

# Job Description for Professional Posts

**Reference:** NA2024/59

<b>Position and Grade:</b>	Associate Dosimetrist, P2
<b>Organizational Unit:</b>	Dosimetry Laboratory Dosimetry and Medical Radiation Physics Section Division of Human Health
<b>Duty Station:</b>	Vienna
<b>Type/Duration of Appointment:</b>	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 Human Health is organized into four Sections whose objectives are to enhance the capabilities of Member States to address needs related to the prevention, diagnosis and treatment of health problems through the development and application of nuclear techniques within a framework of quality assurance.

The Dosimetry and Medical Radiation Physics Section (DMRP) is responsible for quality assurance and metrology in radiation medicine. The Section works closely with clinical colleagues of the Applied Radiation Biology and Radiotherapy Section and the Nuclear Medicine and Diagnostic Imaging Section. Specifically, DMRP provides technical support in medical physics to ensure the safe and effective applications of nuclear technology in radiotherapy, diagnostic radiology and nuclear medicine. It operates the Dosimetry Laboratory located at the Agency's Laboratories, Seibersdorf, and provides a dosimetry calibration service and a dosimetry auditing and verification service for Member States.

## Main Purpose

As a member of a team led by the Laboratory Head, the Associate Dosimetrist contributes his/her technical knowledge to the implementation of activities related to the dosimetry audit services. The incumbent performs dosimetry measurements, processes data, analyses results of measurements and

contributes to laboratory developments. He/she contributes to the implementation of actions and tasks relating to radiation dosimetry and safety activities of DOL.

## Role

The Associate Dosimetrist is: (i) a technical team member, contributing to the provision of radiotherapy dosimetry audit services and the maintenance, and improvement of their quality, as well as to research and development related to various aspects of dosimetry audit activities; (ii) a data analyst evaluating, extracting, analysing and consolidating dosimetry audit data from the DOL databases and that obtained from Member States.

## Partnerships

The Associate Dosimetrist works closely with medical physics colleagues and with other Agency professionals, including NAHU Databases Manager, DOL Quality Manager, NAHU Radiation Protection Officer, general service providers, and others. He/she interacts with consultants and counterparts in Member States receiving IAEA dosimetry services in order to ensure efficient operation of the services and to provide feedback for improvement in the range and quality of the services.

## Functions / Key Results Expected

- Performs measurements and analyses results using statistical models; identify deviations and possible causes and trends; suggests procedures for minimizing measurement uncertainties.
- Provides input to the development of laboratory QA/QC procedures, instructions and documentation for the DOL QMS on auditing services using solid state dosimetry systems.
- In collaboration with the DOL team, performs testing of various auditing procedures.
- Executes additional measurements and data analysis of the solid state dosimetry systems in linac and brachytherapy beams.

## 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 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.

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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.
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<b>Functional Competencies</b>		
<b>Competence</b>	<b>Occupational Role</b>	<b>Behavioural Indicator</b>
Commitment to continuous process improvement	Associate	Identifies opportunities for process, system and structural improvement as well as improving current practices, increasing effectiveness and achieving efficiency gains. Actively supports the application of sound quality management standards and process improvement.
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.

<b>Expertise</b>	
<b>Expertise</b>	<b>Description</b>
Dosimetry/Dosimetry	Experimental methods of high precision solid state and ion chamber dosimetry for RT incl. hands-on experience in TLD, OSL, RPL dosimetry for RT audits.

**Education, Experience and Language Skills**

- University degree in Radiation Dosimetry or Medical Radiation Physics. An advanced degree is an asset.
- Minimum of two years of relevant work experience with high precision solid state dosimetry for radiotherapy.
- Knowledgeable in the principles and practices of radiation dosimetry including experimental methods in high precision solid state dosimetry for radiotherapy.
- Excellent computer skills in all standard applications required for word processing, data analysis and statistics, preparation of scientific reports and papers, graphs, etc.
- Knowledgeable in operation and maintenance of a quality management system for radiation dosimetry laboratories based on ISO/IEC 17025:2017 standards.
- Excellent oral and written command of English. Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) is an asset.

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