

***International Atomic Energy Agency Technical Meeting for  
the Results of the Nuclear Instrumentation Laboratory Network's  
Intercomparison Exercise***

**10-14 March 2014**

**Vienna, Austria**

**ANNOUNCEMENT**

**BACKGROUND**

The Nuclear Science and Instrumentation Laboratory (IAEA Division of Physical and Chemical Sciences within the Department of Nuclear Sciences and Applications) fosters supporting the IAEA Member States to effectively operate and maintain nuclear instruments appropriate to their nuclear activities, including the application of nuclear spectrometry techniques in different fields. In recent years, attention has been paid to the need of creating capabilities to support Member States in introducing the use of in-situ measurement techniques to support environmental studies.

Radiologically impacted sites exist all over the world, the result of past activities that were never subject to regulatory control or that were regulated, but not in accordance with prevailing international standards including those formulated by the IAEA. Radiologically impacted sites may have also resulted from nuclear and/or radiological accidents. These sites can lead to the exposure of members of the public to ionizing radiation which may result in negative health effects in the exposed population.

To achieve a comprehensive characterization of environmental problems, many factors have to be taken into account and only by designing a proper assessment program including an interdisciplinary approach can a proper interpretation be provided and contribute to solve a particular problem. At different stages of any environmental assessment large amount of data on the nature, concentration and migration pathways of the investigated contaminants of concern is required.

In order to investigate, control and regulate radiologically impacted sites, performing assessments using in-situ techniques can provide a more complete and representative investigation of a site in both a time and cost effective manner. In-situ techniques and other nuclear-related methods have reached a high level of analytical performance and offer certain advantages over other traditional characterization procedures, such as:

- Fast determination of contaminant concentrations/activities in across a radiologically impacted site without time-consuming sample collection and preparation procedures.
- Fine tuning of the contaminant spatial distribution, with immediate real time identification of areas of interest ('hot-spot' areas), allowing further investigation of these areas with a better spatial resolution sampling.
- Cost reduction for the investigation of all the stages of an assessment, and remediation process. Larger size of the effectively inspected sample contributes to a drastic reduction of the time required for measurements and results in more representative results.
- Optimization of sampling strategies for more accurate laboratory analysis.

The use of in-situ techniques in environmental monitoring has increased during the last years. However, there is an uneven level of experience and access to such techniques across the IAEA Members States. There is also a need to develop comprehensive guidelines that can be used by the IAEA MSs in implementing site characterization works.

ENVIRONET was created in 2009 to offer a variety of products and services aimed at facilitating and increasing the exchange of information and experiences amongst its participants. The ultimate goal is to build capacity in the different Member States and to facilitate the full implementation of remediation projects. As part of this network in 2013 a working group on IN-SITU characterization of radiologically affected sites was established.

As part of the efforts to improve instrumentation capability between the Member State laboratories with respect to environmental measurements, the nuclear instrumentation community undertook a limited soil-sample inter-comparison exercise. This exercise has now been completed and this meeting is held in part to present the results, and to discuss the needs of the community and future actions.

## **OBJECTIVES**

To present the results of the instrumentation inter-comparison exercise initiated by the nuclear instrumentation community performed since 2012.

To broaden the awareness of, and nurture the recently established ENVIRONET IN-SITU Working Group.

## **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 **2 February 2014**.

The participant should be:

- (i) In the case of presenting inter-comparison results the responsible analyst;

or

- (ii) Interested in participating within the ENVIRONET IN-SITU Working group. The participant should preferably be already registered with ENVIRONET and be a user of nuclear instrumentation or manager in the field of environmental applications of nuclear and related analytical techniques.

*Applicants fulfilling both or either of the above criteria will be given preference for participation*

*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, including motivation for participation within the IN-SITU working group.*

**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). PDF files are preferred.*

## **FINANCIAL SUPPORT**

**As a general rule, the IAEA does not pay the costs for attendance to the meeting.**

However in order to facilitate a broad range of participation, **limited funds may be made available for contributory support** 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 **13:00 on Monday 10<sup>th</sup> March** and conclude by **12:00 on Friday 14<sup>th</sup> March**.

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

- **2 February 2014:** Submittal of requests to the IAEA for participation and financial support close
- **14 February 2014:** Participants informed of their acceptance of participation and request for financial support.

## IAEA SCIENTIFIC SECRETARY

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