

Job Description Print Report

Position Review

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|--------------------------|-----|----------------|-----------------|----------------------|------------------------------------|
| Position Number | TBD | Position Type | CFE/JPO | Subject to Radiation | Yes |
| Hyperion Position Number | | Fund Type | EB | Parent Position | |
| Organization | | FTE | 1 | CCOG 1 | |
| Grade | P2 | Duty Station | Vienna, Austria | CCOG 2 | |
| Classified Grade | | Position Title | | Proposed New Title | Associate Instrumentation Engineer |

Job Description Review

The Department of Safeguards 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 Verifications in Iran, the Office of Safeguards Analytical Services and the Office of Information and Communication Services.

The Division of Technical and Scientific Services is responsible for nuclear and other measurement systems applied in verification activities, containment and surveillance techniques and all verification logistics.

The Section for Non Destructive Assay (TND) is responsible for development, testing, commissioning and provision of equipment for non-destructive assay (NDA) of nuclear materials; development, implementation and maintenance of respective methodologies to be applied by SG inspectors; provision of relevant training and/or expertise through direct participation in field measurements; providing relative methodological support to the section of unattended systems and other users.

The TND section comprises 2 teams, the NDA Instrument team which focuses on the provision of instrumentation for routine activities and the NDA Services Team which focuses on non-routine activities including direct support of inspectors in the field.

The section also coordinates review, identification, evaluation and testing of emerging innovative technologies, having potential for future safeguards applications.

Main Purpose

Reporting to the Section Head, and under the programmatic guidance of the Technology Foresight Specialist, the Associate Instrument Engineer will assist in the testing, evaluating and subsequently authorizing for inspection use, instrumentation focusing on Complementary Access, Design Information Verifications and Spent Fuel verification.

That mission is undertaken in support of the Department's efforts aimed at improving the effectiveness and efficiency of the Agency's capabilities to operate novel, advanced and emerging technologies to verify the correctness and completeness of declarations provided by Member States with emphasis on measurement technologies supporting detection of undeclared materials, facilities and activities.

Role

The Associate Instrument Engineer is (1); an *engineer*, testing and evaluating for specific instrumentation for selected safeguards usage, and; (2) a *technical writer*, developing and updating user requirements for safeguards instrumentation, equipment specifications, equipment test reports, equipment operational procedures and authorization reports.

Partnerships

The Associate Instrument Engineer works in close relation with the NDA technicians in the NDA Instruments Team to prepare and distribute equipment to inspectors on a routine basis.

The Associate Instrument Engineer will also interact intensively with the instrumentation final users, mainly inspectors from Divisions of Operation and the Office for Verification in Iran.

Functions / Key results Expected

- Timely deliver requested support with respect to testing and authorization of safeguards equipment, including documentation and reports.
- Contribute specialized expertise to the definition of user requirements, and to other elements related to the development and deployment of innovative instruments and measurement techniques, fulfilling needs requested by the Operation Divisions and agreed at the Department level.
- Manage, in coordination with the NDA Instruments Team, the transition of instrumentation for Complementary Access and Design Information Verification from experimental and evaluation to routine production for inspection in the field.
- Prepare quality controlled technical documents, testing, calibration and operational procedures for equipment, as well as trip reports detailing the results of field testing on instrumentation.
- Maintain and further develop the knowledge management database used in the technology evaluation process.

Competencies**Core Competencies**

| Competence | Level | Behavioral 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 | Level | Behavioral Indicator |
|----------------------------------|-----------|---|
| Analytical thinking | Associate | Gathers and analyses information, identifying critical relationships and patterns among data and proposes workable solutions. |
| Knowledge sharing and learning | Associate | Actively seeks opportunities to learn by formal and informal means; learns from others, adopting and sharing best practice. |
| 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 |
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| Administrative Support Data and Information Analysis and Reporting | Proficient use of the MS office suite to evaluate data and develop reports and presentations |
| Administrative Support MS Office (Word, Excel, Outlook, PowerPoint) | Evaluate and organize numerical data. Prepare clear and concise technical reports |
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| Position Specific Expertise | Description |
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| Languages | | | | | | | | | | | | | |
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| <table border="1"> <tr> <th>Languages</th> <th>Asset Languages</th> </tr> <tr> <td>English</td> <td>Arabic</td> </tr> <tr> <td></td> <td>Chinese</td> </tr> <tr> <td></td> <td>French</td> </tr> <tr> <td></td> <td>Russian</td> </tr> <tr> <td></td> <td>Spanish</td> </tr> </table> | Languages | Asset Languages | English | Arabic | | Chinese | | French | | Russian | | Spanish | |
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| Qualification | | | | | |
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| Experience |
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| <ul style="list-style-type: none"> Hands-on experience with instrumentation testing and evaluation Experience with agile methodologies. and systemic engineering practices Knowledge in programming, and database design. Experience with documenting experimental results and producing operational documentation for instruments. Experience in developing and implementing technology evaluation tasks will be an asset. Experience in 3D hardware design will be an asset. |

| Job Description Remarks |
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| Requisition | | | | | |
|-------------------------------|----------------------|---------------------|-----------------------|----------|----|
| Contract Type | Fixed Term - Regular | Expected Start Date | 2016-09-01 | Duration | 36 |
| Fully Competitive Recruitment | Yes | Travel | Yes, 25 % of the Time | | |