

ITER 국제기구 공모 직위 직무기술서 (30차)

□ 공모 직위 : P급 3개 직위

분 야 / 소 속		업 무	Job No.
행정 (ADM)	Human Resources Division	Human Resources Responsible Officer	ADM-010
CODAC, IT 가열/진단(CHD)	CODAC Section	Embedded Controls Engineering Resp. Officer	CHD-025
		Instrumentation/Control Engineering Officer	CHD-029

IO1089 Human Resources Responsible Officer ADM010

Job description

Main job	Business Administration - Human Resources
Title of the position	Human Resources Responsible Officer ADM010
Type of contract	Project support
Grade	P4
Direct employment	Required
Supervised by:	Division Head
Purpose	To support the Human Resources (HR) Division Head to deliver strategic initiatives by designing, developing and implementing best practices, HR solutions that meet current and future business needs including performance management & change, and the design & execution of appropriate HR policies and procedures. Represents or acts for the Human Resources Division Head when needed.
Main duties / Responsibilities	<p>Drives forward the initiative to provide a customer-based HR service to the business;</p> <p>Manages and develops operational HR support effectively;</p> <p>Develops a collaborative relationship with line management;</p> <p>Provides labor law legal advice to the Iter Organization;</p> <p>Develops a cooperative relationship with staff representatives;</p> <p>Proactively develops and implements strategic initiatives;</p> <p>Develops HR policies and procedures, and ensures continuous the improvement of HR processes;</p> <p>Resolves, negotiates and drives change issues in a fast-paced work environment;</p> <p>Manages HR projects;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>
Measures of effectiveness	<p>Successfully contributes to the changes implemented within HR Division (processes, structure, policies, etc.);</p> <p>Successfully contributes to the development of projects for the Human Resources Division;</p> <p>Successfully develops relationships with the Line Management and the Staff Representatives.</p>

Applicant criteria

Level of study	Master or equivalent degree
Level of experience	At least 10 years
Technical experience	<p>At least 10 years' experience in Human Resources Management or other related area at an international level;</p> <p>Very good understanding and practice of international civil service law</p> <p>Main achievements at a senior level in a scientific and complex organization would be an advantage.</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, Positive outlook, Ability to effectively multi-task, Ability to hold and respect deadlines
Specific skills	<p>Ability to be a team player and to show strong leadership qualities;</p> <p>Flexibility, positive 'can-do' attitude, conscientious and resilient;</p> <p>Ability to be resourceful;</p> <p>Passion for HR and for its strategic value within an organization;</p> <p>Excellent communication and interpersonal skills, achieving strong working relationships and high levels of personal credibility and integrity;</p> <p>Good command of the Microsoft Office package.</p>
Languages	English (Fluent) French (Working)

IO1096 Embedded Controls Engineering Resp. Officer CHD-25

Job description

Main job	Engineering - Control system
Title of the position	Embedded Controls Engineering Resp. Officer CHD-25
Type of contract	Project engineering
Grade	P3
Direct employment	Not required
Supervised by:	Division Head
Purpose	<p>The CODAC Section is developing standards for and is responsible for integration of Plant Systems instrumentation and control (subsystems) provided by the seven ITER parties called Domestic Agencies. The number of Plant Systems is estimated to be in the order of 160 and be developed over a period of ten years. A large part of these Plant Systems will use embedded control in order to fulfill fast data acquisition and feedback control requirements. In addition, for plasma stability control and machine protection, a complex Plasma Control System has to be implemented as part of the CODAC core. These systems will run plasma pulses, read sensors coming from Diagnostics and feed corrections to actuators in Plant Systems and monitor the whole ITER devices. The CODAC Section has recently standardized the software environment EPICS as a baseline for the ITER control system. The candidate will take a leading role in developing the standards for embedded controls with an emphasis on fast controls software/hardware, signal input/output (I/O), control algorithms and integration with CODAC standards.</p>
Main duties / Responsibilities	<ul style="list-style-type: none"> - Develops standards for an embedded control platform to fulfill ITER requirements on signal I/O for embedded fast controllers; - Develops a baseline for the central controller to achieve plasma control requirements; - Develops standards for Plant System embedded control I/O; - Interfaces with diagnostics and feedback control actors in Plant Systems to establish ITER-wide embedded control standards; - Produces design documents and prototypes for ITER's needs for fast controls; - Implements algorithms and softwares for fast feedback and fast interlock event generation and handling; - Supervises contracts to assist in the development of standard embedded controllers; - Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	<ul style="list-style-type: none"> - Successfully performs System Engineering work needed to fulfill embedded fast controllers for the ITER device; - Successfully defines and enforces ITER-wide standards for embedded control functions; - Successfully defines and enforces input/output standards for embedded control; - Successfully establishes the required software environment to fully integrate the Plasma Control System in ITER standards; - Successfully interfaces with diagnostics and feedback control actors in Plant Systems to establish ITER-wide embedded control standards.

Applicant criteria

Level of study	PhD or equivalent degree
Diploma	Engineering, Physics or other relevant disciplines
Level of experience	At least 5 years
Technical experience	<p>6 - 15 years of practical experience in a research or industrial environment with a similar scope of work;</p> <p>Ability to commission and operate complex systems in large scale scientific facilities;</p> <p>Good knowledge of feedback control tools like SimuLink and Matlab;</p> <p>Basic knowledge of control theory (PI, PID, H infinity, transfer functions, etc.);</p> <p>At least 5 years of practical experience in developing and using embedded technologies (VME, PCI, cPCI, PCIe, PXI, ATCA or similar tools);</p> <p>Good knowledge of digital electronics for fast embedded control and remote input/output is an asset;</p> <p>Experience in specification, design and implementation of feedback systems and their</p>

	integration into control systems; Experience in solving complex interface problems between diagnostics, machine actuators, control systems and computing.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Specific skills	Experience in executing contracts with external partners or industrial companies; Experience with project management methodology & tools; Experience working in a large international project would be an advantage; Good knowledge of the ITER Project.
Languages	English (Fluent)
General skills	MS Office professional (Access, Project, Publisher, Visio), MS Office standard (Word, Excel, PowerPoint, Outlook), Sharepoint

IO1097 Instrumentation/Control Engineering Officer CHD-29

Job description

Main job	Engineering - Control system
Title of the position	Instrumentation/Control Engineering Officer CHD-29
Type of contract	Project engineering
Grade	P2
Direct employment	Not required
Supervised by:	Division Head
Purpose	To support the CODAC & IT Division by defining and coordinating the System Engineering life cycle of Plant Systems procured in kind from ITER's seven Domestic Agencies (DAs) in addition to following-up specification, construction, acceptance testing and integration of industrial Plant Control Systems into the supervisory CODAC control system.
Main duties / Responsibilities	<ul style="list-style-type: none"> - Develops and coordinates the engineering design of industrial plant system Instrumentation & Control; - Contributes to specification, acceptance tests, system integration and operation activities of in kind delivered plant systems; - Applies System Engineering methodologies to manage plant system Instrumentation & Control manufacturing included in procurement packages; - Interacts, according to needs, with design and manufacturing teams in DAs; - Organizes the procurement and support of standardized control components using Supervisory Control And Data Acquisition (SCADA), Programmable Logic Controls (PLCs) and Field buses; - Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	<ul style="list-style-type: none"> - Successfully establishes ITER-wide standards related to industrial controls; - Successfully organizes plant system procurement using standard methodologies; - Successfully prepares and controls the technical specifications of allocated procurement packages; - Successfully prepares acceptance tests to enable the integration of plant systems into the ITER control system; - Successfully supports the project's needs in regard to industrial controls.

Applicant criteria

Level of study	Master or higher degree
Diploma	Engineering, Science or other relevant disciplines
Level of experience	At least 5 years
Technical experience	<p>5-12 years' practical experience in a research or industrial environment with a similar scope of work;</p> <p>Expert knowledge of industrial controls is required;</p> <p>Proven project management experience is mandatory;</p> <p>A clear understanding of the problems linked to planning and production of a large facility's control system is required;</p> <p>Experience in implementing control systems with high availability and reliability is required;</p> <p>A solid background in physics would be an asset.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Specific skills	<p>Demonstrated managerial skills to lead a team of 10 to 15 engineers;</p> <p>Good knowledge of computer operating systems, software development tools, programming languages, physical network and network protocol standards are mandatory.</p>
Languages	English (Fluent)
General skills	MS Office professional (Access, Project, Publisher, Visio), MS Office standard (Word, Excel, PowerPoint, Outlook), Sharepoint