AUDIENCE

This conference is designed for various stakeholders from IAEA Member States including radiation oncologists, radiation biologists, medical physicists, radiation therapists, as well as other scientists, researchers and bio-medical engineers working in the field of radiotherapy.

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.

KEY DEADLINES

Submission of abstracts through IAEA-INDICO	25 November 2024
Submission of Form B (together with Form A) through the InTouch+ platform	25 November 2024
Submission of Form C (together with Form A) through the InTouch+ platform	25 November 2024
Notification of acceptance of abstracts for oral or poster presentation	31 January 2025
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	26 May 2025

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Please visit the IAEA conference webpage www.iaea.org/events/icaro-4 for updates.

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IAEA
Atoms for Peace and Development

International Conference on Advances in Radiation Oncology

ICARO-4

2–5 June 2025
Vienna, Austria

#ICARO4

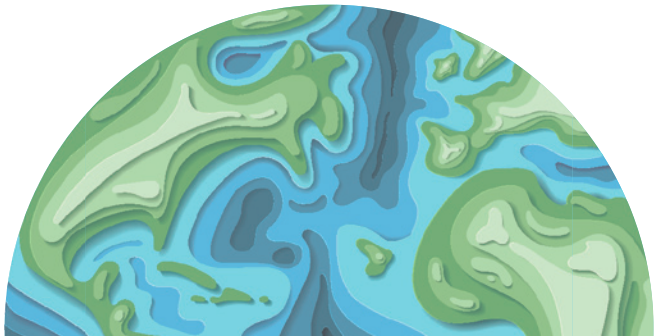
BACKGROUND

Building on the successes of the previous ICARO conferences held in 2009, 2017 and 2021, ICARO-4 will dive deeper into the exploration of new radiotherapy techniques and address the latest advancements and ongoing challenges in the field, including access to high-quality cancer care worldwide.

ICARO-4 will discuss cutting-edge techniques such as stereotactic radiotherapy, intensity modulated radiation therapy, image-guided and motion management, MRI-guided linear accelerators, 3D conformal brachytherapy, as well as proton and light ion therapy. These advanced techniques, coupled with the need to treat more patients in less time, demand high-end technologies, posing challenges in terms of finance, implementation and quality assurance.

Health care professionals will have an opportunity to review current developments in clinical applications of radiation oncology, radiation biology and medical physics. As well, they will discuss ways to enhance cancer management in Member States.

Participants will be awarded Continuing Medical Education (CME) credits.



PURPOSE AND OBJECTIVES

The conference will discuss important clinical, scientific, professional and educational topics covering different aspects of radiotherapy. The conference will review:

- the current role and potential of clinical, medical physics, technological and molecular/ biological innovations in radiation oncology;
- the status of evidence-based recommendations for treating common cancers;
- the present situation of comprehensive audits in radiotherapy;
- the latest developments in medical dosimetry and dose auditing procedures for new radiotherapy technologies;
- resource sparing approaches in clinical radiotherapy practices.

The conference will also

- explore applications of improved imaging tools in treatment;
- facilitate information exchange among leading experts on the latest advances and implementation issues in the field;
- define future challenges and directions in the clinical use of radiotherapy.

LANGUAGE

The working language of the conference will be English.

MAIN TOPICS

The IAEA invites participants to provide high-quality abstracts that fall within the following topics:

- Technological advances and challenges
- Roadmaps for setting up modern radiation oncology facilities
- New treatment and imaging techniques as well as clinical evidence
- Developments in treatment planning
- Advances in treating recurrent patients
- Personalized medicine
- Telemedicine
- Intensity modulated radiotherapy, including arc-based approaches
- Image-guided radiotherapy, including MRI-guided
- Stereotactic radiotherapy
- Proton and light ion therapy
- Applied brachytherapy
- Spatially fractionated radiation therapy
- FLASH therapy
- Combined therapies
- Paediatric radiotherapy
- Safety in radiation therapy
- Health economics in radiotherapy
- Radiation biology
- Dosimetry
- Auditing procedures
- Developments in quality assurance and new approaches to quality management
- Education and training of professionals
- Clinical research
- National cancer control strategies