

***International Atomic Energy Agency Technical Meeting on  
sharing experience, current status and guidelines for effective  
utilization of nuclear instrumentation for environmental  
applications in developing Member States***

**17-21 October 2011**

**Vienna, Austria**

**ANNOUNCEMENT**

**BACKGROUND**

Over the last years considerable progress has been observed in development and applications of nuclear instrumentation and associated analytical methodologies for environmental monitoring. A wide range of possible applications includes the following areas:

- Determination of radioactive pollutants in environmental materials and radioecology
- Remediation of contaminated sites;
- Monitoring of inorganic pollutants in air, water and soil by using nuclear analytical techniques;
- Determination of distribution of toxic elements in support of study of environmental impact (e.g., study of mechanisms of intake and/or release of toxic elements by biological species);
- In-situ characterization of environmental materials (e.g., mining sites, hazardous waste sites);
- Nuclear safety, nuclear security and nuclear safeguards.

Recently many IAEA Member States expressed their interest in launching a nuclear power programme which would generate additional interest and needs in the field of environmental monitoring related to operation of the new nuclear power plants. In addition some countries which already have nuclear power plants (about 30) consider expanding their nuclear power programmes. Such programmes involve not only the construction and operation of nuclear reactors, but also a large set of associated activities such as mining, fuel fabrication, site assessment, environmental monitoring, radiation protection, commissioning/decommissioning, and waste management.

All of these activities require the utilization of equipment for environmental monitoring including equipment for sampling and nuclear spectrometry-based analytical instruments. These instruments should be properly selected, installed, operated and maintained. Moreover, standardised procedures have to be applied to generate meaningful and reliable analytical data.

A Technical Meeting is planned to highlight, review and discuss issues related to the current status of nuclear instrumentation for environmental applications including practical guidelines for the effective utilization in developing Member States. The following topics are expected to be included in the programme:

- State-of-the-art nuclear instrumentation for environmental monitoring including analytical methodologies;
- Capabilities and shortcomings for effective operation, maintenance and repair of state-of-the-art instrumentation used for environmental studies;
- Practical training in operation and effective utilization of nuclear instrumentation for environmental applications including development of conventional and e-learning tools;
- Tools and methodologies for meaningful sampling of air particulate matter, water, soil and sediments including installation of environmental monitoring stations;
- QC/QA for nuclear instrumentation and analytical methodologies;
- Role of national and international networks;
- Role of the IAEA in support of the developing Member State activities to effectively apply nuclear instrumentation for environmental monitoring;

## OBJECTIVES

To review the relevant experience and current status of nuclear instrumentation for environmental applications and to prepare a report/guidelines for the effective utilization in developing Member States including technical and managerial requirements and possible role of the IAEA .

## PARTICIPATION

A person will be eligible to participate only if nominated by the Government of an IAEA Member State (Ministry of Foreign Affairs or National Atomic Energy Authority) or by an Organisation invited to participate. Nomination for participation (Form A) should be received by the IAEA not later than **15 June 2011**. The participant should be the user of nuclear instrumentation or manager in the field of environmental applications of nuclear and related analytical techniques. *A contribution from the participant in the form of a short abstract covering his/her work relevant to the objectives of the meeting will be necessary for consideration for participation.*

**The abstract** should be prepared according to the following instructions:

1) Page size: A4 (21 cm by 29.7 cm) – vertical orientation

2) Margins: 25mm all around

3) Layout:

- Title: single-spaced, 14-point size, Times New Roman Font (TNR), bold
- Authors: single-spaced, 12-point size, TNR Font
- Affiliation: single-spaced, 12-point size, TNR Font, italic
- Text: 1.5 spaced, 12-point size, TNR Font
- Length: one page

**Important:** *In case of sending Microsoft Word files, authors should use True Type Embedded Fonts (when saving the file, click Tools, then Options, and tick Embed True Type fonts. This will help to prevent change of fonts when the file is read in a different system, as is expected in most of the cases).*

## **FINANCIAL SUPPORT**

As a general rule, the IAEA does not pay the costs for attendance to the meeting. However, limited funds may be made available to assist the attendance of selected participants and approved in accordance with the current Agency rules and regulations. Generally, not more than one financial grant will be awarded to any one Member State. If Governments wish to apply for financial support on behalf of their nominees, they should address specific requests (Grant Application Form) to the IAEA Scientific Secretary.

## **MEETING FORMAT**

To facilitate proceedings, participants are invited to contribute an oral presentation on subject relevant to the scope and objectives of this meeting. Participants should submit an abstract of their proposed presentation along with their nomination. The official language of the meeting is English. No interpretation will be provided. It is expected that the meeting will start at 9:00 on Monday 17 October and conclude by 16:00 on Friday 21 October.

The outputs of discussions will be recorded for possible dissemination to Member States as an IAEA technical publication. Contributors of material to be included in the Agency proceedings are required to assign all copyrights or rights to publish to the Agency. Please complete and sign the Form B and send it to the IAEA Scientific Secretary by post or email. The authors should ensure that material they make available for possible publication by the IAEA does not include copyrighted material or other impediments for reproduction.

## **LOCAL ARRANGEMENTS**

It is the responsibility of all participants to make their own travel arrangements to/from Austria. Detailed information on accommodation, local transport to/from the meeting venue, and other organisational details, will be sent to all designated participants well in advance of the meeting.

## **VISA**

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria well in advance of entry. An official letter of invitation will be issued to all designated participants by the IAEA Scientific Secretary.

## **DEADLINES**

- **15 June 2011:** Submittal of requests to the IAEA for participation and financial support close
- **30 July 2011:** Participants informed of their acceptance of participation and request for financial support.

## **IAEA SCIENTIFIC SECRETARY**

Mr Andrzej Markowicz

Nuclear Spectrometry and Applications Laboratory

Physics Section, Division of Physical and Chemical Sciences

Department of Nuclear Sciences and Applications

International Atomic Energy Agency

Wagramer Strasse 5, P. O. Box 100

A-1400 Vienna, Austria

Tel: +431 2600 28236

Fax: +431 2600 28222

E-mail: [A.Markowicz@iaea.org](mailto:A.Markowicz@iaea.org)