



# 6<sup>th</sup> Asian and Oceanic Congress for Radiation Protection (AOCRP6)

on

# **"Radiation Protection and Surveillance in Nuclear, Medical, Industrial Facilities and the Environment"**

7-11 February 2023

# **Programme Schedule**

Organized by

Asian and Oceanic Association for Radiation Protection (AOARP)

Hosted by

Indian Association for Radiation Protection (IARP)

# Nehru Centre, Worli Mumbai, India

Tentative timetable for the programme as on February 02, 2023

## Monday 6 February 2023

#### Venue: Hotel Ambassador

Time	Session	Session Title / Break	
14:00-17:00		IRPA Associate Societies (AS) Forum*	
		Representatives of Asia and Oceania AS and invited people. EOI for	
		those who wish to start an IRPA AS in their country.	
18:00-19:00		AOARP Executive Council meeting*	
		AOARP Executive Council members or proxies	

\* - Participation by invitation

#### **Tuesday 7 February 2023**

#### Venue: Nehru Centre Auditorium, Worli

Time	Session	Session Title / Break
08:00-09:45		Registration and distribution of conference material
10:00-11:30	Inaugural	Inauguration Function
10:00-10:10		Welcome Address by Dr M S Kulkarni, Convener, AOCRP6 & Head, HPD, BARC
10:10-10:20		Address by Dr D K Aswal, Director, HS&EG, BARC
10:20-10:30		Address by Dr B Venkataraman, Chair, AOCRP6 & Director, IGCAR
10:30-10:45		Address by Chief Guest, Mr D K Shukla, Chairman, AERB
10:45-11:05		Address by Guest of Honour, Dr Bernard Le Guen, President, IRPA
11:05-11:15		Release of Book of Abstracts and Souvenir
11:15-11:25		Distribution of IARP awards
11:25-11:30		Vote of Thanks by Dr S Murali, Co-Convener, AOCRP6
11:30-12:00		High Tea
12:00-12:30		Inauguration of Trade Exhibition and Posters (Hall of Knowledge, GF, Nehru Centre)
12:30-13:30	1	Oration Lectures –
		Chair: Dr D K Aswal, Director, HSEG, BARC
12:30-13:00		Dr A K Ganguly Memorial Oration Talk
13:00-13:30		Dr K G Vohra Memorial Oration Talk
13:30-14:30		Lunch
14:30-16:00	2	ICRP Workshop on the Review and Revision of the System of
		Radiological Protection
		Chair: Dr Bernard Le Guen, IRPA (Hybrid mode)
14:30-14:45		IT 1: Introduction to ICRP, Dr Christopher Clement, ICRP Scientific Secretary & CEO
14:45-15:15		IT 2: Review and Revision of the System of RP, Dr Werner Rühm, ICRP Chair
15:15-15:40		IT 3: Views of IARP on the System of RP, Dr M S Kulkarni, BARC & ICRP
		Committee 2
15:40-16:00		IT 4: Presentation from AOARP Associate Members, Dr Michiya Sasaki, JHPS
16:00-16:20		Afternoon Refreshments
		Visit to Trade Exhibition & Posters, Hall of Knowledge, GF, Nehru Centre
16:20-18:00	3	ICRP Workshop on the Review and Revision of the System of
		Radiological Protection
		Chairs: IAEA/ IARP/ AOARP (Hybrid mode)
16:20-16:40		IT 5: Review of the System: Need for stability keeping the pillars and supporting
		efforts to clarify its implementation (pre-recorded presentation), Dr Miroslav Pinak,
		Olvido Guzman, IAEA
16:40-17:00		IT 6: ICRP TG114 Reasonableness and Tolerability in the System of RP, Dr Thierry Schneider, ICRP Main Commission Member, ICRP Committee 4 Chair,
		ICRP Task Group 114 Chair
		Panel Discussion on Reasonableness and Tolerability (with introductory remarks, 3 min
17:00-18:00		each), Dr Cameron Jeffries, ARPS • Dr M S Kulkarni, IARP • Dr Michiya Sasaki,
		JHPS • Dr Bernard le Guen, IRPA
10.00 20.00		Moderated by Dr <i>Thierry Schneider</i>
19:00-20:00		Cultural program
20:00-22:00		Dinner

## IT - Invited Talk; OP – Oral/Platform Presentation; RC - Refresher Course

Time	Session	Session Title / Break	Session	Session Title / Break
	000000	Venue: Hall of Culture, Ground floor	50551011	Venue: Hall of Harmony, Ground floor
08:45-09:45	RC-1	The Augmented Role of the Medical Physicist in Radiation	RC-2	NORM, Dr Jim Hondras, Australia
		Emergencies, Dr Brad Cassels, Australia		
10:00-11:30	<b>4</b> A	Radiation Protection Philosophy and Risk Estimates	<b>4B</b>	Radiation Safety and Protection in Nuclear Facilities
		Chairs: Dr Christopher Clement, ICRP; Dr T K Ghanty, BARC		Chairs: Dr Ola Holmberg, IAEA; Dr A K Bakshi, BARC
10:00-10:30		IT 7 (25 min): 14556, Dr Hiroko Yoshida, Japan, "IRPA Task Group		IT 8 (25 min): Mr Venkataramana, NPCIL, "Radiation safety in Indian nuclear
10:30-11:30		for communications and engagement with the public on radiation and risk"		power plants"
		<ul> <li>3 OP (10 min each)</li> <li>1. 11601, Roha Tukimin, Malaysia, A Profile Study on Electromagnetic Fields Radiation from 5G Radio Base Station in Kuala Lumpur</li> <li>2. 11250, Yang Xue, China, Application of occupational health risk assessment in a radioactive waste treatment facility</li> <li>3. 13361, Sreekanth, BARC, India, Effect of aerosol particle size distribution on the radiological impact assessment of Radiological Dispersal Device detonations</li> <li>4. Rapporteur of posters</li> </ul>		<ul> <li>4 OP (10 min each)</li> <li>1. 22184, Rashmi Prakash Sharma, India, NPCIL, Development of Radiological Safety Performance Indicators (RSPIs)</li> <li>2. 24157, Michiya Sasaki, Japan, CRIEPI, Quantitative evaluation of conservatism included in parameter settings for clearance level calculations: A Case Study in Japan</li> <li>3. 21296, A H Khan, India, Ex-BARC, Evolution of radiological monitoring systems and methodologies in Indian uranium mining industry: A historical perspective</li> <li>4. 23371, P T Ghare, India, BARC, Radiological safety challenges during Hotcell decontamination, cleaning &amp; reinstallation of radiation shielding glass windows of a hotcell facility</li> <li>5. Rapporteur of posters</li> </ul>
11:30-11:45		Tea Break Visit to Trade Exhibitions & Poster Display		
11:45-13:15	5A	Radiation Protection Philosophy and Risk Estimates	5B	Radiation Safety and Protection in Nuclear Facilities
		Chairs: Dr Christopher Clement, ICRP; Dr T K Ghanty, BARC		Chairs: Dr Ola Holmberg, IAEA; Dr A K Bakshi, BARC
11:45-12:15		IT 9 (25 min): Dr Bernard Le Guen, IRPA		IT 10 (30 min):1. Dr Borislava, UNSCEAR, "UNSCEAR ongoing and planned
12:15-13:15		<ul> <li>4 OP (10 min each)</li> <li>1. 16573, Vandana Pulhani, Concentration ratio of <sup>90</sup>Sr and Dose to Earthworm from Tropical region</li> <li>2. 11364, Nilamadhab Prasad, IGCAR, Effect of ionizing radiation on cellular stress, immunity and lifespan of common fruit fly</li> <li>3. 12572, Praveen, VOC College, India, Natural radiation dose to the marine mollusc Sepia pharaonis and assessment of radiological risk</li> <li>4. 11254, Jixia Han, China, Experimental Study on radio-adaptive response of Immune System Induced by Ionizing Radiation</li> <li>5. Rapporteur of posters</li> </ul>		<ul> <li>activities" -pre-recorded presentation on the New Data Collection Strategy, the Public exposure evaluation and international collaboration.</li> <li>2. Mr Peter Hofvander, UNSCEAR, "Evaluation of occupational exposure to ionizing radiation" - pre-recorded presentation</li> <li>4 OP (10 min each)</li> <li>1. 23194, Ganesh G, India, BARC, Particle size distribution characteristics of cesium nitrate, strontium nitrate and standard test aerosols</li> <li>2. 23327, V Ramprasath, India, BARC, Study on the response of beta particulate monitor for Krypton-85</li> <li>3. 23176, Dhanasekaran A, India, IGCAR, Airborne radioactivity concentration measurement in CORAL reprocessing facility during off ventilation condition</li> <li>4. 22216, Ren Hongzheng, China, CIRP, Preliminary experimental study on wet electrostatic technology for methyl iodine capturing</li> <li>5. Rapporteur of posters</li> </ul>

#### Wednesday 8 February 2023; Venue: Nehru Centre, Worli

13:15-14:15		Lunch Break			
		Trade Exhibitions & Poster Display			
14:15-15:45	6A	Radiation Safety & Protection in Medical and Industrial Sectors	6B	Radiation Safety and Protection in Nuclear Facilities	
		Chairs: Dr Brad Cassels, Australia; Ms Rupali Pal, BARC		Chairs: Dr Thierry Schneider, ICRP; Dr S Anand, BARC	
14:15-14:45 14:45-15:45		IT 11 (25 min): Dr Ola Holmberg, IAEA, "Incident prevention in radiotherapy using the updated SAFRON system" <i>4 OP (10 min each)</i> 1. 31105, Sanjay Kumar Saxena, India, BARC, Radiation Protection in Fabrication, Clinical Deployment and Safe Management of I-125 and P-32 Brachytherapy Sources 2. 34301, Kamaldeep, India, BARC, <sup>177m</sup> Lu as an impurity in a direct- route <sup>177</sup> Lu: implications for patients' dosimetry in Peptide Receptor Radionuclide Therapy. 3. 34443, Rajesh Kumar, India, BARC, Dosimetry of Indigenously Developed Round type <sup>106</sup> Ru Eye Plaque 4. 73268, Sandipan Dawn, India, Investigation of LET spectra at Low Earth Orbit by Monte Carlo simulations 5. Presentation by trade delegates - Dr Massimo Morichi, President of CAEN SYS, Italy		<ul> <li>IT 12 (25 min): Mr. Zhiwen Fan, IAEA, "Enhancing safety in decommissioning, remediation, and management of NORM residues"</li> <li>4 OP (10 min each)</li> <li>1. 22595, Kondala Rao R, India, IGCAR, Development and validation of a discrete ordinate method based neutron transport model for criticality safety and shielding analysis in nuclear facilities</li> <li>2. 23370, K S Varshitha, BARC, India, Estimation of skin dose and deep dose equivalents due to exposure situations during handling of uranium</li> <li>3. 24278, Praveen Kumar, BARC, India, AQUADOS: An indigenously developed code for carrying out radiological safety assessment of aquatic releases</li> <li>4. 25503, Tanmay Sarkar, BARC, India, Inhalation hazard of radioactive aerosol generated from dismantling operation of in-core structural components during decommissioning of PHWR</li> <li>5. Presentation by trade delegates</li> </ul>	
15:45-16:00		Tea Break Visit to Trade Exhibitions & Poster Display			
16:00-17:00				Session	
17:00-18:30	7A	Radiation Safety & Protection in Medical and Industrial Sectors	7B	Nuclear Instrumentation and System Development	
		Chairs: Dr Brad Cassels, Australia; Ms Rupali Pal, BARC		Chairs: Dr D K Aswal, BARC; Dr D D Rao, Ex-BARC	
17:00-17:30 17:30-18:30		IT 13 (25 min): Dr Dayanand Sharma, Apollo hospital, Chennai, "Radiation safety and protection in a proton beam therapy facility" 4 OP (10 min each) 1. 32529, R Ravishankar, India, BARC-VECC, Radiation Protection in Positive Ion beam Accelerator Facilities 2. 32227, Dilip Kumar Gupta, India, RRCAT, Experimental determination of radiation source term during the operation of 150 TW Laser Plasma Accelerator Facility 3. 32445, Raksha Rajput, India, BRIT, Dose Uniformity evaluations for Gamma Radiation Processing Facility (GRAPF) using Monte Carlo simulations and its validation 4. 35299, Amit Kumar, India, IGCAR, A review on sterilization of various types of facemasks by ionizing radiation 5. Rapporteur of posters		<ul> <li>IT 14 25 min: Mr Debashish Das, Ex-Director, RRCAT, "Nuclear instrumentation systems for reactors and installations – An overview"</li> <li>4 OP (10 min each)</li> <li>1. 51441, Ashutosh Gupta, BARC, India, Development of Advanced Compact Radiation Monitoring System (ACRMS)</li> <li>2. 51565, E P Amaladass, India, IGCAR, Development of a portable gamma radiation spectrometer using indigenously grown CdZnTe single crystals</li> <li>3. 51515, C N Sunil, BARCF, India, NaI(Tl) based On-Line Stack Monitor to measure <sup>133</sup>Xe in presence of <sup>41</sup>Ar</li> <li>4. 51257, Binqing Zhao, China, Songshan Lake Materials Laboratory, Development and Performance of a MAPMT-based Neutron Detector System using Waveform Digitizer</li> <li>5. Rapporteur of posters</li> </ul>	

Time	Session	Session Title / Break	Session	Session Title / Break
00.45.00.45	DC 4	Venue: Hall of Culture, Ground floor	DC 4	Venue: Hall of Harmony, Ground floor
08:45-09:45	RC-3	Human exposure to non-ionising radiation, Dr Roha Binti	RC-4	Radiation dosimetry (External, internal and biological),
10:00-11:30	8A	Tukimin, MARPA, Malaysia Radiation Dosimetry (External, Internal and Biological)	8B	Dr M S Kulkarni, BARC, India Radiation Safety and Protection in Nuclear Facilities
10.00-11.50	ðА	Chairs: Dr Dayanand Sharma, Apollo Hospital; Dr Pramilla	0D	
				Chairs: Dr Werner Ruhm, ICRP; Dr S Anand, BARC
10.00.10.00		Sawant, BARC		
10:00-10:30		IT 15: 25 min: 42140, Dr Kentaro Manabe, Japan, JAEA, "Internal		IT 16: 25 min: 23500, Dr S K Jha, India, BARC, "Radiological perspective
10:30-11:30		dose calculation code in line with the ICRP 2007 recommendations"		for the utilization of uranium mill tailings"
		3 OP (10 min each)		IT 17: 25 min: Dr Shenlin Liu, CSRP, China, "The Research on radiation
				dose level in China"
		1. 41274, T K Srinivasan, India, IGCAR, Gamma Spectrometry of		3 <i>OP</i> (10 min each)
		KAMINI reactor coolant lines		1. 22166, Veerendra Danannavar, India, NPCIL, Review of collective dose
		2. 41506, Rupali Pal, BARC, India, Neutron dose measurements		consumption in Indian PHWR-A case study of Kaiga Generating Station-
		using a wide range novel combination neutron dosimeter (CND) at		3&4
		CERF facility, CERN		2. 22203, Lokesh Kumar, BARC, India, Removal of <sup>137</sup> Cs from spent fuel
		3. 42116, Lokpati Mishra, India, BARC, Estimation of positional		storage bay water using Zeolite
		errors in direct measurement of <sup>241</sup> Am in axillary lymph nodes		3. 23406, Letha Sebastian, BARC facilities, India, Study on Tritium
		4. Rapporteur of posters		Concentration in Low Level Liquid Waste of a Fuel Reprocessing Plant
11:30-11:45			Tea Br	4. Rapporteur of posters
11.30-11.43		Trade Exhibitions & Poster Display		
11:45-13:15	9A	Radiation Dosimetry (External, Internal and Biological)	9B	Radiation Safety and Protection in Nuclear Facilities
		Chairs: Dr Dayanand Sharma, Apollo Hospital; Dr Pramilla		Chairs: Dr Thierry Schneider, ICRP; Dr S K Jha, BARC
		Sawant, BARC		
11:45-12:15		IT 18: 25 min: 43524, Dr Munehiko Kowatari, Japan, QST,		IT 19: 25 min: 71599, Dr Cameron Jeffries, Australia, "Radon survey in a
12:15-13:15		"Investigation on dosimetric issues about high-dose inhomogeneous		healthcare facility"
		radiation accidents: evaluation of effective dose and organ doses" -		4 OP (10 min each)
		Pre-recorded presentation		1. 15610, Lyu Minghua et al., CIRP, Nuclear accident consequence
		4 <i>OP</i> (10 min each)		assessment technology research and software development
		1. 42232, H K Patni, India, BARC, In-vivo monitoring for a novel		2. 74280, K Sreekumar, India, BARC, Natural High Background Radiation
		radionuclide		Areas of Western Coast of Kerala and Tamil Nadu; A Brief Report
		2. 42234, Vandana P Ghare, India, BARC, Estimation of retained fractions of <sup>131</sup> I during pregnancy		3. 61318, Samim Molla, India, BARC, Distribution of 226Ra and 210Po in groundwater around uranium mining, milling, and tailings management site
		3. 42266, Minal Y Nadar, India, BARC, Uncertainty in the		at Turamdih, Jharkhand
		estimation of Intake of Actinides due to unknown time of intake		4. 21235, Jaison, BARC, India, A Decade of Radiological Monitoring at
		4. 42259, Charubala, India, BARC, Calibration Coefficients for		Beach Sand Mineral Separation plant Chavara
		Monitoring of Uranium and Thorium in Lungs		5. Rapporteur of posters
		5. Rapporteur of posters		

## <u>Thursday 9 February 2023;</u> Venue: Nehru Centre, Worli

13:15-14:15			Lunch B	reak	
		Trade Exhibitions & Poster Display			
14:15-15:45	10A	Radiation Dosimetry (External, Internal and Biological)	10B	Nuclear Instrumentation and System Development	
		Chairs: Dr Cameron Jeffries, Australia; Dr Jim Hondros,		Chairs: Dr D A R Babu, Ex-BARC; Dr S Chandrasekhar, IGCAR	
		Australia			
14:15-14:45 14:45-15:45		<ul> <li>IT 20: 25 min: Dr M S Kulkarni, BARC, "Technological evolution of dosimetry practices in India"</li> <li>4 OP (10 min each)</li> <li>1. 45139, A Ashok Kumar, India, Manonmaniam Sundaranar University, Beach sand Quartz as a retrospective dosimeter</li> <li>2. 45286, Yamaguchi Ichiro, Japan, Can non-destructive EPR tooth dosimetry be used for posterior assessment of radiation exposure in medicine and dentistry?</li> <li>3. 45600, Rajesh Chaurasia, India, BARC, Deciphering impression of high LET radiation (14 MeV DT-neutron and Am-α) on lymphocyte chromosome: Application of multiplex and multi-BAND-FISH</li> <li>4. 44298, Rohit, India, BARC, Simulation based estimation of dosimetric quantities for ICRP computational and CIRS phantoms due to galactic cosmic rays at LEO</li> <li>5. Presentation by trade delegates</li> </ul>		IT 21: 25 min: Mr Probal Chaudhury, BARC, "Aerial Gamma Spectrometry system for rapid assessment during emergency" 4 OP (10 min each) 1. 55237, Biswajit Sadhu, BARC, India, Finding Time-efficient Optimized Pathway with Minimum Radiation Exposure using Deep Reinforcement Learning 2. 51512, Riya Dey, BARC, India, Rapid optimisation of BEGe detector geometry by establishing an empirical formula for full energy peak efficiency using Monte Carlo simulation and machine learning algorithm 3. 51358, Amit Silswal, BARC, India, Source Term Estimation using Particle Filter Algorithm based on Dose Rate 4. 52211, Vivek Kaushik, BARC, India, Simulation of peak tailing in alpha spectrometry based air monitor with collimator using Geant4 5. Presentation by trade delegates – Nucleonix Systems Pvt. Ltd.	
15:45-16:00		5. Tresentation by trade delegates	Tea Br	eak	
		Trade Ex		k Poster Display	
16:00-17:00			Poster Se	ession	
17:00-18:30	11A	Environmental Monitoring and Assessment	11B	Nuclear Instrumentation and System Development	
		Chairs: Dr C V Srinivas, IGCAR; Dr A Baburajan, BARC		Chairs: Mr. G Ganesh, BARC; Dr V Subramanian, IGCAR	
17:00-17:30 17:30-18:30		IT 22: 25 min: 24604, Dr Brad Cassels, Australia, "Consideration of a new technology for the large scale clean-up of Fukushima wastes" <i>4 OP (10 min each)</i> 1. 61440, T K Reji, BARC, India, TFWT and OBT concentration in		IT 23: 25 min: 51460, Dr S Chandrasekaran, IGCAR, "Development of automated delayed neutron coincidence system for special nuclear material detection"	
		Fresh Water Fishes at Kadra Reservoir 2. 61386, Deepak Kumar, BARC, India, Assessment of soil to wheat transfer factor and discrimination factor around NAPS Narora and GHAVP Haryana, two NPP site of Northern India 3. 65580, Rashmi Nayak S, CARER, MU, India, Dose due to the ingestion of NE-OBT in the vicinity of Kaiga Nuclear Power Plant 4. 63368, Sugandhi Suresh, BARC, India, Assessment of ingestion dose to members of public from marine biota 5. Rapporteur of posters		<ul> <li>3 OP (10 min each)</li> <li>1. 51178, Yuvaraj N, IGCAR, India, Y2O3 Loaded Plastic Scinitllators For Radiation Detection</li> <li>2. 54294, Anilkumar S Pillai, BARC, India, Parametric Optimisation of BEGe detector for Efficiency Calibration by Simulation</li> <li>3. 54490, Akila R, India, Gamma Assay of structural material samples irradiated in Fast Breeder Test Reactor with high dose rate using LaBr(Ce)</li> <li>4. Rapporteur of posters</li> </ul>	

Time	Session	Session Title / Break	Session	Session Title / Break
Time	50551011	Venue: Hall of Culture, Ground floor	Dession	Venue: Hall of Harmony, Ground floor
08:45-09:45	RC-5	Ion beam dosimetry, Dr Dayanand Sharma, Apollo Hospital,	RC-6	Emergency Preparedness and Response, Dr Thierry Schneider, ICRP
00.45-09.45	KC-3	Chennai	KC-0	Emergency rrepareuness and Response, Dr Tmerry Schnedder, TCRI
10:00-11:30	12A	Environmental Monitoring and Assessment	12B	Radiation Standards and Metrology
		Chairs: Dr Hiroko Yoshida, Japan; Dr Vandana Pulhani, BARC		Chairs: Mr S B Chafle, ED, AERB; Dr D D Rao, Ex-BARC
10:00-10:30		IT 24: 25 min: 61159, Dr Rina Sato, Japan, "Environmental radiation		IT 25: 25 min: Dr D Ponraju, IGCAR, "Environmental monitoring and
10:30-11:30		monitoring after the Fukushima NPP accident"		assessment at DAE complex of Kalpakkam"
10100 11100		4 OP (10 min each)		
		1. 61189, Kotaro Ochi, Japan, Environmental radiation monitoring		4 <i>OP</i> (10 min each)
		after the Fukushima NPP accident (1) Characteristics of soil		1. 33121, Ritu Sharma, Development and characterisation of standard
		penetration of deposited radiocesium		241Am sources
		2. 61191, Tomohisa Abe, Japan, Environmental radiation monitoring		2. 33344, Shobha Ghodke, Evaluation of microdosimetric quantities of
		after the Fukushima NPP accident (2) Long-term monitoring of		252Cf source using inhouse developed cylindrical TEPC
		atmospheric radiocesium concentrations 3. 61161, Toshiharu Misonou, Japan, Environmental radiation		3. 51206, S P Tripathy, BARC, India, Development of a multi-shell moderating assembly for neutron spectrometry in particle accelerators:
		monitoring after the Fukushima NPP accident (3) Sediment discharge		Generation of response matrix with Au foils as detectors
		from river to coastal area		4. 53583, Vijayalakshmi I, IGCAR, India, Study on Variation of Efficiency
		4. 61137, Fumiya Nagao, Japan, Environmental radiation monitoring		with Various Matrices and Detectors
		after the Fukushima NPP accident (5) Database for Radioactive		5. Rapporteur of posters
		Substance Monitoring Data		
		5. Rapporteur of posters		
11:30-11:45			Tea Bre	
		Trade Exhibitions & Poster Display		
11:45-13:15	13A	Environmental Monitoring and Assessment	13B	Existing Exposures
		Chairs: Dr Hiroko Yoshida, Japan; Mr JPN Pandey, BARC		Chairs: Dr Cameron Jeffries, Australia; Dr S Chitra, BARC
11:45-12:15		IT 26: 25 min; Ms Jaqueline Calabria, IAEA, "The IAEA MEREIA		IT 27: 25 min: 74187, Dr Jim Hondros, Australia, "The IRPA NORM Task
12:15-13:15		programme: Building capacity in methodologies for taking a holistic		Group - Recent and future activities"
		approach to radiological and environmental impact assessment", Pre-		
		recorded presentation		(OP(10 + 1))
		4 OP (10 min each) 1. 63110, Roopashree Shrivastava, STEPS: A Tool to Forecast		4 OP (10 min each) 1. Ms Olvido Guzmán López Ocón, IAEA, "Presentation of a New Safety
		Meteorological Variables on a Short Time Scale		Guide on Existing Exposure Situations" (Pre-recorded presentation)
		2. 63547, Shanu Karmakar, IGCAR, India, Sensitivity of Horizontal		2. 71158, Sangrok Kim, Korea, Measurement of Radon Removal Amount
		Resolution, Land-Use/Land-Cover, Land Surface Model and		of Activated Carbon
		Boundary Layer physics in operational WRF Simulations in Online		3. 71404, Rajeswari P Rout, India, Estimation of Dose Conversion Factor
		Nuclear Emergency Response System (ONERS)		of thoron progeny using ICRP 130 HRT model
		3. 61504, K Swetha, HBNI, Reactive transport simulation in		4. 74162, Karolin Mary F S, India, Estimation of natural radioactivity in
		groundwater using local radial point interpolation meshless method		granite used as building materials in Kanyakumari District, Tamil Nadu,
		4. 63422, Dipan Kundu, Development of Kalman Filter based source		India
		term estimation method and its testing using observed dose rates		5. Rapporteur of posters
1		5. Rapporteur of posters		

#### Friday 10 February 2023; Venue: Nehru Centre, Worli

13:15-14:15			Lunch B	reak	
		Trade Exhibitions & Poster Display			
14:15-15:45	14A	Environmental Monitoring and Assessment	14B	Emergency Preparedness and Response	
		Chairs: Dr D Ponraju, IGCAR; Mr I V Saradhi, BARC		Chairs: Mr Probal Chaudhury, BARC; Dr S Murali, BARC	
14:15-14:45 14:45-15:45		IT 28: 25 min: Dr A Vinod Kumar, BARC, "Environmental and radioactivity surveillance around nuclear facilities in India" <i>4 OP (10 min each)</i> 1. 61437, Aditi C Patra, Uranium association with minerals in mining wastes: Influence on mobility 2. 61379, Y P Gautam, Atmospheric <sup>3</sup> H Impact assessment (2011-2021) around Narora Atomic Power Station 3. 61568, Yashodhara I, Activity concentrations of <sup>7</sup> Be, <sup>40</sup> K, <sup>232</sup> Th, <sup>226</sup> Ra, and <sup>210</sup> Pb in air samples of uranium mineralized region in North Karnataka, India 4. 61374, Thulasi Brindha, BARC, India, Levels of Tritium in various environmental compartments at Kalpakkam		IT 29: 25 min: Dr Zhanat Carr, WHO, "Radiation Emergencies", (Pre- recorded presentation) IT 30: 20 min: 63494, Dr C V Srinivas, IGCAR, "Spatial ingestion dose estimation based on remote sensing derived land use/ land cover data for emergency response" <i>3 OP (10 min each)</i> 1. 81468, S P Lakshmanan, AERB, Evolution of a Performance based Emergency Exercise Methodology for Effectively Testing Preparedness for Emergency Response 2. 81480, S K Pawar, AERB, Current Regulatory Requirements and Guidance on Emergency Preparedness for Management Nuclear Emergency in India 3. 82262, Pradeep Bhargava, India, Methodology for estimation of Emergency Planning Zone using deterministic methods for the 220 MWe PHWRs	
15:45-16:00		5. Presentation by trade delegates – Dassault Systemes India Pvt. Ltd.	Tea Bro	4. Presentation by trade delegates	
		Trade Exhibitions & Poster Display			
16:00-17:00			Poster Se	ssion	
17:00-18:30	15A	Environmental Monitoring and Assessment	15B	Regulatory Framework: System of Protection, Standards and	
		Chairs: Dr A Vinod Kumar, BARC; Mr I V Saradhi, BARC		Regulation	
				Chairs: Mr Zhiwen Fan, IAEA, Dr S Murali, BARC	
17:00-17:30 17:30-18:30		IT 31: 25 min; Dr N Karunakara, Mangalore University, "Carbon-14 specific activity in the vicinity of the PHWR nuclear power plant at Kaiga, India" <i>3 OP (10 min each)</i> 1. 63485, Sujatha P N, IGCAR, India, A study on aerodynamic roughness lengths at Kalpakkam tropical coastal station, India using micrometeorological observations 2. 61375, A Baburajan, BARC, India, Environmental Impact of different forms of Tritium (HTO, TFWT, and OBT) at Tarapur 3. 16356, A K Patra, BARC, India, Studies on Radiological Dose to aquatic weed at Kakrapar Atomic Power Station site using ERICA Integrated Approach 4. Rapporteur of posters		<ul> <li>IT 32: 25 min: Mr S B Chafle, ED, AERB, "Radiation safety and regulatory aspects in radiation facilities"</li> <li>4 OP (10 min each)</li> <li>1. 92428: Jaydeb Manda, Regulatory Review of Radiation Safety Aspects of 700 MWe KAPP-3 Commissioning for improvement in Radiation Safety Aspects in Upcoming 700 MWe NPPs</li> <li>2. 92418: Jolly Joseph K, India, Legal, Regulatory and Technical aspects of Exemption and Clearance of Source (Radioactive materials or Radiation Generating Equipment) in India</li> <li>3. 92477, Hee-Seock Lee, Korea, Proposal of Regulation Framework for Large-scale Particle Accelerator and Legislation in the Korean Nuclear Safety Act</li> <li>4. 96224, Garima Singh, India, Evaluation of Whole body Vibration and Assessment of Degree of Comfort</li> <li>5. Rapporteur of posters</li> </ul>	

## Saturday 11 February 2023; Venue: Nehru Centre, Worli

Time	Session	Session Title / Break
		Venue: Nehru Centre Auditorium
09:15-11:00		
11:00-11:30		Tea Break
11:30-12:30	17	Panel Discussion (Dr Werner Ruhm, Mr D K Shukla, Dr Ola Holmberg, Dr Bernard Le Guen, Dr B Venkataraman) "Radiological Protection of People and the Environment: Future Perspectives"
12:30-13:00	18	Declaration of best paper and poster awards
		AOCRP-7 Announcement
13:00-14:00		Lunch