IAEA
International Atomic Energy Agency

Job Description for Professional Posts

Reference: NA2025/62

Position and Grade:	Associate Greenhouse Gas Emission Officer, P2
Organizational Unit:	Soil and Water Management and Crop Nutrition Laboratory Soil and Water Management and Crop Nutrition Section Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture
Duty Station:	Seibersdorf, Austria
Type/Duration of Appointment:	FT – JPO, 1 year

Organizational Setting

The Department of Nuclear Sciences and Applications implements the IAEA's Major Programme 2, "Nuclear Techniques for Development and Environmental Protection". This Major Programme comprises individual programmes on food and agriculture, human health, water resources, environment and radiation technologies. These programmes are supported by laboratories in Seibersdorf, Monaco and Vienna. The Major Programme's objective is to enhance the capacity of Member States to meet basic human needs and to assess and manage the marine and terrestrial environments through the use of nuclear and isotopic techniques in sustainable development programmes.

The Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture assists Member States of the Food and Agriculture Organization of the United Nations (FAO) and the IAEA in using nuclear techniques and related technologies to improve food security, alleviate poverty and promote sustainable agriculture. The Joint Centre consists of five Sections, each with an associated laboratory (located in Seibersdorf, 45 km south-east of Vienna), in the areas of: animal production and health; plant breeding and genetics; insect pest control; soil and water management and crop nutrition; and food and environmental protection.

The Soil and Water Management and Crop Nutrition Section and Laboratory assist Member States in developing improved soil and water management practices for sustainable intensification of agricultural production systems, the conservation of natural resources and the effective use of external inputs through applied and adaptive research and development activities, technology transfer and capacity building.

Main Purpose

The Associate Greenhouse Gas Emission Officer is responsible for (i) assisting in the development of research protocols for emission of greenhouse gases of carbon dioxide and nitrous oxide from agriculture for enhancing sustainable climate-smart agricultural practices; and (ii) assisting in the development of

methodologies for determining fluxes and sources of carbon dioxide and nitrous oxide in agro-ecosystems using stable isotope methodologies.

Role

The Associate Greenhouse Gas Emission Officer is a junior expert and an Associate Greenhouse Gas Emission Officer. The incumbent will assist in the development of methodology to determine sources of carbon dioxide and nitrous oxide as a result of agricultural activities, and analysis of experimental data and results for protocol development and publication; he/she is also a technical and scientific writer.

Partnerships

The Associate Greenhouse Gas Emission Officer reports to the Soil and Water Management & Crop Nutrition Laboratory Head and will work closely with staff members of the Soil and Water Management & Crop Nutrition Laboratory and Section. He/She will also be involved in Soil and Water Management & Crop Nutrition Section coordinated research activities relating to agricultural farming systems and nutrient management.

Functions / Key Results Expected

- Assist in developing research protocols in the field of greenhouse gas emission analysis for enhancing climate-smart agriculture practices, through developing strategies for sampling and monitoring of greenhouse gases, such as carbon dioxide and nitrous oxide.
- Assist in the development of methodologies for determining fluxes and sources of carbon dioxide and nitrous oxide in agro-ecosystems using stable isotope methodologies.

Competencies and Expertise (do not revise or edit)

Core Competencies		
Competence	**Occupational Role**	**Behavioural Indicator**
Communication	Individual Contributor	Communicates orally and in writing in a clear, concise and impartial manner. Takes time to listen and understand the perspective of others and proposes solutions.
Achieving Results	Individual Contributor	Takes initiative in defining realistic outputs and clarifying roles, responsibilities and expected results in the context of the Department/Division's programme. Evaluates his/her results realistically, drawing conclusions from lessons learned.
Teamwork	Individual Contributor	Actively contributes to achieving team results. Supports team decisions.
Planning and Organizing	Individual Contributor	Plans and organizes his/her own work in support of achieving the team or Section's

		priorities. Takes into account potential changes and proposes contingency plans.

Functional Competencies		
Competence	**Occupational Role**	**Behavioural Indicator**
Commitment to continuous process improvement	Associate	Identifies opportunities for process, system and structural improvement as well as improving current practices, increasing effectiveness and achieving efficiency gains. Actively supports the application of sound quality management standards and process improvement.
Judgement/decision making	Associate	Consults with supervisor/manager and makes decisions in full compliance with the Agency?s regulations and rules.
Technical/scientific credibility	Associate	Acquires and applies new skills to remain up to date in his/her area of expertise. Reliably applies knowledge of basic technical/scientific methods and concepts.

Expertise	
Expertise	**Description**
Chemistry/Analytical Methods In Geochemistry	Practical experience in the use of analytical methods for determining greenhouse gas emission in the laboratory and field.
Geology/Soil and Water Management and Crop Nutrition	Strong understanding of the drivers of greenhouse gas emission in agro-ecosystems.

Education, Experience and Language Skills

- University degree in agronomy, soil science, biology or environmental sciences with a major emphasis on geochemistry.
- Minimum of two years of proven laboratory experience in analytical chemistry or geochemistry in the field of nitrogen or phosphate cycling or related environmental sciences.
- Experience in the use of isotopic and nuclear techniques for tracing greenhouse gas emission is an asset.
- Excellent oral and written command of English. Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) is an asset. Knowledge of German is an asset.