**Internship Title**

Internship – Finalising reference materials for assessing the source of greenhouse gasses in the atmosphere.

**Duration of Internship**

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 assist in the finalization of the production of stable isotope reference materials for greenhouse gasses for use worldwide in atmospheric monitoring. Additionally, these materials aim to meet the requirement of the WMO network compatibility goal in terms of measurement uncertainty.

**Tasks / Key Results Expected**

* Assist in the development of containers to store and distribute various amounts of gas to meet the different requirements of the member state involved in atmospheric monitoring.
* Assist in the development of a system to dilute large amount of gas into synthetic air in collaboration with other international organisations and national metrology institutes.
* Support in organising an interlaboratory comparison test with expert laboratories for characterising the gasses according to the requirement of ISO 17034
* Draft technical reports and scientific publications.

**Knowledge, Skills and Abilities**

* Physics and/or Chemistry knowledge (Required)
* Laboratory skills and abilities (Required)
* Analytical chemistry experience (required)
* Knowledge on gas measurement techniques, stable isotopes (asset)

**Qualifications and Experience**

* University degree in Physics, Chemistry, Environment 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.