

ITER 국제기구 공모 직위 직무기술서 (제220차)

○ 1개 직위

구분	분야	소속	직위	Job No.	등급
①	과학·운전 (SCOD)	Science & Operations Department	Science Division Head	SCOD-056	D1

IO1906 Science Division Head- SCOD-056

General information

Job category	Standard
Status	Published
Department	SCOD / Science & Operations Department

Job description

Main job	Science - Generalist
Title of the position	Science Division Head- SCOD-056
Job family	Head of Division
Grade	D1
Direct employment	Required
Purpose	<p>To manage the ITER fusion science research program, in particular by providing leadership in all matters related to ITER plasma performance projection, coordination of ITER and worldwide tokamak physics R&D activities, development of ITER's plasma control system and the establishment of a comprehensive plasma simulation and integrated data analysis capability. In particular, to manage scope, schedule, cost, risk and quality of the related work. To play a leading role in the preparation of the framework for the implementation of the ITER scientific program during Operations and in positioning ITER to be a facility and a research team with a world-class fusion science and engineering program.</p>
Main duties / Responsibilities	<p>-Executes and delivers the Detailed Work Schedule for scope budget and schedule of the systems in the Division and contributes to the staffing of the Division;</p> <p>-Provides effective leadership for the Division ensuring team members are motivated and constantly developing their skills and experience;</p> <p>-Establishes a comprehensive analysis of fusion plasma behaviour in ITER's operating scenarios, specifies and supervises the development of tokamak physics databases, analysis and simulation tools, and develops R&D activities to resolve challenges in meeting ITER's performance goals;</p> <p>-Develops an international research organization that engages all ITER Members and facilitates world-class research in close collaboration with the Members' research activities;</p> <p>-Oversees the development of the ITER Plasma Control System (PCS) to provide an integrated approach to the control of burning plasmas and ensure the achievement of ITER's performance goals;</p> <p>-Supervises, in collaboration with the Members' fusion communities, the development of an integrated modelling analysis suite (IMAS) for the simulation of burning plasmas in ITER to support the preparation and planning of ITER operation and the evaluation of experimental results;</p> <p>-Manages the provision of physics support to the design of key ITER systems, in particular (but not exclusively): plasma-facing components; disruption detection, avoidance and mitigation systems; heating and current drive systems; and diagnostics; maintains close liaison with all relevant operating units to ensure the timely provision of design input and supporting analysis;</p> <p>-Plays a leading role in the development of the framework and planning for the ITER experimental program during Operations in close collaboration with the key stakeholders in the ITER project and across the Members' fusion research communities; ensures the continued review and updating of the ITER Research Plan in support of the planning for Operations;</p> <p>-Provides leadership to the development of training programs in fusion science for students and young researchers;</p> <p>-Builds and maintains relationship with internal and external stakeholders;</p> <p>-Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;</p> <p>-May be required to work outside normal working hours, including nights, weekends and public holidays;</p> <p>-Performs other duties in support of the project schedule;</p> <p>-May be requested to be part of any of the project/construction teams and to perform other duties;</p> <p>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p>

Measures of effectiveness	<ul style="list-style-type: none"> -Reports to the Head of Science and Operations Department; -Interacts extensively with management and responsible officers within the ITER Organization Central Teams and Domestic Agencies; -Collaborates closely with fusion community and the Members' fusion facilities to implement research activities based on ITER's high priority physics needs; -In response to requests from the Director-General, or proactively, informs the DG 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.
	<ul style="list-style-type: none"> -Proactively supports the Department Head in implementing the ITER scientific and technical scope, in particular, in the areas of plasma performance analysis, physics R&D, research and operations planning, and integrated commissioning; -Manages efficiently the managers, physics research and analysis activities and ensures appropriate physics support to on-going design and manufacturing activities across the project; -Establishes productive collaborations with the ITPA, ISFN, ION and Members' academic and fusion research institutions to address key physics R&D issues and to prepare for efficient exploitation of ITER; -Maintains excellent communications with all IO units and with stakeholders across the Members' fusion research communities; -Manages effectively the continued development of key documentation, such as the ITER Research Plan, required during the Operations Phase.

Applicant criteria

Level of study	PhD or equivalent degree
Diploma	Engineering Diploma or equivalent in fusion plasma
Level of experience	At least 15 years
Technical experience/knowledge	<ul style="list-style-type: none"> -At least 15 years' experience in fusion plasma physics research; -At least 10 years' experience in research and/or operational aspects of fusion facilities and in coordinating research teams within an international framework; -Outstanding contributions to fusion science; -Demonstrated experience in the formulation and implementation of research and/or development projects in fusion physics, plasma engineering or related areas; -Demonstrated experience in the successful interaction with high-level stakeholders in the international fusion research program.
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <ul style="list-style-type: none"> -At least 10 years' experience of managing research and/or project teams in major fusion research organizations; -Ability to provide effective leadership, motivating and developing team members' skills and experience.
General skills	<ul style="list-style-type: none"> -Ability to negotiate with influence and convince internal and external stakeholders; -Ability to promote high visibility of shared contributions to goals; -Ability to adjust communication content and style to deliver messages to diverse audiences; -Ability to analyze multiple and diverse sources of information to define problems accurately; -Ability to model high standards of diversity, trust, excellence, team mindset, integrity and loyalty.
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> -Computer and IT skills consistent with managing within a complex international project; -An understanding of the role of and requirements for large scale fusion plasma simulation in the scientific programme of major fusion facilities would be an advantage.