**NA 2024-09 Internship – Scientific Software Development for Marine Environmental Radiometric Applications (MARIS)**

**Duration of Internship**

12 months

**Organizational Setting**

Department: Nuclear Sciences and Applications

Division: IAEA Marine Environment Laboratories

Section: Radiometrics Laboratory

**Main Purpose**

The main purpose of the internship is to contribute to the development of an SDI (Spatial Data Infrastructure) for sharing marine radioactivity data according to established Data Management Principles and related data analysis and visualisation in order to support applied research on marine environmental radioactivity and capacity building in IAEA Member States.

**Tasks / Key Results Expected**

* Assist the team from the Radiometrics Laboratory (RML) as it develops the SDI for improvement sharing data from the IAEA Marine Radioactivity Information System (MARIS) using mainly open-source technologies including: NetCDF (Network Common Data Form), CDL (Common Data Language), Thredds Data Server (TDS), Python (Pandas, NumPy etc.), Jupyter Notebook, Observable, Quarto.
* Assist RML scientists in developing related products for data analysis and visualisation and for capacity building in IAEA Member States.

**Knowledge, Skills and Abilities**

* Data science.
* Programming, preferably Python.

**Qualifications and Experience**

* Close to completion of a degree in data or computer science or in a relevant subject.
* Experience in/ willingness to learn the technologies listed above.
* Knowledge of marine radioactivity (sources, levels and effects; measurement techniques; analytical methods etc.) highly desirable but not essential.
* Good written and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Russian, Spanish) an asset.

**Internships**

The IAEA accepts a limited number of interns each year. The internships are awarded to persons studying towards a university degree or who have recently received a degree (see Internship web pages for further details).

The purpose of the programme is:

* To provide interns with the opportunity to gain practical work experience in line with their studies or interests, and expose them to the work of the IAEA and the United National as a whole;
* To benefit the IAEA's programmes through the assistance of qualified students specialized in various professional fields.
* The duration of an internship is normally not less than three months and not more than one year.

**Applicant Eligibility**

* Candidates must be a minimum of 20 years of age and have completed at least three years of full-time studies at a university or equivalent institution towards the completion of a first degree.
* Candidates may apply up to one year after the completion of a bachelor's, master's or doctorate degree.
* Candidates must not have previously participated in the IAEA's internship programme.
* Candidates must attach two signed letters of recommendation to their application.