IAEA
International Atomic Energy Agency

Job Description for Professional Posts

Reference: NA2024/01	
Position and Grade:	Associate Research Scientist (HABs and Biotoxins), P2
Organizational Unit:	Radioecology Laboratory Division of IAEA Marine Environment Laboratories
Duty Station:	Monaco
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 IAEA Marine Environment Laboratories consists of three laboratories, which are located in Monaco. The Division supports Member States in enhancing their capacity to use nuclear and isotopic techniques to understand marine and atmospheric environmental processes and dynamics, and to identify and address environmental problems caused by radioactive and non-radioactive pollutants and climate change.

The Radioecology Laboratory’s mission is to improve knowledge about the behaviour and fate of radionuclides and other contaminants in the environment, with a particular emphasis on the biosphere. It aims to assist and enhance Member States' capabilities in the field of radioecology and its applications to ecotoxicology and biogeochemistry.

Main Purpose

The Associate Research Scientist (HABs and Biotoxins) will conduct research using nuclear and isotopic techniques to address the problem of Harmful Algal Blooms and biotoxin quantification at the IAEA Marine Laboratories (NAML) in Monaco. In addition, the Associate Research Scientist (HABs and Biotoxins) will also support the team to manage all seafood safety related activities (including workshops, trainings, outreach, partnership on marine biotoxins) in the context of the IAEA’s Peaceful Uses Initiative (PUI) Project on Food Safety in Monaco.

Role

As a member of the Radioecology Laboratory, the Associate Research Scientist (HABs and Biotoxins) will be based at the IAEA Monaco Laboratories and will be: (1) a scientific-technical assistant assisting in the development and implementation of nuclear and isotopic techniques related to marine bio-toxin pollution, (2) a team member, contributing to development of the activities related this topic at the IAEA

(3) an analyst processing and analysing data, and (4) a communicator preparing and presenting results through technical reports and scientific publications.

Partnerships

The Associate Research Scientist builds and maintains working relationships with staff of the Radioecology Laboratory (REL), and more globally to NAML staff engaged in marine biotoxins projects and with similar relevant staff of other laboratories of the Department of Nuclear Sciences and Applications. He/she also will work under the partnerships already established within the UN system as well as with other international organisations and the scientific communities.

Functions / Key Results Expected

- Develop and prepare nuclear energy-based methods to advance knowledge on marine biotoxins, especially in the determination of Ciguatoxin and Cyanotoxin levels in seafood, in the evaluation of the best harmonized method to detect these toxins as well as in the study behaviour in the trophic chain.
- Collect, analyse and process samples for biotoxins analysis
- Run equipment dedicated to separation and quantification of marine biotoxins
- Produce timely and high-quality data and technical reports on relevant results and interpretations.

Competencies and Expertise

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.

Functional Competencies		
Competence	**Occupational Role**	**Behavioural Indicator**
Knowledge sharing and learning	Associate	Actively seeks opportunities to learn by formal and informal means; learns from others, adopting and sharing best practice.
Judgement/ decision making	Associate	Consults with supervisor/manager and makes decisions in full compliance

Expertise	
Expertise	**Description**
Analytical Chemistry/ Physics /	Knowledge of analytical chemistry and radiochemistry, in particular liquid scintillation techniques.
Marine Pollution Monitoring and Assessment	Knowledge in marine environment monitoring.
Isotopic Techniques to Study Pollution and Climate Change Processes	Basic knowledge in nuclear and isotopic application in relation to pollution studies.

Education, Experience and Language Skills

- University degree in radioecology, ecotoxicology, marine biology, environmental sciences or a related scientific field with demonstrated expertise in the field of HABs and marine biotoxins or related experimental sciences. Advanced University degree would be an asset.
- Minimum two years of relevant experience in the operation of specific equipment related to radionuclide analysis.
- Strong publication record.
- Practical experience in the use of multidisciplinary techniques.
- Excellent oral and written command of English, with demonstrated ability to write and edit reports, as well as to make oral presentations. Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) is an asset.