

Job Description for Professional Posts

Position and Grade:	Associate Project Officer (Heritage Science) (P2)
Organizational Unit:	Physics Section Division of Physical and Chemical Sciences NA
Duty Station:	Vienna
Type/Duration of Appointment:	FT – JPO (1y + 1y)

Organizational Setting

The Physics Section is responsible for planning and implementing activities in the areas of (i) effective utilization of research reactors, (ii) fostering relevant research and development and applications using particle accelerators and related instrumentation, and (iii) plasma physics and fusion, in order to enable Member States to avail themselves of the benefits of nuclear sciences and technologies. It operates the Nuclear Science and Instrumentation Laboratory, located at the Agency's Laboratories in Seibersdorf, which assists laboratories in Member States to improve the effective utilization of nuclear spectrometry and related instrumentation by providing technical advice, training, calibration services, assistance with the modification and development of nuclear instruments and with new applications of nuclear spectrometry techniques in various fields, including energy related applications, environmental monitoring, industry, and the study of cultural heritage objects.

Main Purpose

As a member of a team led by Nuclear Physicist (Accelerators), the Associate Project Officer provides direct support to the development and implementation of IAEA activities to increase relevant capabilities within interested Member States for networking, strategic planning, knowledge transfer and technology development in the area of accelerator-based nuclear analytical techniques to foster cultural and natural heritage sustainability.

Role

The Associate Project Officer (Heritage Science) fulfils several roles within the team by providing assistance and support to the Nuclear Physicist (Accelerators) on the development and applications of accelerator-based analytical techniques for the characterisation of cultural and natural heritage. He/she supports the team in coordinating and implementing IAEA activities under the direct oversight of the Nuclear Physicist (Accelerators) by covering various aspects of reliable, accurate and safe analysis of cultural and natural heritage objects and materials for their preservation. The Associate Project Officer (Heritage Science) provides technical support for implementation of relevant Technical Cooperation

projects; and encourages internal and external cooperation and development through communication with both IAEA and external stakeholders for the preservation of cultural and natural heritage for sustainable development.

Partnerships

In close collaboration with the team, the Associate Project Officer (Heritage Science) provides assistance and coordinates detailed activities under the overarching guidance of the Nuclear Physicist (Accelerators) to internal and external stakeholders, including IAEA programme managers in other sections and departments, research institutes and international organizations under agreement with the IAEA on programmatic and cross-cutting topics and initiatives.

Functions / Key Results Expected

- In close collaboration with the team, implement the IAEA's activities on the development and applications of accelerator-based and complementary nuclear analytical techniques in the field of characterisation of cultural and natural heritage for their preservation;
- Within the scope of relevant projects, support the team in initiating, planning and conducting meetings, workshops and training courses for Member States to assess and discuss the status and key challenges of preservation of cultural and natural heritage and how nuclear analytical techniques can help to overcome those challenges;
- Contribute to the development and/or produce training materials, technical reports, scientific papers, promotional and outreach materials in the field of application of nuclear analytical techniques for characterisation, dating, authentication and provenance of cultural and natural heritage;
- Provide technical support for IAEA technical cooperation projects for human and infrastructure capacity building in the field of nuclear analytical techniques for characterisation, dating, authentication and provenance of cultural and natural heritage;
- Coordinate/liaise with external institutions and stakeholders; gather, maintain and apply knowledge of international good practices and future trends and establish new collaborations and platforms through the application of nuclear analytical techniques for the preservation of cultural and natural heritage for sustainable development.

Competencies and Expertise

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
Analytical Thinking	Associate	Gathers and analyses information, identifying critical relationships and patterns among data and proposes workable solutions
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
Physics/Nuclear Physics	<p>Broad knowledge of nuclear physics and nuclear analytical methods.</p> <p>Practical experience in handling and analysing cultural and natural heritage objects and materials by using accelerator-based nuclear analytical techniques and complementary characterisation methods.</p> <p>Experience in 2D and 3D imaging is an asset.</p> <p>Knowledge of using ionizing radiation for cultural heritage conservation is an asset.</p>
Nuclear Science / Nuclear Sciences and Applications	<p>Management of projects related to heritage science, including use of nuclear analytical techniques, is an asset.</p> <p>Proven record of collaboration with various heritage science stakeholders is an asset.</p>

Education, Experience and Language Skills

University degree in experimental nuclear physics, engineering or related fields appropriate to the duties of the post.

An advanced university degree (Master's or Doctorate's degree) in experimental nuclear physics, engineering or related fields appropriate to the duties of the post is an asset.

Minimum of two years professional experience in the applications of accelerator-based nuclear analytical techniques and complementary techniques for characterisation, dating, authentication and provenance of cultural and natural heritage objects and materials.

Experience in international projects with proven ability to participate effectively in a multinational team with respect and sensitivity for diversity.

Excellent oral and written command of English. Experience in technical writing in English for producing and reviewing scientific and/or technical documents in the subject area; Knowledge of any other official IAEA language (i.e. Arabic, Chinese, French, Russian or Spanish) is an asset.

Applications from qualified women are encouraged.