

Job Description for Professional Posts

Reference: NA2025/73

Position and Grade: Associate Radiation Processing Officer, P2

Organizational Unit: Radiochemistry and Radiation Technology Section

Division of Physical and Chemical Sciences

Duty Station: Seibersdorf, Austria

Type/Duration of Appointment: FT - JPO, 1 year

Organizational Setting

The Department of Nuclear Sciences and Applications implements the IAEA's Major Programme 2, "Nuclear Techniques for Development and Environmental Protection". This Major Programme comprises individual programmes on food and agriculture, human health, water resources, environment, and radiation technologies. These programmes are supported by laboratories in Seibersdorf, Monaco and Vienna. The Major Programme's objective is to enhance the capacity of Member States to meet basic human needs and to assess and manage the marine and terrestrial environments through the use of nuclear and isotopic techniques in sustainable development programmes.

The Division of Physical and Chemical Sciences is responsible for assisting and advising Member States in research and development for the nuclear sciences, especially the physical and chemical sciences. Specifically, the Division provides support to Member States in the following fields: production of radioisotopes and radiolabelled products for applications in health care and industry; radiation source applications; research reactor utilization; applications of accelerators and nuclear instrumentation; nuclear and atomic data for applications; controlled nuclear fusion and isotope hydrology and geochemistry.

The Radiochemistry and Radiation Technology Section is dedicated to enhancing the capabilities of Member States in leveraging radiation technology for environmental and industrial applications. The Section helps Member States strengthen their capacities in adopting radiation-based techniques to meet the key principles of "Atoms for Peace" and provide comprehensive capacity-building initiatives, with a particular emphasis on radiation technology via transportable electron beam irradiation system, housed within a trailer. This innovative system serves as a versatile tool for conducting demonstrations and training events. Specifically, it enables on-site demonstrations and tests for the treatment of liquid and gaseous waste across various locations. Additionally, it facilitates the demonstration of polymer modification techniques and serves as a training platform, primarily based at the Seibersdorf site.

Main Purpose

As a member of a team led by the Section Head, the Associate Radiation Processing Officer contributes to the implementation of the Agency's activities related to radiation processing technology through a transportable electron beam irradiation system.

Role

The Associate Radiation Processing Officer is a: (i) technical analyst formulating, developing, and implementing the IAEA's activities on application of electron beam technology within a multidisciplinary approach; (ii) team member collaborating and implementing the IAEA's activities under the direct oversight of the Section Head covering a broad range of electron beam processing technologies including education, training and demonstration (including on-site activities) of radiation technology for environmental and industrial applications via transportable electron beam irradiation system; (iii) facilitator, encouraging internal and external cooperation and development through communication with both IAEA and external project stakeholders; (iv) technical writer producing and reviewing documents relating to integrated electron beam facilities.

Partnerships

The Associate Radiation Processing Officer works closely with staff in the Section and other relevant sections in the house. He/she interacts closely and establishes partnerships with donor organizations and Member States to ensure compliance with regard to the required timely implementation of the programme, adequate quality of reporting reflecting with accuracy all activities performed throughout the project life cycle. He/she also works with colleagues in the Department of Technical Cooperation to support national, regional, and interregional projects under the IAEA's technical cooperation programme.

Functions / Key Results Expected

- Support the team in providing technical expertise and assistance to IAEA Member States through the design, technical backstopping and support for the implementation and appraisal of projects aimed at the application of radiation technology for environmental and industrial applications via transportable electron beam irradiation system. Towards this objective, implement necessary actions as CRPs, evaluate and monitor individual research contracts, organize meetings, conferences and prepare technical reports.
- Support the team to evaluate and recommend proposals for the award of research contracts in the field of electron beam technology. Provide technical input and coordinate the preparation of technical reports and meeting proceedings.
- Support the team to evaluate and implement Technical Cooperation projects, develop action plans, organize, and participate in seminars, workshops, conferences, expert missions and training courses.
- Provide technical input in the preparation and update of IAEA publications and in relevant scientific
 journals. Recommend, in conjunction with relevant stakeholders, including IAEA Collaborating
 Centres, innovative research and development approaches in the field of electron beam technology.
- Provide training and conduct demonstration activities (including on-site activities) on radiation technology for environmental and industrial applications via transportable electron beam irradiation system.

Competencies and Expertise (do not revise or edit)

| 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 |

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| | | listen and understand the perspective 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 | | | | |
|-------------------------------------|-------------------|--|--|--|
| Competence | Occupational Role | Behavioural Indicator | | |
| Analytical Thinking | Associate | Gathers and analyses information, identifying critical relationships and patterns among data and proposes workable solutions. | | |
| 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 | |
| Radiation Technology/ Electron Accelerator | Solid knowledge of electron beam technology or related field with emphasis on environmental and industrial application, related technical projects and the infrastructure and organizational aspects required to implement them. | |

Education, Experience and Language Skills

- University degree in industrial, environmental, mechanical, or electronic engineering, or a related field. Advanced University degree is an asset.
- Minimum 2 years of professional experience in the area of radiation technology and applications, of which two years of experience in operating and/or maintenance of electron beam technology or related equipment.

- Experience in international cooperation with proven ability to participate effectively in a multinational and multidisciplinary team with sensitivity and respect for diversity is an asset.
- Experience in technical writing in English for producing and reviewing documents in the subject area.
- Excellent oral and written command of English. Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) is an asset.