

**Stellenausschreibung der Internationalen Atomenergie-Organisation (IAEO)
für eine/n Physiker/in oder Ingenieur/in im Bereich Elektrotechnik oder
Informationstechnologie zur Evaluierung und Implementierung von Kamera-
Überwachungssystemen**

Junior Professional Officer (JPO)

Department of Safeguards, Division of Technical and Scientific Services (SGTS)

Im Rahmen des deutschen Unterstützungsprogramms für IAEO-Safeguards-unterstützt das Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz (BMUV) die Internationale Atomenergie-Organisation (IAEO) u.a. bei der Entwicklung von Methoden und Techniken für die internationale Kernmaterialüberwachung in den Mitgliedstaaten. Im Auftrag des BMUV obliegt die wissenschaftliche Koordinierung des Safeguards-Unterstützungsprogramms dem Institutsbereich IEK-6: Nukleare Entsorgung im Institut für Energie- und Klimaforschung des Forschungszentrums Jülich. Gemeinsam mit dem Forschungszentrum Jülich unterstützt das BMUV die IAEO bei der Suche nach geeigneten Bewerbern für Tätigkeiten in unterschiedlichen Fachbereichen der IAEO.

Derzeit liegt eine Stellenausschreibung der IAEO für eine/n Physiker/in oder Ingenieur/in im Bereich Elektrotechnik oder Informationstechnologie für den Bereich Entwicklung von Kamera-Systemen vor:

Aufgabenbereich:

Der Aufgabenbereich umfasst die Bewertung, Erprobung und Implementierung digitaler Überwachungssysteme, die auf der Kamera-Technologie der „Next Generation Surveillance System“ (NGSS) beruhen, welche derzeit von der IAEO im Rahmen der internationalen Kernmaterialüberwachung (Safeguards) eingesetzt wird.

Als aktives Teammitglied stellen Sie die effiziente Implementierung und Prüfung der für die Kernmaterialüberwachung erforderlichen Systeme und Techniken sicher. Dies beinhaltet unter anderem die technische Unterstützung des Teams bei der Evaluierung und Prüfung von NGSS-Ausrüstung. Dabei liegt ein besonderer Schwerpunkt auf der Prüfung von Beeinträchtigungen des NGSS-Equipments bedingt durch Strahlung. Ferner bedarf es technischer Unterstützung der operativen Safeguards-Abteilungen (Inspektorate) hinsichtlich der Implementierung und des Betriebs von NGSS-Systemen sowie entsprechender Abnahmetests, bevor die Systeme in kerntechnischen Anlagen weltweit eingesetzt werden. Auch der Erwerb, die Evaluierung und die Bewertung von kommerziell erhältlichem Equipment hinsichtlich der Eignung für Safeguards-Anwendungen sind Teil Ihrer Aufgabe. Dies umfasst auch die selbständige Erstellung technischer Berichte zu Ihren Arbeitsergebnissen. Zudem sind Sie zu Dienstreisen bereit, die im Rahmen der Instandhaltung und Implementierung von digitalen Überwachungssystemen in technischen Anlagen erforderlich sind.

Erforderliche Qualifikation:

Bachelor of Science (B.Sc.) oder Bachelor of Engineering (B. Eng.)

Universitätsabschluss in Physik, Elektrotechnik oder Informationstechnologie

Erfahrungen:

- Mindestens zwei Jahre einschlägige Erfahrung in den Bereichen Projektmanagement, Netzwerke und Kommunikation.
- Erfahrungen oder Kenntnisse in den Bereichen Kernphysik und Materialwissenschaften sind sehr wünschenswert.
- Erfahrungen mit internationalen elektrischen Zertifizierungsanforderungen und Normen für Instrumente sind wünschenswert.
- Erfahrung im technischen Management von Projekten sind wünschenswert.
- Ein hohes Maß an Integrität, Fairness und Transparenz zur Gewährleistung und Förderung eines Arbeitsumfelds, das auf gegenseitigem Respekt und Vertrauen beruht, wird vorausgesetzt.

Sprachen:

Englisch, Deutsch

Gehaltsstufe:

P2 gemäß UN-Vergütung

Dauer:

24 Monate

Die englische Stellenausschreibung in Langfassung finden Sie hier beigefügt.

Bitten Sie Ihre aussagekräftige Bewerbung per E-Mail an:

Frau Dr. Irmgard Niemeyer

Leiterin Kernmaterialüberwachung und nukleare Sicherung

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Job Description Print Report

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Position Review

Position Number		Position Type	CFE/JPO	Subject to Radiation	Yes	Subject to GD	No
Hyperion Position Number		Fund Type	EBR	Parent Position	Section Head (SGTS-TUS)		
Organization	SGTS-Surveillance Team	FTE	1	CCOG 1			
Grade	P2	Duty Station	Vienna, Austria	CCOG 2			
Classified Grade		Position Title	Associate Surveillance Systems Engineer	Proposed New Title			

Job Description Review

Organization Settings

The Department of Safeguards (SG) is the organizational hub for the implementation of IAEA safeguards. The IAEA implements nuclear verification activities for some 180 States in accordance with their safeguards agreements. The safeguards activities are undertaken within a dynamic and technically challenging environment including advanced nuclear fuel cycle facilities and complemented by the political diversity of the countries.

The Department of Safeguards consists of six Divisions: three Operations Divisions: A, B and C, for the implementation of verification activities around the world; three Technical Divisions: Division of Concepts and Planning, Division of Information Management, and Division of Technical and Scientific Services; as well as three Offices: the Office for Verification in Iran, the Office of Safeguards Analytical Services and the Office of Information and Communication Services.

The Division of Technical and Scientific Services (SGTS) is the departmental branch for nuclear and other measurement systems applied in verification activities, containment and surveillance techniques and all verification logistics. Within the Department of Safeguards, the Division of Technical Support is responsible for the development and implementation of the Department's equipment systems.

The Section for Unattended Systems (TUS) is responsible for the full development, assembly, testing, implementation and maintenance cycle of all measurement and surveillance systems to be permanently installed and operating in unattended mode at nuclear facilities worldwide. The Section is comprised of two specialized teams (technical units): Surveillance and Unattended Monitoring Systems.

Main Purpose

Under the general supervision of the Team Leader, the post-holder will assist in evaluating, testing and implementing digital surveillance systems built with Next Generation Surveillance System (NGSS) technology, as currently used by the IAEA for international safeguards.

Role

As an active member of the team, the Surveillance Engineer is: (1) a technical professional, ensuring the efficient and effective implementation of the evaluation and testing of surveillance equipment; (2) an implementer, installing and verifying surveillance systems and techniques as required for (1); and (3) a technical writer, drafting and updating reports related to activities described in (1).

Partnership

The Surveillance Engineer establishes relationships with staff throughout the IAEA to provide advice and assistance in the evaluation, testing and implementation of surveillance measures and with other departmental specialists and customers to consult and coordinate on specific cases. Furthermore, she/he liaises with R&D laboratories/organizations and commercial partners on assessments and qualification of safeguards surveillance equipment.

Functions / Key results Expected

Specifically, the post holder will:

- Provide technical support in the evaluation and testing of NGSS equipment, with a focus in equipment radiation testing;
- Provide direct technical support and assistance to the Operations Divisions in the Department of Safeguards regarding the implementation and operation of NGSS;
- Perform acceptance and burn-in tests of digital surveillance equipment prior to deployment in nuclear facilities worldwide;
- Install, service and troubleshoot digital surveillance equipment in nuclear radiation test sites;
- Acquire, test and evaluate commercial equipment to be used for the evaluation and testing of digital surveillance equipment used for safeguards applications;
- Participate in field travel related to the task of equipment evaluation and testing;
- Write evaluation and test plans and equipment test reports.

Generic JD Remarks

Competencies

Core Competencies

Competence	Occupational Role	Behavioural Indicator
Communication	Individual Contributor	Communicates orally and in writing in a clear, concise and impartial manner. Takes time to listen to and understand the perspectives of others and proposes solutions.
Achieving Results	Individual Contributor	Takes initiative in defining realistic outputs and clarifying roles, responsibilities and expected results in the context of the Department/Division's programme. Evaluates his/her results realistically, drawing conclusions from lessons learned.
Teamwork	Individual Contributor	Actively contributes to achieving team results. Supports team decisions.
Planning and Organizing	Individual Contributor	Plans and organizes his/her own work in support of achieving the team or Section's priorities. Takes into account potential changes and proposes contingency plans.

Functional Competencies

Competency	Occupational Role	Behavioural Indicator
Change Management	Associate	Demonstrates openness to new situations. Contributes with ideas and innovative approaches to enhance work processes and procedures.
Partnership building	Associate	Develops and maintains partnerships needed for his/her work. Establishes and nurtures positive relations with partners and stakeholders.
Technical/scientific credibility	Associate	Acquires and applies new skills to remain up to date in his/her area of expertise. Reliably applies knowledge of basic technical/scientific methods and concepts.

Expertise

Expertise		Description				Asset	
Safeguards Containment and Surveillance						Y	
Safeguards Industrial Safety and Hazardous Materials						Y	
Safeguards Materials Engineering						Y	
Position Specific Expertise		Description				Asset	
Languages							
Languages				Asset Languages			
English German				Arabic Chinese French Russian Spanish			
Qualification		Description					
Qualification Title		Description					
Bachelor's Degree		University degree in physics, electronics or computer engineering					
Experience							
<p>At least two years' relevant experience in project management, networks and communications. Experience in or knowledge of nuclear physics and material sciences highly desirable. Experience in international electrical certification requirements and standards for instruments desirable. Experience in the technical management of projects desirable. Adherence to principles and values: A high standard of integrity, fairness and transparency to ensure and promote a work environment based on mutual respect and trust. Strong interpersonal skills to establish and maintain good relationships with internal and external (designers, manufacturers and facility operators) counterparts and to work harmoniously in a multicultural/multidisciplinary environment with respect and sensitivity for diversity.</p>							
Job Description Remarks							
Requisition							
Contract Type		Expected Start Date		Duration		Mobility	
Fully Competitive Recruitment		Travel					