

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

Workshop to outline the training programme on In Situ Radiological Characterization of Sites

3 - 7 November 2014, VIC MOE75, IAEA Headquarters, Vienna, Austria

INFORMATION SHEET AND CALL FOR PAPERS

BACKGROUND

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

To achieve a comprehensive characterization of environmental problems, many factors have to be taken into account. The design and proper assessment of a program including adopting an interdisciplinary approach can provide a proper interpretation and contribute to solving a particular problem. At different stages of any environmental assessment, a large amount of data on the nature, concentration and distribution pathways of the investigated contaminants of concern is required. In order to investigate, control and regulate a contaminated site the possibility to perform screening surveys of the contaminated sites using in-situ techniques is an important alternative allowing to improve the sampling strategies and to reduce the costs of the analytical survey.

In-situ techniques and other nuclear-related methods have reached a high level of analytical performance and offer certain advantages over other more traditional characterization procedures, such as:

- Fast determination of contaminant concentrations/activities in many spots/areas across the contaminated 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 in the IAEA Members

States. There is also a need to develop comprehensive guidelines that can be used by the IAEA Member States in implementing site characterization works.

The IAEA's vision is that its Member States will eventually have in place a proper infrastructure and technologies for radiological characterization of the sites in a timely, safe and cost-effective manner. Aligned with this vision the INSITU Working Group was created within ENVIRONET (http://www.iaea.org/OurWork/ST/NE/NEFW/WTS-Networks/ENVIRONET/overview.html), to produce a variety of products and services aimed at facilitating and increasing the exchange of information and experiences in the specific field of in-situ methods for characterization of sites. The ultimate goal is to build capacity in the different IAEA Member States and to facilitate the full implementation of remediation projects.

A Workshop is planned to highlight, review and discuss topics related to the development of training materials (including e-learning) and the organization of training activities in the field of in-situ characterization of sites. In particular, the participants will:

- Review the first version of an e-learning material on Introduction to in-situ techniques,
- Discuss in detail the topics and training modalities to be implemented in the training programme *In-Situ Measurements Course on Site Remediation*,
- Discuss alternatives for data interpretation and 2D/3D representation and mapping,
- Participate in a demonstration of performance of a variety of detectors used for in-situ applications.

OBJECTIVES

To review the contents and possible modalities to be included in a training programme on in-situ measurements in support of site remediation. To outline effective mechanisms for further exchange of information within the IN-SITU working group.

PARTICIPATION

The Workshop is targeted to professionals working on the development and applications of nuclear instrumentation and associated analytical methodologies for in-situ radiological characterization of sites. Priority in selection of candidates will be given to members of the ENVIRONET IN-SITU working group. 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 **19 September 2014.** A contribution from the participant in the form of a short abstract covering his/her work relevant to the objectives of the Workshop 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; and

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; and

• Length: one page.

Important: When sending Microsoft Word files, authors should use True Type Embedded Fonts (to save 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). If possible, please also send your abstract in <u>PDF format</u>.

FINANCIAL SUPPORT

The IAEA is generally not in a position to bear the travel and other costs of designated participants in the meeting. Limited funds are, however, available to contribute to the costs of participants from Member States eligible to receive technical assistance under the IAEA's technical cooperation programme. Such assistance can be offered, upon specific request, to one participant per country provided that, in the IAEA's view, the participant will make an important contribution to the meeting. The application for financial support should be made at the time of designation of the participant.

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in meetings, workshops or training courses or for consultants. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

If your Government should wish, in addition, to appoint one or more observers to assist and advise the designated participant in the meeting, their name(s) should reach the IAEA by 19 September 2014. In accordance with the established rules, Governments are expected to bear the cost of attendance of any observers they may send to IAEA meetings. Compensation is not payable by the IAEA for any damage to or loss of observers' personal property or for illness, injury or death occurring while travelling to or in connection with their attendance at IAEA meetings.

As subsequent correspondence will be exchanged directly between the Scientific Secretary for the meeting, Mr Roman Padilla-Alvarez of the Division of Physical and Chemical Sciences and the participants, the full names and complete contact details (including postal address, telephone/fax numbers, and email address) of designated participants should be provided.

To facilitate the preparation of the Workshop report, participants are invited to contribute with an oral presentation on subjects 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, 3 November and conclude by 12:00 on Friday, 7 November 2014.

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

- 19 September 2014: Submittal of requests to the IAEA for participation and financial support close; and
- 10 October 2014: Participants informed of their acceptance of participation and request for financial support.

IAEA SCIENTIFIC SECRETARY

Mr Roman Padilla-Alvarez
Nuclear Science and instrumentation 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 28244 Fax: +431 2600 28222

E-mail: r.padilla-alvarez@iaea.org