



Technical Meeting on Current Trends and Developments in Nuclear Instrumentation

**IAEA Headquarters
Vienna, Austria**

**Vienna International Centre
Room C0440/C0437**

3–7 December 2018

Ref. No.: F1-TM-1703707

Information Sheet

A. Background

Over the last 20 years, the International Atomic Energy Agency's (IAEA's) Nuclear Science and Instrumentation Laboratory (NSIL)¹ has played a leading role worldwide in the effective use of nuclear instrumentation and nuclear spectrometry techniques, including the use of in situ measurement techniques to support environmental studies. In addition to these research activities, the NSIL has supported IAEA technical cooperation projects by providing training in nuclear instrumentation to hundreds of fellows and scientific visitors.

NSIL has developed strong capacities for in situ measurement campaigns and has a variety of portable instruments. The geostatistics based interpretation of large data sets allows the simulation of a model that can be used to describe the statistical and geostatistical variability of the measurement results, and to provide useful tools to represent an estimate of the distribution of the contaminants, to evaluate the volume of contaminated material and to support decision-making in environmental remediation processes.

¹ The Nuclear Science and Instrumentation Laboratory replaced the former Nuclear Spectrometry and Applications Laboratory (NSAL) in 2013.

Synergies were identified with the Division of Nuclear Fuel Cycle and Waste Technology (NEFW) of the Department of Nuclear Energy and a Working Group (INSITU) was launched within the Network on Environmental Management and Remediation (ENVIRONET) in November 2013. NSIL, in cooperation with NEFW and the Waste and Environmental Safety Section of the Department of Nuclear Safety and Security have organized several activities aimed at deploying a Mobile Unit that has supported several IAEA developing Member States (Argentina, Azerbaijan, Gabon, Indonesia, Kenya, Kyrgyzstan, Mexico, Uzbekistan and Zambia) to perform radiological assessment of sites in environmental assessment and remediation related projects.

B. Objectives

The purpose of the meeting is to highlight, review and discuss the state of the art portable nuclear instrumentation for in situ environmental monitoring including analytical methodologies. The following topics are expected to be included in the programme:

- Examination of capabilities and shortcomings for effective operation and maintenance of state of the art instrumentation and interpretation tools used for environmental studies;
- Discussion of practical training in the operation and effective utilization of portable nuclear instrumentation for environmental applications, including development of conventional and e-learning tools;
- Discussion and review of the role of national and international networks, including ENVIRONET and its INSITU Working Group;
- Consider and advise on the role of the IAEA in support of developing Member State's activities to effectively apply nuclear instrumentation for environmental and other applications.

C. Format

To facilitate proceedings, participants are invited to contribute 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 09:30 on Monday, 3 December 2018, and conclude by 16:00 on Friday, 7 December 2018.

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 IAEA proceedings are required to assign all copyrights or rights to publish to the IAEA. Please complete and sign the attached Form for Submission of a Paper (Form B) and send it to the IAEA Scientific Secretary (see Section J below) 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 to reproduction.

D. Administrative and Financial Arrangements

The selected candidates will in due course be sent full details of the procedures to be followed with regard to administrative and financial matters.

No registration fee is charged to participants. The costs of the meeting facilities and of logistic support for the meeting will be borne by the IAEA.

As a general rule, the IAEA does not pay the costs for attendance at the meeting. However, limited funds may be made available to assist the attendance of selected participants in accordance with the current IAEA rules and regulations. Travel and subsistence expenses of participants may be borne by the IAEA utilizing the limited funds that are available to help cover the costs of certain participants. Such assistance can be offered upon specific request to normally one participant per country provided that, in the IAEA's view, the participant on whose behalf assistance is requested will make an important contribution to the meeting. The application for financial support should be made at the time of designating the participant. If Governments wish to apply for financial support on behalf of their designees, they should address specific requests using the attached Grant Application Form (Form C) to the IAEA Scientific Secretary.

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.

E. Registration and Participation

The meeting may be attended only upon official designation. Participants should complete the attached Participation Form (Form A) and send it to the appropriate national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for subsequent transmission to the IAEA, not later than **19 October 2018**. Designations received after that date or applications sent directly by individuals or by private institutions cannot be considered. Designating Governments will be informed in due course of the names of the selected candidates and at that time full details will be given on the procedures to be followed with regard to administrative and financial matters. For Member States receiving technical cooperation assistance, applications for financial support should be made at the time of designating the participant.

The meeting will be of interest to professionals involved in the field of radioactivity measurements using portable instruments or who have been designated by their national authorities to provide an assessment of their country's needs in this field. Individuals wishing to be considered for participation are expected to submit a short abstract covering their work relevant to the objectives of the meeting.

F. Submission of Abstracts and Presentations

Abstract Submission

The abstract is expected to provide a summary of the content and principal conclusions of the presentation that the author intends to give at the meeting. The abstract must be sent, together with Forms A and B, to the appropriate national authority, and also directly to the IAEA Scientific Secretaries (N.Skukan@iaea.org, R.Padilla-Alvarez@iaea.org), by **19 October 2018**.

Important: Contributors of material to be included in the expected technical publication are required to assign all copyrights or rights to publish to the IAEA. The authors should make sure that the files do not include copyrighted fonts or other impediments to reproduction.

The abstract should be sent in Microsoft Word format and according to the following instructions:

- 1) Page size: A4 (21 cm by 29.7 cm) – vertical orientation
- 2) Margins: 25 mm all around
- 3) Layout:
 - Title: single-spaced, 14-point size, Times New Roman (TNR) font, bold
 - Authors: single-spaced, 12-point size, TNR font
 - Affiliation: single-spaced, 12-point size, TNR font, italics
 - Text: 1.5 spaced, 12-point size, TNR font
 - Length: one page

Important: If 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 any change of fonts when the file is read in a different system, as is expected in most cases). **PDF files are preferred.**

Presentation Submission

Those authors whose presentations are accepted will be informed of the acceptance of their contributions by email by **2 November 2018**. The authors will be requested to prepare and submit their presentations in Microsoft PowerPoint or PDF format by **19 November 2018**.

G. 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 organizational details, will be sent to all designated participants well in advance of the meeting.

H. Visas

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 participants by the IAEA Scientific Secretary.

I. Deadlines and Key Dates

- **19 October 2018:** Submission of abstracts and requests to the IAEA for participation and financial support.
- **2 November 2018:** Participants are informed of the acceptance of their nominations and of their requests for financial support.
- **19 November 2018:** Selected participants submit their presentations and contributions.

J. Organization

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