



35th IARP National Conference (IARPNC-2025)

www.iarpnc2025.co.in

Focal Theme Radiation Protection for Sustainable Nuclear Energy: Adapting to Climate and Technological Changes

January 29-31, 2025

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Invitation

Dear Colleagues,

Indian Association for Radiation Protection (IARP) is pleased to announce its 35th National Conference (IARPNC-2025) on "Radiation Protection for Sustainable Nuclear Energy: Adapting to Climate and Technological Changes," scheduled from January 29-31, 2025, at Mangala Auditorium, Mangalore University.

Founded in 1968 as a non-governmental organisation (NGO) under the Public Trust Act 1950, IARP represents radiation protection professionals across India. It serves a diverse membership, including specialists and users of natural and artificial radiation sources. In May 1970, IARP became an affiliate of the International Radiation Protection Association (IRPA). The Association's primary mission is to advance radiation protection science in nuclear technology and the broad applications of ionising radiation across industry, medicine, agriculture, and research. To support knowledge dissemination in radiation protection, IARP operates through four regional chapters nationwide.

For the past 55 years, IARP has served national and international scientific communities by organising conferences and workshops on radiation protection and safety. IARP hosts its national conference biennially, partnering with regional institutions and those under the Department of Atomic Energy (DAE).

IARPNC-2025 will focus on key themes such as Radiation Protection in Emerging Nuclear Technologies, Radiation Safety and Protection across Nuclear Fuel Cycle facilities, Medical, Industrial, and other Sectors, Radiation Dosimetry, Nuclear Instrumentation and System Development, Environmental Monitoring and Assessment, Radiation Protection Philosophy, Risk Estimates, and Regulatory Frameworks.

This conference will provide a crucial platform for stakeholders to discuss radiological safety concerns, particularly those related to emerging nuclear technologies.

Mangalore University, located approximately 20 km southeast of Mangalore at Mangalagangothri, is recognised as a premier institution in India and is internationally acclaimed for its research in radiation sciences, particularly in radiation protection and radioecology.

We are delighted to invite you to participate in IARPNC-2025 and eagerly look forward to your valuable contributions.

Scientific Programme

The scientific programme of the conference will include keynote addresses, invited talks, oral and poster presentations of contributed papers, panel discussions, and technical exhibitions. The scientific thematic areas to be covered at the congress are listed below:

Radiation Protection in Emerging Nuclear Technologies

- 1. Small Modular Reactors (SMRs): Radiation protection challenges and solutions.
- 2. Advanced Nuclear Reactors: Occupational radiation safety in new reactor designs.
- 3. Climate Change and Nuclear Energy

Radiation Safety and Protection in Nuclear Fuel Cycle Facilities

- 1. Front-end nuclear fuel cycle facilities
- 2. Nuclear power plants (including research reactors)
- 3. Back-end nuclear fuel cycle facilities
- 4. Transport of radioactive materials, waste management and disposal
- 5. Decommissioning
- 6. Emergency preparedness and response

Radiation Safety and Protection in Accelerators, Medical, Industrial and Other Sectors

- 1. Accelerator facilities
- 2. Radioisotope facilities (including sealed sources & radiation facilities)
- 3. Medical, industrial, and agricultural facilities
- 4. Beneficial applications of radiation technologies

Radiation Dosimetry

- 1. Measurements and assessment of radiation in workplace environment
- 2. Internal contamination monitoring, biokinetic models and dose assessment
- 3. Personnel monitoring
- 4. Retrospective dosimetry and medical management
- 5. Radiation metrology and standards

Nuclear Instrumentation and System Development

- 1. Radiation detectors and monitoring systems
- 2. Monitoring methodology and strategy
- 3. Newer types of radiation detectors, systems and tools
- 4. Spectrometric techniques

Environmental Monitoring and Assessment, Radioisotopes for Studies on Climate Change, Atmospheric Studies

- 1. Environmental radioactivity measurements: Radionuclide fate and behaviour in terrestrial, atmospheric and aquatic environment
- 2. Meteorological studies, environmental modelling and dose assessment
- 3. Radioisotope application in research in climate change, atmospheric, monsoon dynamics, soil erosion and sedimentation rate studies
- 4. Environmental sampling, criterion and strategies

Radiation Protection Philosophy, Risk Estimates, Regulatory Framework: System of Protection, Standards and Regulation

- 1. Radiation risks, nuclear liability, epidemiology, and radiation health effects
- 2. Education and training
- 3. Artificial Intelligence and machine learning
- 4. Implementation and application of justification and optimisation principles in radiological protection
- 5. International and national regulatory guidelines
- 6. Future developments in the system of radiological protection
- 7. Industrial hygiene and safety practices in radiation facilities

Existing Exposures

- Radon and thoron
 Cosmic radiation, including space
- 3. Naturally occurring radioactive materials (NORM) and technically enhanced naturally occurring
 - radioactive materials (TENORM)

Important Deadlines

Abstract submission	:	November 15, 2024
Regular registration	:	December 31, 2024
Late registration	:	January 10, 2025
Accommodation booking	:	January 1, 2025
Booking for trade/scientific exhibition	:	January 20, 2025
Full text paper submission to RPE	:	March 15, 2025

Registration

Registration is a pre-requisite for attending the conference and presenting a paper. Participants should register using the option given on the conference website.

Registration fee payable is listed below:

Type of registration	Amount payable (INR)	
	Regular	Late registration
IARP member	Rs. 3,000	Rs. 3500
IARP member (Senior Citizen)	Rs. 2,000	Rs. 2500
Non-IARP member	Rs. 4,000	Rs. 5000
Accompanying person	Rs. 2,000	Rs. 2500
PhD student	Rs. 2,000	Rs. 2,500
Student delegate (postgraduate)	Rs. 1,500	Rs. 2000
Trade delegate	Rs. 10,000	Rs. 10,000
Foreign delegate	US \$ 200	US \$ 250
Foreign students	US \$ 100	US \$ 150

Guidelines for Manuscript Submission

Authors are invited to submit abstracts of their papers (maximum 500 words) via the online submission facility on the conference website.

The abstract must be in Microsoft Word format, using Times New Roman, 12-point font, single-line spacing on A4 paper, and one-inch margins on all sides. It should include a title, author names (with the presenting author underlined), affiliations, email addresses, sections for the introduction, materials and methods, results, and conclusions. Illustrations, figures, or tables should not be included. Abstracts not adhering to these guidelines will be rejected. The submission deadline is November 15, 2024. Template of the Abstract is available in the conference website.

Abstracts will be independently reviewed by two scientific committee members, with results communicated to the corresponding author by January 10, 2025. A Book of Abstracts (soft copy) will be published online during the conference, including invited and accepted papers.

The Journal of Radiation Protection and Environment (RPE) will also publish a special issue for the conference proceedings. Selected full papers, including tables, figures, and references, must follow RPE's author instructions and be submitted online within two months after the conference. Authors should incorporate feedback from the scientific committee in their full-length papers, which will undergo further review.

About Indian Association for Radiation Protection (IARP)

The Indian Association for Radiation Protection (IARP) is a non-governmental organisation (NGO) founded in 1968 and registered under the Public Trust Act 1950. As a professional body, the IARP is dedicated to promoting radiation safety and serves a large membership of specialists and users of both natural and man-made radiation sources. It has been an affiliate of the International Radiation Protection Association (IRPA) since May 1970.

IARP has regional chapters that promote radiation safety awareness across various regions of India. Its core aims include fostering a deeper understanding of the benefits of ionising radiation among users and the general public while advocating for adopting appropriate safety procedures to minimise radiation exposure in nuclear technology applications like power generation, industry, medicine, agriculture, and scientific research.

Key activities of IARP include:

- Conferences & Seminars: IARP organises bi-annual international and national conferences, along with regional workshops and seminars, to foster the exchange of knowledge and ideas among radiation protection and safety professionals. For over 50 years, these events have been key in supporting the national and international scientific communities.
- •Scientific Publications: IARP publishes "Radiation Protection and Environment" (RPE), an open-access web-based quarterly journal, to disseminate scientific findings and advancements in radiation protection.
- •Training Programs: Periodic training courses, including Radiation Safety Officer (RSO) Certification programs approved by the Atomic Energy Regulatory Board (AERB), are conducted to enhance human resource capacity in radiation safety and industrial applications of radioisotopes.
- •Awareness Programs: Self-financed or funded radiation safety awareness initiatives are held at educational institutions to promote the beneficial effects of radiation technology and the Indian Nuclear Energy Programme while emphasising the importance of safety in its applications.
- Through these initiatives, IARP offers a vital platform for communication and knowledge sharing among radiation protection experts in India and internationally, advancing its mission to enhance the societal benefits of radiation technologies while ensuring safety.

For more details: https://www.iarp.org.in/

About Mangalore University

Mangalore University was established in 1980 to fulfil the aspirations of the people of the undivided Dakshina Kannada and Kodagu districts of Karnataka. The University's campus, Mangalagangothri, is situated about 20 km southeast of the coastal town of Mangalore, offering a scenic view of the Nethravathi River merging with the Arabian Sea on one side and the misty Western Ghats on the other. This picturesque setting enhances the educational pursuits of the Dakshina Kannada, Udupi, and Kodagu districts. Since its founding, Mangalore University has grown significantly, currently comprising 206 affiliated degree colleges, six constituent colleges, and five autonomous colleges under its jurisdiction. The University hosts 28 departments offering 50 postgraduate programs and 36 PhD programs. A P.G. Centre has also been established at Chikka Aluvar (Cauvery campus) in the Coorg district. Mangalore University is nationally and internationally recognised for its excellence in radiation physics research and has set up three centres in this field: the Centre for Advanced Research in Environmental Radioactivity (CARER), the Centre for Application of Radioisotopes and Radiation Technology (CARRT), and the Microtron Centre. Furthermore, the U University has established a research centre equipped with advanced instrumentation facilities through the Department of Science and Technology (DST) funded promotion of the University Research and Scientific Excellence (DST-PURSE) program serving researchers nationwide. These centres cater to the needs of researchers from all over the country.

For more details: https://www.mangaloreuniversity.ac.in/

About Centre for Advanced Research in Environmental Radioactivity (CARER)

Mangalore University established the Centre for Advanced Research in Environmental Radioactivity (CARER) as a national facility with the financial support of the Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy, Govt. of India, and technical support from the Bhabha Atomic Research Centre (BARC). This is the most advanced laboratory for radioecological and radiation protection research in the University system in India. The centre focuses on developing radiation protection technologies and frontline research in radioecology and environmental radioactivity in collaboration with BRNS, BARC, Indira Gandhi Centre for Atomic Research (IGCAR), and Nuclear Power Corporation of India Ltd. (NPCIL). It is noteworthy that CARER has grown into an international research hub, collaborating with around 100 institutions in India and 30 institutions globally.

Some of the important facilities available in CARER are:

- Liquid scintillation spectrometry laboratory
- Carbon-14 and tritium measurements laborator
- Alpha Spectrometry laboratory (with multi-chamber and array detectors)
- Gamma spectrometry laboratory (with HPGe and Nal(TI) detectors)
- Radon calibration laboratory (Asia's largest facility)
- Computation fluid dynamics laboratory
- Sample processing laboratory
- Walk in environmental chamber laboratory

For more details: https://mangaloreuniversity.ac.in/carer/

About Centre for Application of Radioisotopes and Radiation Technology (CARRT)

The Centre for Application of Radioisotopes and Radiation Technology (CARRT) was set up at Mangalore University through financial support from the Board of Research in Nuclear Sciences (BRNS) and scientific support from the Board of Radiation and Isotope Technology (BRIT). The mandate of the CARRT is to undertake research and development in the application of radiation technology for social benefits, generate human resources, and provide a platform for scientists, academicians, and industrialists to interact in collaborative R&D programmes. The centre is extending support to researchers from about 50 institutions and has research collaborations with many institutions from within and abroad. The following are some of the important facilities available in CARRT:

- · High-dose gamma irradiation facility
- Low-dose gamma irradiation facility (5 Gy/min)
- · Helicobacter pylori sampling laboratory
- Instrumentation/counting laboratory
- Radioisotope labelling laboratory
- Radioimmunoassay and immunoradiometric assay laboratory
- Hybridoma laboratory
- Radioiodination laboratory

For more details: https://mangaloreuniversity.ac.in/carrt

IARP Awards

Nominations/ applications are invited for the following IARP Awards:

- 1. Dr. A.K. Ganguly Memorial Oration Award
- 2. Dr. K.G. Vohra Memorial Lecture
- 3. Shri A. Nagaratnam Memorial Oration Award
- 4. Dr. A.K. Ganguly Felicitation Prize
- 5. Dr. A.R. Gopal Ayengar Young Scientist Award
- 6. Meritorious Radiological Safety Officer Award
- 7. Meritorious Operational Health Physicist Award
- 8. Dr. P. R. Kamath Radiation Environmentalist Award.

Please contact Secretary, IARP (iarpsect@gmail.com) for more information about these awards.

Accommodation

Accommodation in guest houses:

Efforts will be made to reserve some of the guest houses of academic institutions around Mangalore. Depending upon the availability, these would be made available to research students and teachers from academic institutions. The tariff of these guest houses will be about Rs. 300 to Rs. 800/day/person on a sharing basis.

Guest house reservations will be confirmed to the participants after the accommodation form and registration fee are received. The organising committee will consider the conference registration fee of each participant as a guarantee for the reservation in guest houses.

Those requiring such accommodation should inform well in advance. The last date for receiving requests for accommodation booking in guesthouses is January 1, 2025. The link for guesthouse reservations will be available on the conference website.

Reservation in Hotels:

We recommend that the delegates book accommodation in the desired hotels by contacting the hotel directly or through the respective websites of the hotels or any of the online hotel booking portals. However, the delegates should share the information on the hotel booking (such as the name of the hotel in which the booking is confirmed and arrival and departure dates) with the organisers of the conference to enable the organisers to make transportation arrangements to travel to conference venue during the conference days.

The hotels are located in Mangalore city. The daily accommodation tariffs for different categories of hotels in Mangalore City are indicated in the following table:

Traiff per night	Hotel	Address and contact details
(Range)		
Rs. 5,000- 10,000	Hotel Taj Vivanta	Old Port Rd, Bunder, Mangalore, Karnataka- 575001.
		Phone: +91 8246660420.
		www.vivantahotels.com
	Hotel Ocean Pearl	Navabharath Circle, Kodialbail Mangalore
		Karnataka – 575003.
		Phone: +91 8242413800.
		www.theoceanpearl.in/mangalore
	Hotel A J Grand	Bunts Hostel Rd, Boloor, Hampankatta Mangalore, Karnataka– 575003. Phone: +91 8242862400.
		www.ajgrand.com
	Hotel Deepa Comforts	VRHR+3MG, MG Rd, 111ak Nagar, Boloon Kodailbail, Mangalore, Karnataka– 575003. Phone: +91 8242497101. www.hoteldeepacomforts.com
	Hotel Gold Finch	VRFX+PM6 Bunts Hostel Rd near Ivoti Circle
		Balmatta, Mangalore, Karnataka– 575003. Phone: +91 8244245678 www.goldfinchhotels.com
D 0.500 5.000		
Rs. 2,500 - 5,000	Hotel Poonja International	K.S. Kao Road, Mangalore, Karnataka- $5/5$ 001. Phone: ± 01.0141055527
		www.hotelnooniginternational.com
	Hotel Srinivas the Verda	GHS Rd. Bhayathi, Hampankatta, Mangalore
		Karnataka 575001.
		Phone: +91 9686236496
		www.theverda.com/srinivas
	Hotel Sai palace	KSR Road, opposite City Center Mall Hampankatta, Mangalore,Karnataka 575001. Mob: +91 9930809900
		www.saipalacehotels.com
	Hotel Karuna residency	Karunadham Complex, Karuna Residency, KSI Road, Hampankatta, Mangalore, Karnataka - 575001
		Phone: +91 74838 84800
		www.hotelkarunaresidency.com
	Hotel Vasanth Mahal	KSR Road, Hampankatta, Mangalore, Karnataka- 575001.
		Phone: +91 824 244 1310.
		www.hotelvasanthmahalcom
	Hotel Mangalore	Aysha Towers, KSR Road, Hampankatta
	International	Mangalore, Karnataka- 575001.
		Phone: +91 8242444860.
		www.mangaloreinternational.com

Traiff per night (Range)	Hotel	Address and contact details
Rs. 1,000-2,500	Hotel Navarathna palace	VRCR+HP8, Hampankatta, Mangalore, Karnataka
		575001.
		Phone: +91 9980021104
		www.navaratnapalace.com
	Hotel Manorama	KSR Road, near city centre, Hampankatt
		Mangalore, Karnataka- 575001.
		Phone: +91 8242440306
	Hotel Prestige	Collectors Gate, Junction, Balmatta, Mangalur
		Karnataka – 575002.
		Phone: +91 7813910605
	Hotel Suman residency	Near Bendorewell Junction, Kankanady Balmatta
		Road, Mangaluru, Karnataka 575002
		Phone: +91 8242439700
Below Rs. 1000	Hotel Highland Residency	Millennium Towers, Falnir Rd, opp.Highland
		Hospital, Falnir, Kankanady, Highland, Mangalur
		Karnataka 575002.
		Phone: +91 8242433961.
		www.highlandresidency.in

Note:

The delegates are requested to book any of the above hotels directly. Transport for the participants will be arranged from the vicinity of the above hotels to travel to the venue of the conference. Those who plan to stay in other hotels must come to the designated pick-up points at a scheduled time.

Local Transport:

Local transport for the participants from the place of stay to the conference venue will be arranged on all conference days. Pick-up time will informed to the delegates in advance.

About Mangalore, India

A historic city recognised as one of the most well-known ports of south India as early as the 6th century AD, Mangalore exports many items, including coffee and cashew nuts. Mangalore is also renowned for its roof tiles and seafood, and it is a busy commercial city.

The scenic landscape is dominated by distinctive coconut palms set against a backdrop of rolling hills and majestic streams flowing towards the Arabian Sea. The picturesque location contains many ancient buildings roofed with the renowned Mangalore tiles of red clay dug from local places. The bustling city of Mangalore, with its winding roads and beautiful sandy beaches, makes a perfect destination for tourists to spend their time in a happy and relaxed manner. There are several places of religious importance in and around Mangalore, and the delegates may plan to stay back over the weekend and explore these places.

How to Reach Mangalore



The Mangalore International Airport is located nearly 10 km away from the city and is connected to many cities in India. Direct flights are available from Mangalore to Mumbai, Delhi, Hyderabad, Bangalore, Pune, Chennai and several Gulf countries. Taxi services are available from the airport to the city, and the cost is about Rs. 700. For delegates coming from north Indian states, it is recommended to take a flight to Mumbai or Bengaluru and then take a connecting flight to Mangalore.



Mangalore is well connected to other cities, with direct train services available to many major stations in India. Mangalore has two railway stations: (i) Mangalore Junction and (ii) Mangalore Central.



Smooth national highways link to places like Bangalore, Goa, Mysore, Mumbai, and cities of Kerala. Air-conditioned bus coaches operate from these places into and out of Mangalore.

Weather chart for Mangalore in January 2025

In January, the weather in Mangalore is typically cool and dry, with temperatures ranging from 15°C–31°C. This makes visiting the city and exploring its beaches and landmarks pleasant.

