ITER 한국사업단 공고 제2010 - 010호

국제핵융합실험로(ITER) 공동개발사업
ITER 국제기구 채용후보자 모집 공고

국제핵융합실험로(ITER) 공동개발사업을 담당하는 ITER 국제기구에서 전문인력 5개 직위에 대한 참여국들의 추천을 요청한 바, 채용 후보자를 붙임와 같이 공모하오니 많은 응모바랍니다.

2010년 11월 12일

ITER 한국사업단장

ITER 국제기구 채용후보자 추천 공모(34차) 개요

1. 국제핵융합실험로(ITER) 공동개발사업

❑ 사업 목표

○ 핵융합 반응을 통해 대용량 에너지 생산 가능성을 최종적으로 검증하기 위한 국제핵융합실험로(ITER) 공동건설 및 운영

※ **ITER** : **I**nternational **T**hermonuclear **E**xperimental **R**eactor

❑ 사업 내용

○ **주요내용** : ITER 장치 건설·운영 및 ITER 국제기구 운영 참여

○ **참 여 국** : 한국, EU, 미국, 일본, 중국, 러시아, 인도 등 7개국

❑ 사업 추진조직

○ **국제사업 추진조직** : ITER 국제기구

- 우리나라를 포함한 7개국(한국, EU, 미국, 일본, 중국, 러시아, 인도)이 공동으로 참여하여 ITER 사업을 수행하기 위해 '07.10월 출범한 국제기구임
- ITER 공동이행협정에 따라 참여국 인력에 한해 ITER 국제기구 근무가 가능하며, 직원 선발은 각 참여국 전담기관의 추천을 받은 자를 대상으로 이루어짐

○ **국내 전담기관** : ITER 한국사업단 (국가핵융합연구소 內)

2. 공모분야 및 근무조건

❑ 공모직위

❍ **5개 직위** (D급 1개, P급 4개)

분 야 / 소 속		직 위	Job No.	등급
중앙 엔지니어링 (CEP)	Plant Engineering Division	Head of Plant Engineering Division	CEP-058	D1
	Tritium Plant Section	Tritium Plant Section Leader	CEP-015	P5
		System Integration Responsible Officer	CEP-032	P4
토카막 (Tokamak)		Tokamak Integration Responsible Officer	TKM-002	P5
사업관리 (Project Management)		Project Planning & Integration Resp Officer	PRO-091	P4

❑ 근무조건

○ 기　　간

- 직접고용 : 최대 5년
- 파　　견 : 3~5년(파견기관과의 협의 하에 연장 가능)

○ 채용예정일 : 2011년 5월 이후(예상)

※ ITER 국제기구의 채용심사 일정에 따라 조정될 수 있음

○ 근 무 지 : ITER 국제기구(프랑스 카다라쉬)

○ 보수수준 : ITER 국제기구 인사규정에 따름

3. 신청자격 및 선발방법 등

❑ 신청자격

○ ITER 국제기구에서 요구하는 자격요건을 만족하는 자

○ 해당분야에 대한 충분한 전문지식 및 경력을 갖춘 자

○ 직무수행에 필요한 어학능력 등 국제기구 업무수행 능력을 갖춘 자

※ 어학능력 기준점수(기타 공인시험 성적은 아래 점수로 환산적용)

TOEFL		TOEIC	TEPS
CBT	iBT	800점 이상	689점 이상
240점 이상	94점 이상		

※ 영어권 국가 2년 이상 체류경험자 및 영어권 국가 학위취득자 제외 - 증빙서류 첨부

○ 기타 국외파견에 결격사유가 없는 자 등

※ 공무원이 응모할 경우『공무원 임용규칙』제63조의 요건을 충족하는 자에 한함

❑ 선발방법

(1차) 우리나라 채용후보자 선정(국내)

○ 응모자를 대상으로 서류심사를 통해 면접대상자 선발

○ 면접전형을 통해 우리나라 채용후보자 선발

○ ITER 국제기구에의 추천

※ 단, 추천을 받았다고 해서 ITER 국제기구에 채용되는 것은 아니며, 각 참여국으로부터 추천된 채용후보자들과의 경쟁을 통해 ITER 국제기구의 선발절차에 따라 최종 선발됨

(2차) ITER 국제기구 선발절차(국외)

○ ITER 국제기구는 각 참여국으로부터 추천된 채용후보자들에 대해 서류 심사 진행

○ 서류심사에 합격자에 한하여 면접(화상면접) 실시 및 최종선발

4. 제출서류 및 방법

❑ 제출서류

[국문]

○ 신청서 1부(※ 개인 자격으로 응모 시 기관장 직인 생략 가능)

○ 국문이력서(양식 참조)

○ 주요경력 소개서(별도양식 없음)

※ 국제기구 및 국제회의 활동 관련 경력, 국외교육훈련 및 연수경력 등 명시 요망

[영문]

○ ITER Personal History Form 1부

○ Motivation Letter(CV, 주요경력소개서 포함) 1부

○ 영문 이력서 1부(별도양식 없음)

※ Personal History Form, Motivation Letter, 영문이력서는 반드시 MS-Word로 작성하며, 인터뷰의 근거자료가 되는 중요한 내용이므로 신중하게 작성 요망

[증빙서류]

○ 졸업증명서, 학위증명서, 경력증명서, 자격증 사본 등

○ 어학능력 증빙자료(어학시험 성적표 또는 영어권 국가 학위 및 경력증빙 등)

❑ 제출기간 및 방법 등

○ 제출기간 : **'10. 11. 12 (금) ~ 12. 2 (목) 18:00 까지**

○ 제출방법 : 방문접수 또는 우편접수(마감일 18시 이전 도착분에 한함)

○ 제 출 처 : (305-343) 대전시 유성구 신성로 14-1번지(장동 60-1번지)
국가핵융합연구소 ITER 한국사업단

○ 문 의 처 : ITER 국제기구 파견담당(042-879-5545)

※ 서류 제출 시 반드시 해당서류 전자파일 제출 또는 이메일 전송 (jwko@nfri.re.kr)

❑ 공모일정

일 정	추 진 내 용
'10.11.12~'10.12.2	○ 응모서류 접수
'10.12.3~'10.12.10	○ ITER 국제기구 채용후보자 선발 심사
'10.12.13~'10.12.15	○ ITER 국제기구로의 추천

※ 응모자 심사 결과 최종 합격자에 한해 ITER 국제기구에 추천하며, 합격자는 개별 통보 예정

※ 상기 공모일정은 사정에 따라 조정될 수 있음

❑ **참고사항**

○ 우리나라 채용후보자 선정 단계에서 서류심사 및 채용후보자 선정 결과는 선발자에 한해 개별통보

○ ITER 국제기구의 서류심사 합격 시 면접평가 일정 개별통보

※ 접수된 서류는 일체 반환하지 않으며, 기재된 사항이 사실과 다르거나 허위 기재 시, 선발결과를 무효로 할 수 있음

【붙 임】

1. ITER 국제기구 공모 직위 직무기술서(Job Description)
2. 신청서, 국문이력서, 주요경력소개서 양식
3. ITER Personal History Form 양식
4. Motivation Letter(CV, 주요경력소개서 포함) (작성 예)

ITER 국제기구 공모 직위 직무기술서 (34차)

□ **공모 직위 :** 5개 직위

분 야 / 소 속		직 위	Job No.
중앙 엔지니어링 (CEP)	Plant Engineering Division	Head of Plant Engineering Division	CEP-058
	Tritium Plant Section	Tritium Plant Section Leader	CEP-015
		System Integration Responsible Officer	CEP-032
토카막 (Tokamak)		Tokamak Integration Responsible Officer	TKM-002
사업관리 (Project Management)		Project Planning & Integration Resp Officer	PRO-091

D 급

IO1111 Head of Plant Engineering Division - CEP-058

Job description

Main job	Engineering - Facilities engineering
Title of the position	Head of Plant Engineering Division - CEP-058
Type of contract	Line management
Grade	D1
Direct employment	Required
Purpose	To be responsible for the integration of all design aspects, construction planning and installation of Plant Support Systems as follows: Cooling Water System (Work Breakdown Structure 2.6), Cryoplant and Cryodistribution System (WBS 3.4), Hot Cell and Radwaste Processing System (WBS 2.3). To provide leadership for Plant Engineering Division members and work collaboratively with ITER management, users of plant support systems, and with multiple Participant Teams to complete the engineering design, installation, testing and commissioning of Plant Support Systems.
Main duties / Responsibilities	Coordinates and collaborates with the Plant Engineering Division Section Leaders and section members to complete the Plant Support Systems on time and within budget; Ensures that functional requirements for each Plant Support System are specified and documented and that functional requirements meet user needs; Anticipates, averts and/or resolves issues that arise regarding the quality and design each of the Plant Support Systems by collaborating with the Integrated Product Team's (IPTs); Coordinates the collection and reporting of project management information including progress on design and fabrication activities performed by the IPTs; Ensures consistency regarding integration of the design with the rest of the ITER system and components and that lessons learned from one WBS element are transferred to other WBS elements; Coordinates completion of Procurement Arrangements for Plant Support Systems, including design description documents and technical specifications; Supports the licensing activities in close contact with the Safety Control Section; Supports conflict resolution regarding the schedule and cost of the Plant Support Systems construction; Provides effective leadership for the Division ensuring team members are motivated and constantly developing their skills and experience; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	Successfully communicates with the Plant Engineering Section Leaders to foster a collaborative and productive working environment; Maintains cost and schedule; Successfully implement the baseline which was approved in 2010 Successfully communicates and collaborates with other IPTs/ organizations within the ITER organization; Successfully completes the tasks assigned under Main Duties / Responsibilities above

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Mechanical, Chemical or Nuclear Engineering
Level of experience	At least 10 years
Technical experience	At least 15 years' experience in engineering management, mechanical design, or systems engineering; In-depth technical understanding of complex design and construction (e.g., nuclear plant systems and components); Knowledge of water chemistry, construction, waste processing, hot cell operations, and cryogenic systems will be considered an advantage. Project experience: Knowledge of the design of tokamak fusion machine systems will be considered an advantage; Basic Project Management experience is required.

Project experience	10 years
People management experience	10 years
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, Collaborative, Positive outlook
Specific skills	Ability to develop and maintain effective international contacts in the plant system engineering discipline At least 10 years' managerial experience on a wide range of project-related experience or plant design and construction.
Languages	English (Working)

P 급

IO1106 Tritium Plant Section Leader CEP-015

Job description

Main job	Engineering - Fusion
Title of the position	Tritium Plant Section Leader CEP-015
Type of contract	Project engineering
Grade	P5
Direct employment	Required
Purpose	To lead the ITER Tritium Plant section and manage all design aspects and integration of the whole Tritium Plant, including Research and Development (R&D), the detailed design and layout of primary tritium processing and confinement systems for the Tokamak Complex and Hot Cell, the development of technical specifications and procurement arrangements, and the implementation of the ITER Radiological Protection and Environmental Monitoring systems.
Main duties / Responsibilities	Acts as the Responsible Officer for the Tritium Plant and all ITER tritium confinement systems; Compiles and assesses all Tritium Plant systems requirements; Manages all design aspects of primary tritium processing and detritiation and confinement systems; Coordinates the integration and layout of the Tritium Plant as a whole; Manages all interfaces of Tritium Plant associated systems and components, particularly those that contain or handle tritium, and interfaces to buildings, including penetrations and supports; Ensures the consistency of the Tritium Plant procurement and construction planning, including tritium testing and commissioning; Coordinates and directs the work of the Tritium Plant system engineers and the contributions from the Domestic Agencies (DAs); Implements the ITER Radiological and Environmental Monitoring Systems (REMS); Liaises with the DAs with respect to Procurement Packages; Provides support in the licensing activities and assessment of safety related functions in close contact with the safety group; Supervises procurement and contracts with suppliers; Provides effective leadership for the Section ensuring team members are motivated and constantly developing their skills and experience; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	Successfully builds-up and executes all functions as described above; Prepares high-quality materials required for the project in a timely manner; Successfully communicates with Tritium Plant collaborators; Manages and integrates the contributions from the DAs in Tritium Plant design, in-kind contribution and R&D.

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Master/PhD nuclear technology/chemical engineering
Level of experience	At least 10 years
Technical experience	At least 10 years of experience in the development, design, manufacturing, commissioning, operation, licensing and start-up of large inventory nuclear facilities; Demonstrated experience in the safe handling of tritium systems and their technical requirements and safety functions on an industrial scale and in the safe handling of other hazardous and/or radioactive materials; Wide-ranging knowledge of gas processing technologies, isotope effects, vacuum technology, analytical methods, heterogeneous catalysis, gas (hydrogen)/solid interactions, and metal physics; Knowledge of all aspects of fusion science and technologies is preferred.
Project experience	8 to 10 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
	Project experience:

Specific skills	Experience in contract and project management, preferably in an international environment. People Coordination experience: Demonstrated experience working on large technical projects and coordinating tasks of large teams; Ability to lead a team and provide guidance to tritium experts in the DAs.
Languages	English (Working)

IO1101 System Integration Responsible Officer - CEP 032

Job description

Main job	Engineering - Generalist
Title of the position	System Integration Responsible Officer - CEP 032
Type of contract	Project engineering
Grade	P4
Direct employment	Required
Purpose	To act as responsible officer in support of the Fuel Cycle Engineering Division (FCED) and the Tritium Plant Section through the development of detailed design guidelines, performance specifications, and safety, security, and quality standards. To ensure the application of all technical rules, safety and security guidelines and quality management throughout the procurement of FCED components and systems. To support the FCED Head and Section Leaders in all aspects relating to budgeting, scheduling and planning activities. To coordinate Fuel Cycle systems integration issues through the Fuel Cycle Integrated Project Team (FC-IPT), specifically in areas relating to safety, security, quality assurance (document control, codes and standards) and Near Term Work Planning (schedules and resources) and to serve as the Technical Responsible Officer (RO) for Tritium Plant systems (Tokamak Exhaust Processing, Storage and Delivery System).
Main duties / Responsibilities	Develops FCED safety design requirements Rapport Préliminaire de Sûreté follow-up, HAZOP studies (including confinement for all ITER systems), licensing, guidelines, and standards; Oversees the further detailing of FCED security and sensitive information handling requirements and guidelines; Supports Fuel Cycle systems integration through FC-IPT; Develops the FCED Quality Management Plan, including document control, codes and standards; Collaborates with other ITER Groups on tritium related issues; Develops procurement and installation schedules and procedures; Oversees interfaces issues within the Fuel Cycle Systems; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	Prepares high-quality design guidelines and technical rules in a timely manner; Successfully manages systems' interface issues within the FCED and the Tritium Plant; Successfully builds-up and executes all functions as described above.

Applicant criteria

Level of study	PhD or equivalent degree
Diploma	Science, Engineering or other relevant discipline.
Level of experience	At least 10 years
Technical experience	At least 10 years of experience in R&D, design, commissioning and/or engineering of nuclear facilities; Demonstrated experience with the design, operation, licensing and/or start up of large inventory nuclear facilities; Demonstrated experience in the design and safe handling of tritium and/or other hazardous/radioactive materials on an industrial scale is preferred; Demonstrated experience in safety, design codes and standards and in quality assurance policies and procedures; Prior experience with major items of equipment purchasing, facility design, permitting procedures and construction is preferred.
Project experience	2 to 4 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Specific skills	Demonstrated capability in coordinating the tasks of team members for a large-scale project is required.

Languages	English (Working) French (Working)
General skills	Cobra, MS Office professional (Access, Project, Publisher, Visio), SAP

IO1104 Tokamak Integration Responsible Officer TKM-002

Job description

Main job	Engineering - Fusion
Title of the position	Tokamak Integration Responsible Officer TKM-002
Type of contract	Project engineering
Grade	P5
Direct employment	Not required
Purpose	- To assist the Deputy Director-General (DDG) in successfully constructing the tokamak machine within the given costs and schedule through the management and coordination of all integration activities within the Tokamak (TKM) Directorate. - To act as the main interface between the DDG and all TKM Divisions as well between the TKM Directorate and other ITER Directorates & Departments for integration matters.
Main duties / Responsibilities	Manages and coordinates all integration activities within the Tokamak Directorate which includes defining and coordinating interfaces, resolving conflicts, assisting with space allocations, etc; Works closely with all Divisions within the Tokamak Directorate and with other Directorates & Departments to ensure interface problems are identified and resolved in a timely manner; Prepares and implements coordination procedures to ensure the effective management of tokamak integration; Conducts reviews of various systems as required to identify and resolve coordination issues within the Tokamak Directorate; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	Successfully and effectively manages and coordinates technical activities within the Tokamak Directorate; Successfully maintains effective communication between all Divisions of the Tokamak Directorate and with all other ITER Directorates & Departments as well as external collaborators; Ensures a successful integration of the tokamak subsystems and interface with other systems.

Applicant criteria

Level of study	Master or higher degree
Diploma	Engineering, Physics or other relevant discipline
Level of experience	At least 10 years
Technical experience	More than 10 years' experience in the design, construction, system engineering and integration of large scientific and/or nuclear projects; Good knowledge of specific design and engineering aspects of tokamak systems and experience in the assembly management of similar devices; Experience in effective Quality Assurance (QA) management and implementation.
Project experience	10 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Specific skills	Extensive Project Management experience is required. Demonstrated ability to coordinate the activities of a design team; Excellent capability to interact with experts from different disciplines. Excellent organizational skills with the ability to set priorities and meet deadlines; Strong interpersonal and communication skills; Demonstrated ability to produce high-quality results; General familiarity with numerical analysis packages and computer-aided design systems.
Languages	English (Working)
General skills	MS Office standard (Word, Excel, PowerPoint, Outlook)

IO1107 Project Planning & Integration Resp Officer PRO091

Job description

Main job	Project Management - Generalist
Title of the position	Project Planning & Integration Resp Officer PRO091
Type of contract	Organizational support
Grade	P4
Direct employment	Not required
Purpose	To support the executing organizations within the ITER Project, both ITER Organisation (IO) and Domestic Agencies (DA), in developing and implementing cost effective plans to support the ITER Project. To ensure that the activities of the IO and ITER DAs are fully coordinated and integrated to meet Project Specification and requirements in the most efficient and cost effective manner possible. To work with IO and DA management to identify, evaluate, and implement improvements that contain and reduce cost, improve schedule, lower risk and exploit opportunities in all areas of work.
Main duties / Responsibilities	Ensures the effective execution of the project baseline by working with executing organisations across the IO and DA project team to identify and implement improvements to the planned baseline; Establishes and maintains appropriate contacts with IO and DA organizations, and maintains complete familiarity with the work scope, schedules, cost/credit estimates, risks and opportunities associated with the assigned work elements; Optimizes the use of budgeted resources and minimizes resource requirements required for IO and DA mission completion, while maintaining performance against the Project Specification and requirements; In accordance with the approved ITER Risk Management Plan, conducts routine risk and opportunity analysis on the technical baseline and associated performance to identify and document areas of need and priority ; Works with the IO and DA management team and Technical Responsible Officers to develop and execute initiatives to improve technical performance of components and systems within the approved baseline schedule and cost/credit values; Supports the executing organization in development and coordination of technical strategy and planning, and assists Departmental efforts to develop and implement the technical aspects of procurements; Ensures work is performed in a safe, cost-effective, compliant, and quality manner that is fully responsive to the needs and requirements of the IO, the regulators, employees, and stakeholders; Provides support for ITER Organization reviews, Domestic Agency reviews, and other ITER entities such as the Management Advisory Committee and the ITER Council on project planning matters; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	Leads planning efforts in the ITER baseline in a quality manner, on schedule and within budget; Communicates Planning and Integration activities to the ITER Organization and Domestic Agency leadership through clear, concise written and verbal communication; Provides the required leadership in the resolution of technically complex issues, including consistent communication of expectations, clear definition of requirements, and continuous feedback on performance.

Applicant criteria

Level of study	Bachelor or equivalent degree
Diploma	Project Management & Physics or Fusion beneficial
Level of experience	At least 10 years
	At least 10 years' experience with technical management of technical equipment and systems; Strong experience in management of large construction and/or science projects; project experience in licensed nuclear facilities is a distinct benefit; Candidate must demonstrate knowledge of fusion science systems and sub-systems related to

Technical experience	the assigned work within the ITER Project; Demonstrated experience in managing large, technically complex projects; Background in nuclear facilities and operations, especially in the areas of reactor design and engineering; knowledge and experience in fusion science and engineering and superconducting magnets is beneficial;
Project experience	10 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote