IAEA
International Atomic Energy Agency
Atoms for Peace and Development

Training Workshop on Radiological Mapping Using Mobile Instrumentation

Seibersdorf, Austria

9 - 13 October 2023

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Information Sheet

Introduction

Radiological mapping using portable, mobile, or airborne instrumentation is becoming an increasingly used tool for environmental control, detection of radioactive contamination in areas of interest, search for uncontrolled and reactive radiation sources, characterization of sites with exceeded NORMs and others.

The state-of-the-art technology is characterized by high deployment flexibility, application operability and the speed of obtaining results for further decision-making. Aspects of radiation protection when using these technologies are no less important.

This workshop will allow participants to gain knowledge about new radiation detectors suitable for field measurements, modern mobile platforms used for radiation detection and measurement, new methods of radiological data processing and analysis, as well as to acquire basic practical skills from real measurements in field conditions.

Objectives

The aim of the workshop is the exchange of experience with experts, a practical introduction to the state-of-the-art instrumentation, a comparison of the performance of various UAV-based technologies for typical radiation applications, as well as an understanding of robustness for work in field conditions.

Topics:

- Field gamma spectroscopy and new detectors,

- Current backpack, mobile and UAV gamma spectroscopy instrumentation,
- Outlining field strategies for radionuclide concentration, dose rate, and surface contamination measurement,
- Principles of radiological data processing and postprocessing, data analyses, metrology,
- Practical field measurement using backpacks and mobile instrumentation (UGV),
- Practical field measurement using UAV-based instrumentation,
- UAV Photogrammetry and its use for radiological mapping,
- Data handling and interpretation for creation of maps, including interpolation based on geo-statistics (use of "R-Tool").

Target Audience

This training workshop is aimed at experts or interested parties in the field of using UAV based systems for ionizing radiation detection and radiation mapping in various application areas.

Working Language(s)

English

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the Participation Form (Form A) to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA **by 24 July 2023.** Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the Agency's Personal Data and Privacy Policy and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. Further information can be found in the Data Processing Notice concerning IAEA InTouch+ platform.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain

participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made using the **Grant Application Form (Form C)** which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A) by 24 July 2023.**

Visas

Participants who require a visa to enter Austria should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of Austria.

Organization

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary/Secretaries and correspondence on other matters related to the event to the Administrative Secretary.