IAEA
International Atomic Energy Agency

Job Description for Professional Posts

Reference:NA2025/33

Position and Grade:	Associate Research Scientist (Stable Isotopes in Timber), P2
Organizational Unit:	Terrestrial Environmental Radiochemistry Laboratory (TERC) Radioisotope Products and Radiation Technology Section Division of Physical and Chemical Sciences
Duty Station:	Seibersdorf, Austria
Type/Duration of Appointment:	FT – JPO, 1 years

Organizational Setting

The Terrestrial Environmental Radiochemistry (TERC) Laboratory assists IAEA Member States in enhancing the quality of their analytical measurements of radionuclides, trace elements and stable isotope ratios for monitoring and assessment of environmental pollution and climate change. This is accomplished by provision of reference products, such as matrix reference materials, validated procedures, proficiency tests, and guidelines for environmental protection, and through coordination of laboratory networks and training activities. Contributing to the IAEA Technical Cooperation programme, TERC supports the Member States in their development and capacity building by improving preparedness for emergency situations, analytical quality in Member States laboratories and providing training.

TERC is the producer of international scale-defining stable isotope reference materials, used to calibrate measurements worldwide for the element hydrogen, carbon, nitrogen, oxygen and sulphur.

Main Purpose

Under the supervision of the Laboratory Head and of the staff of the Stable Isotopes Subgroup, the Associate Research Scientist (Stable Isotopes in timber) carries out research to support Member States laboratories with improving capacities in stable isotope analysis in the scientific area of timber traceability and illegal logging. The incumbent will conduct experimental work to contribute to the improvement of the existing isotopic methods and applications to wood under the guidance of senior professionals.

Role

The Associate Research Scientist (Stable Isotopes in Timber) is: (i) a technical specialist assisting in the development and implementation of stable isotope ratio techniques focusing on wood, (ii) an analyst processing and analysing data with the purpose of generating an isoscape map of a defined geographical region, and (iii) a communicator preparing and presenting results through technical reports and scientific publications.

Partnerships

The Associate Research Scientist (Stable Isotopes in Timber) builds and maintains working relationships with staff of the TERCL engaged in isotopic analyses and with similar relevant staff of

other laboratories of the Department of Nuclear Sciences and Applications. He/she also develops and builds networks with scientists and technical staff from Member State laboratories to exchange information on the development and the applications of stable isotope ratio analysis. The incumbent will collaborate with project officers and researchers on projects supporting the application of isotopic techniques.

Functions / Key Results Expected

- Perform stable isotope ratio analyses of light bio-elements using isotope ratio mass spectrometry.
- Participate in the development of stable isotope ratio measurement method(s) for wood materials, specifically for the exchangeable H isotope ratios.
- Review literature and carry out scientific research to select the best method for data interpolation using existing precipitation data in order to generate an isoscape model for wood of a specific geographical area.
- Analyse and evaluate data and outcomes and infer conclusions for the preparation of technical reports and scientific manuscripts for publication.
- Contribute to the transfer of knowledge to member states, both for the analytical method and for the data modelling.

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**

Knowledge sharing and learning	Associate	Actively seeks opportunities to learn by formal and informal means; learns from others, adopting and sharing best practice.
Judgement / decision making	Associate	Consults with supervisor/manager and makes decisions in full compliance with the Agency's regulations and rules.

Expertise	
Expertise	**Description**
Analytical Chemistry / Physics /	Knowledge in analytical chemistry, particularly in Mass Spectrometry
Stable Isotope Ratio techniques	Basic knowledge in stable isotope ratio techniques and application
Modelling	Basic knowledge in statistics

Education, Experience and Language Skills

- University degree in chemistry, physics or similar.
- Minimum of two-years of experience with analytical instruments, particularly with Stable Ratio Mass Spectrometry, or at least Mass Spectrometry and statistical treatment of the data
- Excellent oral and written command of English Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) is an asset.