**NA 2024-04 -Internship – Nuclear Techniques in Marine Plastics and Ecosystems Research**

**Duration of Internship**

12 months

**Organizational Setting**

Department: Nuclear Sciences and Applications

Division: Marine Environment Laboratories

Section: Radioecology Laboratory

**Main Purpose**

The main purpose of this internship will be to develop and conduct experimental studies on the movement of marine plastics through coastal and marine biota in the context of seafood safety and trophic transfer. The internship will be carried out in the Radioecology Laboratory (REL) of the IAEA’s Marine Environment Laboratories in Monaco. The laboratory is engaged in applied research on the accumulation and transfer of contaminants in freshwater, coastal and marine ecosystems and associated biota.

**Tasks / Key Results Expected**

* Participate in the development of experimental work using nuclear techniques to better assess the movement of marine plastics through coastal and marine trophic food webs in the context of environmental and climate-change impacts.
* Participate and conduct controlled experiments using nuclear techniques to advance our understanding of bioaccumulation of marine plastics.
* Assess the role of marine plastics as organic contaminant vectors using nuclear-based technologies and live marine organisms.

**Knowledge, Skills and Abilities**

* Ability to work with marine organisms and aquaria.
* Good knowledge of Environmental Toxicology, Radioecology, Chemistry or Biochemistry.
* Knowledge in microplastics analysis in environmental samples.
* Knowledge of gamma-ray spectrometry and LSC techniques is an asset.
* Experience in handling datasets and generating graphic data analysis products is an asset.
* Strong analytical skills: ability to articulate, conceptualize, plan and execute ideas is an asset.

**Qualifications and Experience**

* University degree in Environmental Toxicology, Radioecology, Marine Biology, Ecology or a related field.
* Knowledge in marine biology, ability to conduct experiments using aquaria and marine organisms.

**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 Nations 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.