

AOCRP6

INTERNATIONAL RADIATION PROTECTION ASSOCIATION
(IRPA)

6th ASIAN AND OCEANIC CONGRESS ON RADIATION PROTECTION

Theme

**“Radiation Protection and Surveillance
in Nuclear, Medical, Industrial Facilities
and the Environment”**

Hosted By

Indian Association for Radiation Protection (IARP)



NEHRU CENTRE, WORLI
MUMBAI, INDIA



7 - 11 February, 2023

Important Dates

Abstract Submission Up To - 30th June, 2022

Registration Starts - 15th July, 2022

For details visit - www.aocrp6.com | www.iarp.org.in

Email - aocrp6@gmail.com

EARLY BIRD

REGISTRATION

UP TO 15th OCT., 2022

Conference Secretariat

Dr. M. S. Kulkarni

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About Congress

The Indian Association for Radiation Protection (IARP) is proud to host the International Radiation Protection Association's (IRPA's) Regional Congress for first time in India. Asian and Oceanic Congress for Radiation Protection (AOCRP6) will be held during February 07-11, 2023 at Nehru Centre, Worli, Mumbai, India. The theme of the Congress is **“Radiation Protection and Surveillance in Nuclear, Medical, Industrial Facilities and the Environment”**. The congress in general, will consist of inaugural session, panel discussion, invited talks, refresher courses, oral and poster presentations. More than 500 delegates including eminent international and national radiation protection professionals are expected to participate in the congress.

About IARP

The Indian Association for Radiation Protection (IARP), a Non-Governmental Organization (NGO) of radiation protection professionals in India, was registered in 1968 under the Public Trust Act, 1950. The association has a large membership comprising of specialists and users of natural and man-made radiation sources. The Association is an affiliate of the International Radiation Protection Association (IRPA) since May, 1970. The Association has six chapters in different regions of the country.

The aim of IARP is to bring about proper awareness of the benefits of ionizing radiation amongst their users in particular and the public in general. IARP encourages adoption of appropriate means/procedures for avoiding or reducing radiation exposure in the applications of ionizing radiation and nuclear technology in the country, such as power generation, industry, medicine, agriculture, scientific research etc., thereby maximizing the benefits to the society. It provides a forum for communication and exchange of information amongst specialists in the field of radiation protection and related disciplines in the country and with their counterparts in other countries. IARP conducts training courses to cater to the requirement of trained manpower in the industrial applications of radioisotopes in industry and research. The IARP publishes an open access web-based quarterly journal “Radiation Protection and Environment” (<https://www.rpe.org.in/>). IARP has been serving the national and international scientific community for the past 55 years by organizing international, national and regional conferences and workshops in the field of Radiation Protection and Safety.

About Congress Theme

Radiation safety is given highest priority at different stages of operation in nuclear, medical and industrial applications of radiation technology. Radiological safety aspects are implemented at each phase using the latest techniques and methodologies based on the international/national guidelines. In the past decade or so, variety of systems and methods have been developed in the field of radiation protection and surveillance including release of new ICRP publications. Development of software solutions for radiation protection programs have also played a key role in overall control of radiation exposure at work places. In view of these developments over the past decade, AOCRP6 is devoted to the congress theme of **“Radiation Protection and Surveillance in Nuclear, Medical, Industrial Facilities and the Environment”**.

The major thematic areas to be covered are: Foundation Topics on Radiation Protection Philosophy and Risk Estimates, Radiation Safety and Protection in Nuclear, Medical and Industrial Facilities, Radiation Dosimetry, Nuclear Instrumentation and System Development, Environmental Monitoring and Assessment, Existing Exposures, Emergency Preparedness and Response, and Regulatory Framework: System of Protection, Standards and Regulation. This congress is a forum for all the stakeholders including researchers and policy makers to discuss various safety issues related to the developments in radiological and environmental safety of nuclear and radiation facilities.

About Location

Mumbai (Maharashtra State) is on the west coast of India. Mumbai is built on what was once an archipelago of seven islands: Isle of Bombay, Parel, Mazagaon, Mahim, Colaba, Worli, and Old Woman's Island (Little Colaba). Mumbai, previously known as Bombay, is one of the most populous and biggest cities of Maharashtra. It is also popular as the entertainment and financial capital of India. There are several attractions in Mumbai like a walk around the streets of Colaba or near Churchgate, many monuments like Chhatrapati Shivaji Terminus, Flora Fountain, High Court, Taj Hotel, Gateway of India, CSM Museum and also the Asiatic Society. The ideal time to visit the city is January to March and November to December.

AOCR6 is being held at Nehru Centre, Worli, Mumbai. Nehru Centre was conceived in 1972 as living testament and monument of faith in India's former Prime Minister Jawaharlal Nehru's vision and encouragement in the field of Science and Technology. The site is located near the famous shrine of Haji Ali Dargah and Mahalaxmi Race Course. Chhatrapati Shivaji Maharaj International Airport (CSMIA), Mumbai is around 20 km from Nehru Centre. Prepaid Taxies are available at most of the railway stations and the airport.

For International participants

Eligibility criteria for VISA for International travelers visiting India to attend congress are as follows:

- ✓ Applicant's passport should have at least six months validity at the time of making application for grant of e-Visa.
- ✓ International Travelers should have return ticket or onward journey ticket, with sufficient money to spend during his/her stay in India.

For visa details visit: <https://indianvisaonline.gov.in/evisa/tvoa.html>

Apply for e-VISA: <https://indianvisaonline.gov.in/evisa/Registration>

Dr. B. Venkataraman
President, IARP &
Chair, AOCR6

Dr.M.S.Kulkarni
Vice President, IARP &
Convener, AOCR6

Dr. S Murali
Secretary, IARP&
Co-Convener, AOCR6

Scientific Programme

The scientific programme of the congress will include keynote addresses, Panel Discussions, Invited Talks, Proffered Papers, Posters and Technical Exhibition. The major scientific thematic areas to be covered at the congress are listed below:

Topic 1. Foundation Topics on Radiation Protection Philosophy and Risk Estimates

- T1.1 Health effects, risk assessment of radiation including biological mechanisms and exposure characteristics
- T1.2 Radio-ecology, processes influencing radionuclide transfers and stress to the receptors
- T1.3 Social, psychological and economic impacts of radiation exposure situations
- T1.4 Perspectives from ethics, social sciences and humanities
- T1.5 Tools and quality criteria for epidemiology and radiation risk assessment
- T1.6 Integrated approach to assess radiological risk to biota
- T1.7 Education & Training

Topic 2. Radiation Safety and Protection in Nuclear Facilities

- T2.1 Mining and mineral processing and implementation of circular economy
- T2.2 Nuclear power plants (including research reactors)
- T2.3 Nuclear fuel cycle facilities
- T2.4 Transport of radioactive materials, and waste management and disposal
- T2.5 Decommissioning

Topic 3. Radiation Safety and Protection in Medical and Industrial Sectors

- T3.1 Radioisotope facilities (including sealed sources & radiation facilities)
- T3.2 Design and radiation safety in medical, industrial and accelerator facilities
- T3.3 Radiation metrology and standards
- T3.4 Radiation safety during diagnosis and treatment of patients
- T3.5 Beneficial applications of radiation technologies
- T3.6 Medical and industrial application of Non-Ionizing Radiations (NIR) and their protection standards and regulations.

Topic 4. Radiation Dosimetry (External, Internal and Biological)

- T4.1 Measurements and assessment of radiation in workplace environment
- T4.2 Internal contamination monitoring, biokinetic models and dose assessment
- T4.3 Personnel monitoring
- T4.4 Numerical and computational methods
- T4.5 Retrospective dosimetry and medical management

Topic 5. Nuclear Instrumentation and System Development

- T5.1 Radiation detectors and monitoring systems
- T5.2 Monitoring methodology and strategy
- T5.3 Newer types of radiation detectors, systems and tools
- T5.4 Spectrometric techniques
- T5.5 Artificial Intelligence and Machine Learning

Topic 6. Environmental Monitoring and Assessment

- T6.1 Environmental radioactivity measurements: Radionuclide fate and behaviour in terrestrial, atmospheric and aquatic environment
- T6.2 Processes controlling distribution of radionuclides in marine environment
- T6.3 Meteorological studies, environmental modelling and dose assessment
- T6.4 Radioisotope techniques and research in climate change studies
- T6.5 Environmental sampling, criterion and strategies

Topic 7. Existing Exposures

- T7.1 Radon and thoron
- T7.2 Terrestrial radiation and radionuclides in ground water
- T7.3 Cosmic radiation including space
- T7.4 Public exposures from Naturally Occurring Radioactive Materials (NORM) and Technically Enhanced Naturally Occurring Radioactive Materials (TENORM)
- T7.5 Legacy sites of radioactive contamination

Topic 8. Emergency Preparedness and Response

- T8.1 Implementation of international standards and of national regulations for emergency preparedness, response, and recovery
- T8.2 Assessment of the radiological and public health consequences, management of occupational and public exposures, including lessons learned from past accidents
- T8.3 Emergency exposures assessment and management (occupational and public)
- T8.4 Human health consequences and countermeasures (medical and public health)
- T8.5 Management of contaminated goods and waste, remediation strategies and the transition from an emergency to an existing exposure situation
- T8.6 Emerging trends in nuclear security and forensics

Topic 9. Regulatory Framework: System of Protection, Standards and Regulation

- T9.1 Implementation and application of justification and optimization principles in radiological protection
- T9.2 International and national regulatory guidelines
- T9.3 Protection standards for special populations (including pregnant women, children, carers and comforters)
- T9.4 Influence of dose response models on standards and regulations (assessing risks at low doses and dose rates)
- T9.5 Future developments in the system of radiological protection
- T9.6 Industrial hygiene and safety practices in radiation facilities

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Important dates

1.	Abstract submission starts	10/05/2022
2.	Last date for abstract submission	30/06/2022
3.	Intimation of acceptance of abstract	15/09/2022
4.	Registration begins	15/07/2022
5.	Early bird Registration and accommodation request (up to)	15/10/2022
6.	On the spot registration allowed (up to)	06/02/2023

REGISTRATION

Registration is pre-requisite for attending the conference and presenting a paper. Request for registration will be taken through online form available on website from 15th July 2022 onwards. Registration fee payable is listed below:

Type of registration	Amount payable (INR)	
	Early bird up to 15/10/2022	Late or on the spot 6/2/23
IARP Member	10000	12000
Senior Citizen (IARP Member)	5000	5500
Non IARP member	15000	15500
Accompanying Person	8000	8500
Student delegate (Indian)*	5000	5500
Trade delegate (Indian)	20000	25000
Foreign delegate	600\$	650\$
Student delegate (Foreign)	200\$	250\$

* To encourage the participation of young students, financial assistance to the deserving under graduate / post graduate students of Universities will be provided subject to the availability of funds. Certificate from Head of the Institute/Department is mandatory.

IRPA SCIENTISTS AND PROFESSIONALS AWARDS-2023

IRPA Young Scientists and Professionals Awards In Radiation Protection

IARP AWARDS-2023 (for Indian Nationals only)

Eminent Indian nationals working in the field of radiation protection will be honored by bestowing the following awards:

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

Dr A. K. Ganguly Best Essay Award

It is planned to organize a pre-congress outreach programme for students from various schools & colleges in and around Mumbai. An essay competition will be conducted for the students participating in the programme. Winners of the competition will be awarded "Dr A. K. Ganguly Best Essay Award" during the AOCRP6.

Nominations / applications are invited for the above-mentioned awards. Secretary, IARP (smurali@barc.gov.in, mrliyengar@gmail.com) may be approached for obtaining more information about these awards. Information on awards can also be found in the IARP website (www.iarp.org.in) and AOCRP6 website (www.aocrp6.com)

GUIDELINES FOR ABSTRACT PREPARATION AND SUBMISSION

Contributions should be brief with relevant scientific/technical details in the form of an extended abstract of one page, not exceeding 500 words. The objective of the study should be clearly stated in the introduction of the abstract. The extended abstract should be of two column type containing Title, Affiliation, Introduction, Materials and Methods, Results and Discussions, and References, strictly as per the Template. A maximum of only three most relevant references should be included in the abstract and listed as per the template. References in text should be indicated as given in the template. In the reference list, the author's name should be followed by initials, year of publication within parentheses, the journal in which it appeared, volume number and the page numbers. SI units should be used throughout. The illustrations such as big figures and long tables should be avoided as far as possible, unless they are essential.

The template of the abstract can be downloaded from the AOCRP6 website. The contribution must be submitted ONLINE (electronically) through the abstract submission facility of AOCRP6 website (www.aocrp6.com) before the closing date. Abstracts submitted via e-mail, fax or regular mail will neither be accepted nor acknowledged.

Abstract submitted for presentation in the congress will be reviewed independently by the members of the Scientific Programme Committee and experts in the field. The intimation will be sent to the authors post the acceptance of abstracts. A book of abstract (only electronic/online version) including abstracts of invited talks will be published and distributed during the congress. Manuscripts selected by our Scientific Programme Committee will be published in a peer reviewed journal. **Last date for abstract is 30/06/2022.** The acceptance of the abstracts will be intimated before **15/09/2022.**

Dr. M. S. Kulkarni

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TRADE / SCIENTIFIC EXHIBITION

Arrangements for trade and scientific exhibition have been made at the conference venue. Interested vendors or companies can avail this facility for demonstrating their products. Companies/Traders can also send in their requests for publishing product advertisements in the book of abstracts/proceedings. Companies may send their requirement for trade exhibition through completely filled trade exhibition form (available in (website: www.aocrp6.com) to Convener, AOCRP6. Last date for receiving trade request forms for booking space is January 15, 2023.

S.No.	ADVERTISEMENT/EXHIBITION/SUPPORT
1.	BACK COVER (colour)
2.	BACK COVER INSIDE (colour)
3.	FRONT COVER INSIDE (colour)
4.	SPECIAL FULL PAGE INSIDE (colour)
4.	SPECIAL FULL PAGE INSIDE (b/w)
5.	HALF PAGE INSIDE (colour)
5.	HALF PAGE INSIDE (b/w)
6.	STALL SIZE (3 m x 3 m)
7.	STALL SIZE (5 m x 3 m)
8.	TECHNICAL SESSION (1 free registration, banner during the session)
9.	HIGH TEA (1 free registration, banner during break, half page colour advertisement)
10.	LUNCH (2 free registration, banner during lunch, 1 page advertisement in colour)
11.	DINNER (3 free registration, banner during dinner, 1 page advertisement in colour)
12.	CULTURAL PROGRAM (1 free registration, banner during the event, logo on cultural program invitation card)
13.	SILVER SUPPORT (Includes a stall of 3 m x 3 m, two free registrations, one full page advertisement in colour, logo in backdrop during inauguration)
14.	GOLD SUPPORT (Includes a stall of 5 m x 3 m, three free registrations, one full page advertisement in colour and logo in backdrop during inauguration)
15.	PLATINUM SUPPORT (Includes two stall of 5 m x 3 m, three free registrations, one full page advertisement in colour and logo in backdrop during inauguration)