



International Conference on Advances in Radiation Oncology (ICARO-2)

Organized by the
International Atomic Energy Agency

**IAEA Headquarters
Vienna, Austria**

20–23 June 2017

Announcement and Call for Papers

A. Introduction

The International Atomic Energy Agency (IAEA) is organizing the second International Conference on Advances in Radiation Oncology (ICARO-2), following the success of the first conference (ICARO-1), which was held in 2009. The advances in radiotherapy in the last years have been striking, although numerous challenges are still to be faced, including achieving access to high standard cancer care in many countries. New radiotherapy techniques have been implemented in the past decade, including three-dimensional conformal therapy, stereotactic radiotherapy, intensity modulated radiation therapy, image guided radiation therapy, tomotherapy, new brachytherapy and unsealed-source techniques, and proton and heavy ion therapy. The increased use of these complex techniques, coupled with the need to treat more patients in less time, will continue to drive a reliance on high-end technologies and impose a financial burden on health care programmes. In addition, the development and implementation of a quality assurance programme for these new techniques is a major challenge in Member States.

The conference will give health care professionals an opportunity to review the current developments in clinical applications in the fields of radiation oncology, radiation biology and medical physics, with a view to addressing the challenge of cancer management in Member States.

It will also critically examine the pivotal role of emerging radiotherapy techniques in tackling the health challenges common to many Member States.

An appropriate number of accredited continuing medical education (CME) credits will be awarded to participants.

B. Objectives

The conference is aimed at defining the current role and future potential of technological, medical physics and molecular/biological innovations for their incorporation into routine clinical practice in radiation oncology. It will also provide a forum where advances in technology, best practices and quality assurance methodologies can be disseminated and scientific knowledge exchanged. The conference will have the following specific objectives:

- To review the current role and future potential of technological, medical physics and molecular/biological innovations for clinical use in radiation oncology
- To explore the applications of improved imaging tools in treatment planning
- To review the current status of evidence based recommendations for the treatment of common cancers
- To review the latest developments in medical dosimetry and dose auditing procedures for new radiotherapy techniques
- To review the current status of comprehensive audits in radiotherapy
- To review resource sparing approaches in clinical radiotherapy practice
- To exchange information on the current advances and implementation challenges in the field among leading experts
- To define future challenges and directions in the clinical use of radiotherapy

C. Format and Topics

The conference programme will include plenary and parallel sessions, poster sessions, round-table discussions, lunch forums and teaching lectures.

The **plenary sessions** will include topics of interest to all participants such as personalized medicine, recent technological, physical and clinical developments, quality assurance, challenges and solutions, and health care economics.

Parallel sessions will cover detailed developments and recent findings related to clinical and physical aspects of radiotherapy.

Poster sessions will be dedicated to discussion and interaction with colleagues.

Round-table discussions will address specific issues from different perspectives and **lunch forums** will review potential solutions to these issues such as telemedicine and transitioning to paperless radiotherapy departments.

The **teaching lectures** will provide an opportunity for continuous professional development for all participants.

The IAEA invites participants to provide high quality contributions on all aspects of radiotherapy. The topics to be addressed during the conference will be centred on technological as well as biological, medical physics and clinical advances, and should take into account real clinical settings in all Member States. Both academic and practice-based papers under the umbrella of the following topics will be considered:

- Technological advances and challenges
- Roadmap for setting up modern radiation oncology facilities
- New treatment and imaging techniques and clinical evidence
- Health economics in radiotherapy
- Developments in treatment planning
- Small field dosimetry
- Auditing procedures
- Personalized medicine
- Advances in the treatment of recurrent patients
- National cancer control strategies
- Developments in quality assurance and new approaches to quality management
- Safety in radiation therapy
- Intensity modulated radiotherapy, including arc-based approaches
- Telemedicine
- Radiobiology
- Combined therapies
- Paediatric radiotherapy
- Clinical research
- Applied brachytherapy
- Education and training of professionals

D. Target Audience

This conference will offer an opportunity to review the latest technological, clinical and biological developments that are relevant to radiotherapy, and the main target audience therefore comprises:

- Radiation oncologists

- Radiobiologists
- Medical physicists
- Technologists

The conference would also be of interest to scientists, researchers and biomedical engineers working in the field of radiotherapy.

E. Expected Outcomes

The conference will provide clinicians, scientists and other professionals with an overview of technological achievements in the field of advanced radiotherapy techniques and of their potential future therapeutic benefits, as well as with a summary of progress made in the molecular/biological modification of tumour and normal tissue responses, and of advances in medical physics. Also, the proceedings of the conference will document the impact of new technological and biological tools in current clinical practice and the likely future integration of the knowledge and tools in radiotherapy, preferably using clinical trials as a suitable matrix for providing robust data for future clinical implementation. A review of the effectiveness and limitations of the current quality assurance programmes will be completed and new innovative processes will be disseminated.

F. Papers

Contributions on the topics listed in Section C above are welcome as oral or poster presentations. All papers submitted — other than invited keynote papers — must present original work and should not have been published elsewhere. Poster sessions will be used to promote greater interactions among conference participants. A Book of Synopses of the accepted contributions will be distributed to all participants at the opening of the conference.

F.1. Submission of Synopses

Synopses (up to two printed A4 pages, including not more than one figure, graph or table, no references) must be uploaded to the conference's web browser-based file submission system (IAEA-INDICO) which will be available on the conference web page (see Section P) from **1 July to 31 October 2016**. No other submission route will be accepted. Specifications for the layout will be available on IAEA-INDICO.

In addition, all participants must submit the following two forms to their appropriate governmental authority (see Section G) for transmission to the IAEA. These forms must be received by the IAEA no later than **31 October 2016**.

- Participation Form (Form A)
- Form for Submission of a Paper (Form B)

IMPORTANT: The uploaded synopses will be considered by the Programme Committee only if these two forms have been received by the IAEA through the established official channels (see Section G).

F.2. Acceptance of Synopses

Authors will be informed by **16 January 2017** as to whether their synopses have been accepted for inclusion in the Book of Synopses and, as appropriate, for ultimate presentation in an oral or a poster session and will receive further guidelines. The IAEA, however, reserves the right to refuse the presentation or publication of any submission that does not meet expectations based on the information given in the synopses.

IMPORTANT: The system for electronic submission of papers, IAEA-INDICO, is the sole mechanism for submission of the synopses. Authors are encouraged to submit the synopses as early as possible.

G. Participation and Registration

All persons wishing to participate in the conference are requested to register **online in advance** through the conference web page (see Section P). **In addition**, they must send a completed

- Participation Form (Form A),
- Form for Submission of a Paper (Form B) (if applicable), and
- Grant Application Form (Form C) (if applicable),

as soon as possible to a competent official authority:

- Ministry of Foreign Affairs,
- Permanent Mission to the IAEA, or
- National Atomic Energy Authority,

or to one of the organizations invited to participate for subsequent transmission to the IAEA, via email to: Official.Mail@iaea.org.

A participant will be accepted only if the Participation Form is transmitted through the Government of a Member State of the IAEA or by an organization invited to participate.

Participants whose official designations have been received by the IAEA will receive further information on the conference at least three months before the start of the conference. This information will also be made available on the conference web page (see Section P).

H. Expenditures and Grants

No registration fee will be charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the conference. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Such assistance may 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 conference. If governments wish to apply for a

grant on behalf of one of their participants, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are:

1. Submitted by **31 October 2016**;
2. Accompanied by a duly completed Grant Application Form (Form C) signed and stamped by the Ministry of Foreign Affairs or the National Atomic Energy Authority;
3. Accompanied by a completed Participation Form (Form A).

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

I. Distribution of Documents

A preliminary programme of the conference will be made available on the conference web page (see Section P) before the start of the conference. The final programme and the Book of Synopses (in electronic form) will be available free of charge upon registration at the conference.

J. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretariat by email: icaro2@iaea.org by **30 June 2016**.

K. Working Language

The working language of the conference will be English.

L. Venue and Accommodation

The conference will be held at the IAEA's Headquarters in Vienna, Austria. Participants must make their own travel and accommodation arrangements. Hotels which are offering a reduced rate for conference participants will be listed on the conference web page (see Section P). Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying cancellation fees or for re-bookings and no shows.

Detailed information on accommodation and other administrative details will be made available on the conference web page as soon as possible.

M. Visas

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least eight weeks before they travel to Austria. Designated participants will be required to submit a letter of invitation in support of their visa application.

N. Key Deadlines

Electronic submission of extended synopsis, including submission of Forms A and B through official channels:	31 October 2016
Submission of Grant Application Form (Form C) and Participation Form (Form A) through official channels:	31 October 2016
Notification of acceptance of paper:	15 January 2017
Registration only (no paper submission, no grant request)	open until conference

O. Conference Secretariat

General postal address and contact details of the IAEA:

International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Ref.: IAEA-CN-250
Tel.: +43 1 2600 0
Fax: +43 1 2600 7
Email: Official.Mail@iaea.org

Scientific Secretaries:

Mr Eduardo Zubizarreta
Applied Radiation Biology and Radiotherapy Section
Division of Human Health
Department of Nuclear Sciences and Applications
Tel.: +43 1 2600 21669

Mr Ahmed Meghzifene

Dosimetry and Medical Radiation Physics Section
Division of Human Health
Department of Nuclear Sciences and Applications
Tel.: +43 1 2600 21653

Email address of the Scientific Secretaries: icaro2@iaea.org

Administration and organization:

Ms Martina Khaelss

Conference Services Section
Division of Conference and Document Services
Department of Management
IAEA-CN-250
Tel.: +43 1 2600 21315
Email: M.Khaelss@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries, and correspondence on administrative matters to the Conference Services Section.

P. Conference Web Page

The IAEA web page for the conference is as follows:

<http://www-pub.iaea.org/iaeameetings/50815/International-Conference-on-Advances-in-Radiation-Oncology-ICARO2>

It will be updated regularly with new information, and participants are encouraged to check it on a regular basis.