



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

International Conference on Hybrid Imaging

(IPET 2024)

IAEA Headquarters

Vienna, Austria

7–11 October 2024

Organized by the

International Atomic Energy Agency (IAEA)

In cooperation with the

Asociación Latinoamericana de Sociedades de Biología y Medicina Nuclear (ALASBIMN)

Asia Oceania Federation of Nuclear Medicine and Biology (AOFNMB)

Arab Society of Nuclear Medicine (ARSNM)

European Society of Radiology (ESR)

The International Centers for Precision Oncology Foundation (ICPO)

International Society of Radiology (ISR)

Radiological Society of North America (RSNA)

Society of Nuclear Medicine and Molecular Imaging (SNMMI)

World Association of Radiopharmaceutical and Molecular Therapy (WARMTH)

World Federation of Nuclear Medicine and Biology (WFNMB)

Announcement and Call for Papers

A. Background

The International Atomic Energy Agency (IAEA) is organizing the International Conference on Hybrid Imaging (IPET 2024), following the success of IPET 2007 (Bangkok, Thailand), IPET 2011 (Vienna, Austria), IPET 2015 (Vienna, Austria) and IPET 2020 (virtual event at IAEA headquarters in Vienna, Austria).

Medical imaging technology is one of the most revolutionary innovations in the medical world and it has transformed health care. It plays a fundamental role in the management of patients with a broad spectrum of pathologies, including both noncommunicable diseases (e.g., cancer, cardiovascular diseases and neurodegenerative disorders) and transmissible, infectious diseases. A wide range of clinical scenarios depend on medical imaging, including early diagnosis, the evaluation of disease location and spread, the establishment of a prognosis, support in the selection of the appropriate therapy, the evaluation of therapy response and patient follow-up. In this era of vast scientific and technological developments, physicians are compelled to provide patient-centred care. Medical imaging is essential for paving the way towards personalized medicine, an approach that stratifies patients based on the specific characteristics of their illness so as to tailor the most appropriate medical intervention.

Medical imaging encompasses technologies such as ultrasonography, X-rays, mammography, computed tomography (CT), magnetic resonance (MR), single photon emission computed tomography (SPECT) and positron emission tomography (PET). These various imaging modalities have different and complementary applications, with some providing the evaluation of structures within the body and detecting lesions as small as 2-3 mm, while others visualize the function of different organs and tissues in vivo. Hybrid imaging is an integral part of this approach since it provides complementary visual and quantitative information – morphological and functional insights into the living body.

The IPET 2024 conference will provide clinicians and imaging specialists with an international forum to critically examine the pivotal role of multimodality imaging techniques and their streamlined and emerging clinical applications, with special emphasis on SPECT-CT, PET-CT, and PET-MR for cancer management within adult and paediatric populations. As well, it will critically assess current clinical indications of radiopharmaceutical therapies in cancer management, using an evidence-based approach.

The conference's special session on Ethics, Leadership, Education and Patient Advocacy will provide participants with the opportunity to review the necessary theoretical tools for them to become leaders within their respective professions.

Participants will be awarded an appropriate number of accredited Continuing Medical Education (CME) credits.

B. Purpose and Objectives

IPET 2024: Advancing Frontiers in Hybrid Imaging for Precision Medicine

The conference is set to provide a comprehensive review of the role of streamlined and emerging medical techniques in the management of patients with cancer, with an emphasis on hybrid imaging. Additionally, there will be a critical assessment of the current clinical indications of radiopharmaceutical therapies in cancer management using an evidence-based approach. It will have the following specific objectives:

- To comprehensively review and assess the role of streamlined and emerging medical imaging techniques, with a particular emphasis on hybrid imaging (SPECT-CT, PET-CT and PET-MR), while providing best practices for the clinical management of patients with cancer;
- To critically evaluate – by employing an evidence-based approach – the current clinical indications for radiopharmaceutical therapies in cancer management. This involves assessing the efficacy and appropriateness of such therapies in various clinical scenarios;
- To enhance the quality of clinical practice through immersive 'read with the experts' sessions and robust discussions. These interactive sessions are designed to refine participants' skills and promote an in-depth understanding of complex cases;
- To foster engagement with the user community, which encompasses nuclear medicine physicians, radiologists, radiation oncologists, clinical oncologists, medical physicists, technologists, radiographers, radiopharmacists, radiochemists and other scientists working across the spectrum of hybrid imaging. The conference seeks to provide these professionals with pivotal insights on the field's latest advancements.
- To provide participants with essential theoretical tools related to ethics, leadership, education and patient advocacy. This will empower attendees to assume leadership roles in the domain of medical imaging, thereby shaping the discipline's future landscape;
- To facilitate the exchange of cutting-edge information within the realm of radiopharmaceutical sciences. Participants will have the opportunity to share and gain insights into the latest research, developments and trends within this dynamic field; and
- To conduct an in-depth review of the technological strides which have been made in hybrid medical imaging equipment. Through covering advances in hardware, software and methodologies, this will enable participants to stay abreast of the latest technological breakthroughs.

C. Themes and Topics

The IAEA invites participants to provide high-quality contributions on all aspects of nuclear medicine, diagnostic imaging or theranostic applications and research. Academic and practice-based papers that fall within the following topics will be welcomed:

1. Applications of PET-CT, molecular imaging and diagnostic imaging for different types of cancer: breast, lung, colorectal, prostate, neuroendocrine, thyroid etc.;
2. Theranostic applications;
3. Radio-guided surgery;
4. Hybrid imaging and other imaging techniques in benign conditions;
5. Dosimetry, physics and instrumentation;
6. Radiopharmaceutical production, including good manufacturing practices and quality assurance;
7. Radiation protection for personnel and patients;

8. Quality management in nuclear medicine and diagnostic imaging;
9. Ethics, leadership and education for nuclear medicine and diagnostic imaging professionals; and
10. Experience in establishing or strengthening nuclear medicine, diagnostic imaging or radionuclide therapy facilities, including related technical cooperation projects.

D. Structure

Every session will follow a clinical, disease-based approach and will include an initial discussion on the important clinical aspects to which the session is devoted. This discussion will be followed by a thorough review of hybrid imaging and theranostic applications. Each clinical session will consist of plenary sessions, an interactive ‘read with the experts’ session and an open discussion. Sessions for physicists, technologists, radiographers, radiopharmacists and radiochemists will be conducted in parallel.

E. Expected Outcomes

The conference will provide clinicians, scientists and other medical professionals with an international forum to review the latest developments across all aspects of nuclear medicine, diagnostic imaging and theranostics, with a view to addressing the health challenges that are common to many IAEA Member States.

F. Target Audience

This conference will provide an opportunity to review the latest developments in the field of nuclear medicine, diagnostic imaging and theranostics. The target audience consists of:

- Nuclear medicine physicians;
- Radiologists;
- Technologists and radiographers;
- Medical physicists;
- Radiochemists and radiopharmacists; and
- Other scientists working in all aspects of molecular imaging.

G. Call for Papers

Contributions on the topics listed in Section C are welcome as oral or poster presentations. All submissions, apart from invited papers, must present original work, which has not been published elsewhere.

G.1. Submission of Abstracts

Abstracts (approximately 500 words (including title) on one or maximum of two A4 pages should not include more than one figure, graph or table; should not include references; and must be written and submitted using the abstract template on the conference web page (see Section P)) should give enough information on the content of the proposed paper to enable the Programme Committee to evaluate it. Anyone wishing to present at the conference must submit an abstract in electronic format using the conference's file submission system ([IAEA-INDICO](#)), which is accessible from the conference web page (see Section Q). The abstract can be submitted through this system from **22 December 2023** until **11 March 2024**. Specifications for the layout will be available on IAEA-INDICO. The system for electronic submission of abstracts, IAEA-INDICO, is the sole mechanism for submission of contributed abstracts. Authors are encouraged to submit abstracts as early as possible. The IAEA will not accept submissions via email.

In addition, authors must register online using the InTouch+ platform (see Section H). The online registration together with the auto-generated Participation Form (Form A) and Form for Submission of a Paper (Form B) must reach the IAEA no later than **11 March 2024**.

IMPORTANT: The Programme Committee will consider uploaded abstracts only if these two forms have been received by the IAEA through the established official channels (see Section H).

G.2. Acceptance of Abstracts

The Secretariat reserves the right to exclude abstracts that do not comply with its technical or scientific quality standards and that do not apply to one of the topics listed in Section C.

Authors will be informed by **12 April 2024** as to whether their submission has been accepted, either orally or as a poster, for presentation at the conference. Accepted abstracts will also be reproduced in an unedited electronic compilation of Abstracts which will be made available to all registered participants of the conference.

G.3 Proceedings

Following the conference, the IAEA will publish a summary report. The proceedings will be made available to read online.

H. Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be a member of an organization that has been invited to attend.

Registration through the InTouch+ platform:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can [sign in here](#) with their username and password;
 - Persons without an existing NUCLEUS account can [register here](#).
2. Once signed in, prospective participants can use the InTouch+ platform to:

- Complete or update their personal details under ‘Basic Profile’ (if no financial support is requested) or under ‘Complete Profile’ (if financial support is requested) and upload the relevant supporting documents;
- Search for the relevant event (**EVT2300043**) under the ‘My Eligible Events’ tab;
- Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating authority’ (if an invited organization is not listed, please contact Conference.Contact-Point@iaea.org);
- If applicable, indicate whether a paper is being submitted and complete the relevant information;
- If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
- Based on the data input, the InTouch+ platform will automatically generate Participation Form (Form A), Form for Submission of a Paper (Form B) and/or Grant Application Form (Form C);
- Submit their application.

Once submitted through the InTouch+ platform, the application together with the auto-generated form(s) will be transmitted automatically to the required authority for approval. If approved, the application together with the form(s) will automatically be sent to the IAEA through the online platform.

NOTE: Should prospective participants wish to submit a paper or request financial support, the application needs to be submitted by the specified deadlines (see section O).

For additional information on how to apply for an event, please refer to the [InTouch+ Help](#) page. Any other issues or queries related to InTouch+ can be sent to InTouchPlus.Contact-Point@iaea.org.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA’s Conference Services Section via email: Conference.Contact-Point@iaea.org.

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.

I. 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 conference. The IAEA has, however, limited funds at its disposal to help cover 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 conference.

If participants wish to apply for a grant, they should submit applications to the IAEA using the InTouch+ platform through their competent national authority (see Section H). Participants should ensure that applications for grants are:

1. Submitted by **11 March 2024**
2. Accompanied by Grant Application Form (Form C); and
3. Accompanied by 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**.

J. Distribution of Documents

A preliminary and final programme will be made available on the conference web page (see Section Q) prior to the start of the conference. The electronic compilation of abstracts will be accessible free of charge to participants registered for the conference.

K. 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 ipet-2024.contact-point@iaea.org by **11 March 2024**.

L. Working Language

The working language of the conference will be English. All communications must be sent to the IAEA in English.

M. Venue and Accommodation

The conference will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Participants must make their own travel and accommodation arrangements. Hotels offering a reduced rate for participants are listed on <https://www.iaea.org/events>. Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying fees for cancellations, re-bookings and no-shows.

N. Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as early as three months but not later than four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

For more information, please see the Austria Visa Information document available on <https://www.iaea.org/events>.

O. Key Deadlines and Dates

Submission of abstracts through IAEA-INDICO	11 March 2024
Submission of Form B (together with Form A) through the InTouch+ platform	11 March 2024
Submission of Form C (together with Form A) through the InTouch+ platform	11 March 2024
Notification of acceptance of abstracts for oral or poster presentation	12 April 2024
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	2 October 2024

P. Conference Secretariat

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

Q. Conference Web Page

Please visit the IAEA conference [web page](#) regularly for new information regarding this conference.