**Internship Title**

Internship – Measurement of radioactivity in coral samples from the atolls of Mururoa and Fangataufa

**Duration of Internship**

6 – 12 months

**Organizational Setting**

Department: NA (Nuclear Sciences and Applications)

Division: NAPC (Division of Physical and Chemical Sciences)

Section: RCRT (Radiochemistry and Radiation Technology Section)

Unit: TERC (Terrestrial Environmental Radiochemistry Laboratory)

**Main Purpose**

The main purpose of the internship is to measure the anthropogenic radionuclides present in archived coral samples collected from the atolls of Mururoa and Fangataufa. These samples were originally collected in 1996, to assess the radiological situation following the testing of nuclear weapons at the atolls during 1966 to 1996. The purpose of the current analysis is to assess the effects of radioactive decay on the radioactive composition of the samples and to assist with the development of new radioanalytical techniques.

**Tasks / Key Results Expected**

* To perform radioanalytical measurements on coral samples collected from the atolls of Mururoa and Fangataufa. This includes radiochemical separation of various radionuclides with analysis by alpha, beta and gamma-spectrometry.
* Characterisation of the radionuclide composition of the coral samples
* Produce a technical report and presentation detailing all work undertaken.

**Knowledge, Skills and Abilities**

* The ability to work within a laboratory and undertake analytical tasks (Required)
* Knowledge of radioanalytical techniques (Asset)

**Qualifications and Experience**

* University degree in Chemistry, Physics, Environmental or a related Scientific discipline.
* Excellent 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.
* Good written and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Spanish or Russian) an asset.
* Candidates must attach two signed letters of recommendation to their application.