

**34th IARP National Conference on “Radiation
Safety in Nuclear and Core Industries, Health
Care and Environment”
IARPNC–2020
(Virtual Conference)
January 21-23, 2021**

Programme

Day 1: 21-01-2021

1045 – 1145 hr	: InaugurationFunction
Welcome Address	: Dr. M. S. Kulkarni, Vice President, IARP
Address by President, IARP	: Dr. B. Venkataraman, Dir, SQ&RMG, IGCAR
Address by Guest of Honour	: Dr. Dinesh Srivastava, CE, NFC
Address by Chief Guest	: Shri G. Nageswara Rao, Chairman, AERB
Release of Conference Proceedings & Declaration of IARP Awards	
Vote of Thanks	: Dr. S. Murali, Secretary, IARP

SESSION I (1145 – 1315 hr)

**ORATION LECTURES
(Session Chair: Dr B Venkataraman)**

1145 – 1215 hr	A. K. Ganguly Memorial Oration Talk
1215 – 1245 hr	K. G. Vohra Memorial Oration Talk
1245 – 1315 hr	Lecture by Guest of Honour (CE, NFC)
1315 – 1400 hr	: LUNCH BREAK

SESSION II (1400-1530 hr)

Radiological safety aspects & exposure control in nuclear fuel cycle facilities

(Session Chair: Shri Suresh Babu)

IT1: Dr. M S Kulkarni, BARC (20 + 5 min)

IT2: Dr. P.P. Haridasan, IAEA (20 + 5 min)

Oral Presentation: (4 Papers) (4 * (8 + 2) min)

1. P85, Suryanarayana, Radiation protection in off-gas system of AHWR
2. P79, Rajeev Kumar, Measurement of thermal Neutron flux at tray rod location in APSARA-U Reactor
3. P66, Lokesh Kumar, Estimation of tritium transfer rate from spilled tritiated water to ambient air of the Research Reactor Containment Building
4. P126, Raveendran, Five decades of radiation protection at TAPS 1 & 2

1530-1545 hr: Tea Break

SESSION III (1545-1715 hr)

Radiation safety in front and back-end nuclear fuel cycle

(Session Chair: Dr M S Kulkarni, BARC)

IT3: Dr S K Jha, HPD, BARC (20 + 5 min)

IT4: Dr CP Kaushik, NRG, BARC(20 + 5 min)

Oral Presentation: (4 Papers) (4 * (8 + 2) min)

1. P20, D K Pandey, Health Physics Experience during processing of long stored Uranyl Nitrate solution at reprocessing plant
2. P15, Yuvraj, Health Physics Surveillance during In-Service Inspection of CORAL Waste Tank Farm
3. P61, Venkataswamy, A case study on innovative approach for controlling the stack release of uranium particulates in UO₂ powder production
4. P43, U.V Deokar, Radiological safety aspects during campaign of In-Situ Conditioning of Radioactive Sludge

1715-1815 hr: Poster Presentations (P1-P96)
(Rapporteur: Dr S Anand)

Day 2: 22-01-2021

SESSION IV (0930-1000 hr)

Special Lecture: Shri R M Suresh Babu, Director, HS&EG, BARC

SESSION V (1000-1200 hr) Environmental

**measurements and modeling
(Session Chair: Dr A Vinod Kumar)**

IT 6: Dr. P M Ravi Ex. BARC (20 + 5 min)

Oral Presentation: (9 Papers) (9 * (8 + 2) min)

1. P146, Deepak Kumar, Estimation of site specific carbon content in environmental samples around NAPS, Narora site for determination of Carbon 14 specific activity
2. P221, Manish Chopra, Virtual Source Formulations for Different Dispersion Parameterization Schemes: A Comparison
3. P199, Chinnaessakki, ^{134}Cs Gamma emission probabilities measurement using Gamma Spectrometry
4. P196, Sanu S Raj, Major and minor elemental analysis in suspended silt in seawater around Mumbai and its correlation with organic matter content and particle size.
5. P137, Nankar, Performance evaluation of an automatic air moisture sampler developed at Environmental Survey Laboratory, Kakrapar Gujarat Site
6. P262, Renita Shiny D'souza, Organically Bound Tritium in terrestrial biota in the vicinity of PHWR power plant at Kaiga
7. P151, Vedesh K Varakhedkar, Performance evaluation of SODAR with Tower based Ultrasonic anemometer for Tarapur Coastal Site
8. P84, Pallavi Singhal, Synthesis and Characterization of Silica Coated Phosphoramidate Functionalized Magnetic Nanoparticles for Uranium Separation from Aqueous Medium
9. P209, Rupali C.K. Kamat, Determination of Heavy Metals (Zn, Cr, Fe) in *Mangifera Indica* (Mango) Leaves using Neutron Activation Analysis

1200 – 1215 hr: TEA BREAK

SESSION VI (1215-1345 hr)

**Radiation Dosimetry
(Session Chair: Dr B K Sapra)**

IT7: Dr. Dash Sharma, AERB (20 + 5 min)

IT8: Dr. D. D. Rao Ex. BARC (20 + 5 min)

Oral Presentation: (4Papers) (4 * (8 + 2) min)

1. P105, Rajesh Chaurasia, Formulation of a novel fixative composition for preservation and recovery of leucocytes and other biological samples

2. P63, Riya Dey, Monte Carlo Simulation of Beta Dose Rate Distribution in Sand Grains of Heterogeneous Size for Implementing in Single Grain OSL Dating
3. P33, Bakkiam, Study of cytogenetic damage induced in human blood lymphocytes irradiated with Am-241 alpha radiation
4. P103, Sonali Bhade Generation of baseline urinary excretion data for 40K by Liquid Scintillation Counting technique

1345-1430 hr: LUNCH BREAK

SESSION VII (1430-1530 hr)

**Radiation Detectors and Health Physics Instrumentation
(Session Chair: Dr D N Sharma)**

IT9: Shri. K Venkatramana, NPCIL (20 + 5 min)

Oral Presentation: (4 Papers) (4 * (8 + 2) min)

1. P18, Soumyajit Chakraborty, ANUSUCHAK: A Gamma Dongle for Real-time Detection of Elevated Levelsof Gamma Radiation
2. P229, Shivam Agarwal, Design and Development of Radiation Monitoring Watch (RMW)
3. P6, Pattanayak, Laser assisted decontamination of contaminated metallic object
4. P82, M K Tiwari, Development of an online dose rate monitoring system for exhaust filter bank at WIP, Trombay

1530-1545 hr: TEA BREAK

SESSION VIII (1545 – 1715 hr)

**Nuclear & Radiological Emergencies
(Session Chair: Shri Probal Chaudhury)**

IT10: Dr. S. Murali RSSD, BARC (20 + 5 min)

IT11: Shri. Ramesh NCMG-DAE (20 + 5 min)

Oral Presentation: (4 Papers) (4 * (8 + 2) min)

1. P123, Rajesh Sankhla, Development of Portable Whole Body Monitor for Measurement of Internal Contamination During Emergency Situations
2. P222, Ritika Datta, Development of extractive liquid scintillation spectrometry for the determination of 90Sr in urine samples for emergency bioassay.
3. P124, Padi Sreenivasa reddy, Performance Evaluation of Enhanced Criticality Alarm System
4. P195, Karthik, Post LOCA decontamination of fueling machine vaults and service areas of KAPS-1

**1715-1815 hr: Poster Presentations (P97-P179)
(Rapporteur: Shri G Ganesh)**

Day 3: 23-01-2021
SESSION IX (0930-1100 hr)
Radiation applications in health care & core industries
(Session Chair: Dr M S Kulkarni)

IT12: Dr. B. Venkatraman, IGCAR (20 + 5 min)

IT13: Dr. P K Pujari RCIG, BARC (20 + 5 min)

Oral Presentation: (4 Papers) (4 * (8 + 2) min)

1. P120, Susheela Sivakumar, Health physics experience during fabrication of ¹⁰⁶Ru eye plaque from high level radioactive liquid waste
2. P53, Sahiralamkhan Mohammed, Radiochemical Separation of I-131 from neutron irradiated TeO₂ by dry distillation method for human health care applications
3. P19, Aswathi Raj, A Dosimetric study in the effect of relative position of secondary jaws from a Multi leaf Collimator.
4. P184, Kamaldeep, Quantification of radioactivity inside the patient's body administered with ¹⁷⁷Lu-PSMA-617 using gamma camera and validation of technique using urine analysis method.

1100-1115 hr:TEA BREAK

SESSION X (1115-1245 hr)
Regulatory Aspects and National & International guidelines
(Session Chair: Dr K S Pradeepkumar)

IT14: Dr R K Gopalakrishnan HPD, BARC (20 + 5 min)

IT15: Shri D K. Shukla AERB (20 + 5 min)

Oral Presentation: (4 Papers) (4 * (8 + 2) min)

1. P4, S.P. Lakshmanan, Development of Protection Strategy for Early Phase of Nuclear Emergency
2. P8, S.K. Dubey, Review on New Dose Conversion Factors for Radon and Thoron
3. P164, Suriya Murthy, Development of emergency action levels and examples of EAL for PFBR
4. P71, Khandelwal, Development of Radiological Safety Criteria for ALARA Exposures Based on Analysis of Dose Intensive Jobs in NPPs

1245-1330 hr: Poster Presentations (P180- P266)
(Rapporteur: Dr (Ms.) Pramilla Sawant)

1330-1430 hr: LUNCH

SESSION XI (1430-1530 hr)

PANEL DISCUSSION

“Radiation Protection and Safety - Public perceptions”

1530 – 1600 hr

Concluding session and declaration of best paper/poster awards