**Internship – Isotopes for Soil and Water Management**

**Target Start of Internship**

Flexible

**Organizational Setting**

Department: Nuclear Sciences and Applications

Division: Joint FAO/IAEA Centre for Nuclear Techniques in Food and Agriculture

Section: Soil and Water Management & Crop Nutrition

Laboratory: Soil and Water Management & Crop Nutrition Laboratory in Seibersdorf

The Soil and Water Management & Crop Nutrition Section and its Laboratory (SWMCNL) assists Member States in improving soil and water management towards sustainable intensification of agricultural production systems through Research and Development (R&D) activities, technology transfer, and capacity building. SWMCNL develops stable isotope and nuclear techniques for tracing and monitoring soil, water and nutrients to enhance climate change resilience of agriculture.

**Main Purpose**

Under the supervision of the Laboratory Head and a Soil Scientist, the intern assists in implementing the agreed work programme of the laboratory and the subprogramme. Goal is the development and adaptation of technologies for climate-smart land and water management practices for the benefit of Member States, thereby contributing to food security and the sustainable development goals.

The intern will assist in the development and implementation of applications using compound-specific stable isotope analysis for enhancing the climate change resilience of agricultural practices. The intern will thus contribute to innovative R&D, provide relevant services, and support SWMCNL’s capacity building and outreach activities. The intern will work closely on collaborative projects with all professional staff members of the Soil and Water Management & Crop Nutrition Laboratory.

These activities will provide the intern with a unique learning experience at the interface of Environmental sciences and international development cooperation.

**Tasks / Key Results Expected**

* Assist in the development of applications using compound-specific stable isotope analysis for enhancing the climate change resilience of land and water management practices in agriculture.
* Participate in and contribute to the development of novel approaches and analysis tools for tracing soil, water and nutrient fluxes at plant and field level.

**Knowledge, Skills and Abilities**

* Laboratory Analysis: Basic experience in laboratory analysis on soil and plant samples (focus on inorganic chemistry).
* Soil Science: Knowledge and understanding of the challenges of soil and water management in agriculture is an asset.

**Qualifications and Experience**

* University degree in the field of Soil Science or related equivalent scientific disciplines (e.g. Agricultural or Environmental Sciences).
* Work experience in the laboratory with emphasis on environmental, soil or plant analysis (focus on inorganic chemistry) is an asset.
* 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.
* Good and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Russian, Spanish) an asset.
* Candidates must attach two signed letters of recommendation to their application.