

3rd International Conference on

Applications of Radiation Science and Technology



#ICARST2025

7 – 11 April 2025
Vienna, Austria

BACKGROUND

The International Atomic Energy Agency (IAEA) is organizing the Third International Conference on Applications of Radiation Science and Technology (ICARST-2025), following the success of the first ICARST in 2017 and second ICARST in 2022.

Innovations in the field of radiation sciences have contributed significantly to industrial growth and economic development by providing versatile tools and processes to produce high quality products in a clean and efficient manner. These advances have resulted in economic growth and have significantly improved the quality of life in many Member States. With the focus now shifting to the development of sustainable technologies to help achieve the United Nations Sustainable Development Goals (UN SDGs), it is now time to revisit the current status of radiation technology programmes in academia and industry to prepare for meeting future challenges.

PURPOSE AND OBJECTIVES

The purpose of ICARST-2025 is to provide a comprehensive review of significant developments in applications of radiation science and technology, as well as the state of the art in the field; assess national, regional, and global initiatives for implementing proven industrial applications of radiation science and technology; provide a composite platform where representatives from industry and academia can develop new initiatives; and chart a clear-cut pathway for the adoption of radiation technologies to achieve specific SDGs.

It will aim to provide a unique opportunity to achieve the following objectives:

- Review key developments;
- Assessing Initiatives;
- Fostering New Initiatives;
- Identifying implementation strategies;

AUDIENCE

This conference will focus on the applications of radiation science and technology, which is a multidisciplinary area covering many branches including radiation-related physics, chemistry, materials science, biology, engineering, and industrial applications. The target audience for this conference comprises, but is not limited to:

- Radiation technologists in areas of chemistry, physics, microbiology, material science;
- Food technologists;
- Cultural heritage conservators and preservers;
- High dose radiation dosimetry experts;
- Environment engineers and scientists;
- Radiation facility operators;
- Quality assurance specialists for radiation facilities;
- Radiation safety experts;
- Process engineers;
- Entrepreneurs involved in applications of radiation technologies;
- Manufacturers of radiation sources and equipment suppliers;
- Research scientists and students engaged in radiation technologies;
- Policy makers and regulators; and
- Other stakeholders.

MAIN TOPICS

The scope of the conference will cover, but is not limited to, the following topical areas:

- Advances in radiation chemistry, radiation science and technology;
- Radiation modified advanced materials: from fundamentals to applications;
- Radiation and nuclear technology for imaging and preservation of cultural heritage;
- Radiation processing applications in medical sterilization, tissue banking, food and agriculture;
- Dosimetry, standards and quality management of irradiation facilities;
- New generation of radiation sources: gamma rays, electron beam and X-ray;
- Production and application of radionuclides and tracers for studying industrial and environmental processes and flow visualisation;
- Nucleonic control and measurement systems and imaging technologies;
- Non-destructive Testing (NDT) applications for civil engineering, including artificial intelligence, neutron and muon radiography;
- Computational fluid dynamic (CFD) and numerical Residence Time Distribution (RTD) modelling;
- Radiation sciences and technology in environmental monitoring, protection, remediation and post natural disaster management;
- Education, training and certification in radiation science and technology; and
- Radiation sciences & technology success stories in line with the UN SDGs (<https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>).

KEY DEADLINES

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| 2 August 2024 | Submission of abstracts through IAEA-INDICO |
| 2 August 2024 | Submission of Form B (together with FormA) through the InTouch+ platform |
| 2 August 2024 | Submission of Form C (together with Form A) through the InTouch+ platform |
| 31 October 2024 | Notification of Acceptance of abstracts for oral or poster presentation |
| 31 March 2025 | Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform |

REGISTRATION

No registration fee is charged.

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.

LANGUAGE

The working language of the conference will be English.

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CONFERENCE WEB PAGE

Detailed information on administrative matters including registration, paper submission and grants is provided on:

<https://www.iaea.org/events/icarst-2025>

Please include reference number **IAEA-CN-332** in all communications.