilst ensuring timely operation of the systems.</p> <p>2) One position of Fusion Power Engineer at P3:</p> <p>Develop the designs of neutron/gamma diagnostics systems and supporting infrastructures. Support the manufacturing, installation, commissioning and operation of these systems.</p>
Background	<p>The Port Plugs and Diagnostic Integration Division has the function to provide all the Diagnostics for ITER along with the engineering infrastructures and test systems to support these. The Ex-Vessel Section takes responsibility for approximately half of the diagnostics and guides them through design, manufacturing, installation and commissioning always keeping efficient operation in view. The Division also has an In-Vessel Diagnostics Section along with an Engineering Section that manages engineering justification and integration.</p> <p>Please note that an organizational restructuring is planned in accordance with the needs of the organization and the evolution of the project phases. In this context, the unit of assignment of the present position may be updated in late 2019, early 2020.</p> <p>Manages the scope, schedule, construction, commissioning and procurement of the associated diagnostic systems, /supporting hardware and related documentation; Prepares technical specifications in support of procurement actions; Prepares installation and commissioning activities; May be requested to be part of any of the project/construction teams and to perform other duties in support of the project; May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays.</p>
Main duties / Responsibilities	<p>Specific to the Fusion Power Responsible Officer at P4:</p> <p>To be responsible and support the design, development and implementation of all the fusion-product diagnostics on ITER; Coordinates ongoing diagnostic design and integration activities; Coordinates research and development as required to fulfill the project needs; Provides advice in matters related to the Neutron Diagnostic systems and neutronics for ITER's construction;</p>

Measures of effectiveness	Reports variances on all technical, cost and schedule aspects and proposes any necessary related action plans; Co-ordinates the Neutron calibration activities.
	Specific to the Fusion Power Engineer at P3:
	Supports the Diagnostics team and DA teams in the evaluation and development of neutron / gamma diagnostics from the design phase up to their delivery on site; Preparation and maintenance of interface documentation; Updates and takes through review all relevant supporting engineering documents, diagrams and databases; Supports or leads the Design Review processes when appropriate.
	For both vacancies:
	Completes work packages to agreed deadlines; Develops and approves interface documentation, schematics plans and databases; Develops and approves technical documentation for procurement to a high quality and in a timely manner; Develops and reviews installation and commissioning plans; Collaborates and communicates well with technical partners in the Domestic Agencies and IO.
	For the Fusion Power Responsible Officer at P4:
	Manages interfaces efficiently with the Construction teams and Port Integration teams to ensure implementation of the systems as required; Coordinates efficiently diagnostic design and integration activities; Ensures that Nuclear Safety is suitably managed and surveyed accordingly.

Applicant criteria

Technical experience/knowledge	Level of study	Master or equivalent degree
	Diploma	Nuclear Engineering or Applied Nuclear Physics
	Level of experience	At least 10 years
		For the Fusion Power Responsible Officer at P4:
		At least 10 years' experience in the development and integration of neutron diagnostic systems in a large scale facility including coordination responsibilities; Experience of nuclear systems/devices and mechanical & engineering design for neutron/gamma diagnostics systems.
General skills		For the Fusion Power Engineer at P3:
		At least 8 years' experience in the field of nuclear diagnostic engineering including project engineering; Experience of nuclear systems/devices and mechanical & engineering design for neutron/gamma diagnostics systems.
		Education:
		Masters' degree or equivalent in Nuclear Engineering or Applied Nuclear Physics or other relevant discipline; The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
		Develop and review specifications for modelling and simulation; Follow-up and review CAD activities supported by mechanical design experience for neutron systems; Interpret international engineering codes & standards, and master software tools (eg MCNP); Analyze and prepare various reports on project progress, non-conformances, deviations, etc..
		Specific to the Fusion Power Responsible Officer at P4:
		Proven experience of leadership and coordination of teams/activities; Experience in effective Quality Assurance management and implementation would be an advantage;

	Identify issues and delays in projects and take corrective action within scope of responsibility; Propose recovery plan and ensure its implementation; Resolve complex and challenging technical issues or problems, drawing on experience and expertise; Provide coaching and guidance as needed within the organization.
Languages	English (Fluent)
	Collaborate: Ability to dialogue with a wide variety of contributors and stakeholders; Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;
Others	Drive results: Ability to persist in the face of challenges to meet deadlines with high standards; Manage Complexity: Ability to gather multiple and diverse sources of information to understand problems accurately before moving to proposals/solutions. Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.