

Job Description for Professional Posts

Reference: NA2024/67

Position and Grade:	Associate Medical Radiation Physicist, P2
Organizational Unit:	Dosimetry and Medical Radiation Physics Section Division of Human Health
Duty Station:	Vienna
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 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 Head of the Dosimetry and Medical Radiation Physics Section, the Associate Medical Physicist contributes professional knowledge to the implementation of activities related to the regular programme of the Division through contributions to the divisional research, development of services, educational activities and in manuscript preparation.

Role

The Associate Medical Radiation Physicist is: (i) a researcher collecting, reviewing, analysing and reporting data collection related to developments in radiotherapy dosimetry audit services; (ii) a collaborator utilizing technical expertise to participate and support laboratory procedures relating to the development of dosimetry in radiation metrology; (iii) a collaborator utilizing technical expertise to provide support to the development, quality assurance and delivery of high-quality educational material for medical physicists and radiation metrologists.

Partnerships

The Associate Medical Physicist will work closely with colleagues in the Section. He/she interacts with consultants and on occasion, counterparts in Member States.

Functions / Key Results Expected

Under the guidance of the Head of the Dosimetry and Medical Radiation Physics Section, the Associate Medical Physicist will:

- Participate and support the organization and implementation of internal meetings and events such as consultancy and research coordination meetings.
- Participate in measurements to support developments in radiology dosimetry.
- Contribute to developments in solid state dosimetry measurements and reporting for radiotherapy dosimetry audit methodologies.
- Review scientific literature and contribute to the drafting and review of reports and publications.
- Collaborate in developing, harmonizing, proofreading, testing and publishing e-learning material in dosimetry in accordance with IAEA guidelines and regulations.

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.
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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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.
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
Radiotherapy Physics	The use of solid state and ionization chamber-based detectors for clinical dosimetry.
Medical Radiation Physics	Physical, technical and quality assurance aspects related to the medical application of ionizing radiation to diagnosis and therapy.
Dosimetry	A working knowledge of international codes of practice in dosimetry.

Education, Experience and Language Skills

- University degree in Medical Radiation Physics.
- Minimum of two years of experience in medical radiation dosimetry at national or international level.
- Excellent computer skills in all standard applications required for word processing, data analysis and statistics, preparation of scientific reports and papers, graphs, etc.
- 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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