

**List of accepted papers for IARPNC-2020 (Poster Presentation)**

<b>Paper Id.</b>	<b>Authors</b>	<b>Title</b>	<b>Department</b>	<b>E-mail</b>
P1	C.S.A. Fernandes, A.D. Pant, V.D. Pol, T.I. Khan, R. Vijayan, S.V. Kadam, S.K. Suman, R.V. Kolekar	Analysis of Uranium Content of Sludge Accumulated in an Old Decommissioned Collection Tank	Health Physics Division	<a href="mailto:clinton@barc.gov.in">clinton@barc.gov.in</a>
P2	N. Praveena <sup>1</sup> , B. Suresh <sup>1</sup> , S. Murugan <sup>1</sup> , Biplap Paul <sup>2</sup> , Sujatha P. N3	Correlation of gamma activity of the liquid waste and surface dose rate of cemented waste drum	<sup>1</sup> Health physics Unit, Waste Immobilization Plant, BARC(F), Kalpakkam 603102, India	<a href="mailto:praveena@igcar.gov.in">praveena@igcar.gov.in</a>
P3	A.R.Khot,U V Deokar,K. Patra, P Mathew,Ashish Singh, G Ganesh	Radiological safety aspects during decommissioning of vitrification cell equipment	Health Physics Division	<a href="mailto:arkhot@barctara.gov.in">arkhot@barctara.gov.in</a>
P5	Subrata Bera <sup>1</sup> , Subrata Pathak <sup>2</sup> , Pankaj Tandon <sup>2</sup>	Methodology for Estimation of Dose to Sewage Worker due to Active Liquid Effluent	<sup>1</sup> Safety Research Institute, Nuclear Safety Analysis and Research Group, Atomic Energy Regulatory Board, Anushaktinagar, Mumbai 400094, India	<a href="mailto:sbera@aerb.gov.in">sbera@aerb.gov.in</a>
P7	S K Nayak <sup>1</sup> , V Santhanakrishnan <sup>1</sup> , V Ramprasad <sup>1</sup> , G Ganesh <sup>1</sup> and M S Kulkarni <sup>1,2</sup>	A methodology to standardize and estimate <sup>129</sup> I in Charcoal Cartridges using an array of HPGe detectors	<sup>1</sup> Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:nayaksk123@gmail.com">nayaksk123@gmail.com</a>
P9	Parthasarathi Prusty <sup>1#</sup> , Abinash Sahu <sup>1</sup> , S K Jha <sup>*1</sup> , M S Kulkarni <sup>*1</sup>	Size distribution of thorium bearing aerosols in a mineral separation Plant, India	<sup>1</sup> Health Physics Division, Bhabha Atomic Research Centre, Mumbai, India <sup>*</sup> Professor, Homi Bhabha National Institute, Mumbai, India	<a href="mailto:jugun540@gmail.com">jugun540@gmail.com</a>
P10	Jashi K.B <sup>1</sup> , Ashok Kumar A <sup>1</sup> , Geetha P.V <sup>2</sup> , Pandaram P <sup>1</sup>	Significance of Nitrogen Purity on Thermo Luminescence in Gas Heating-Based Semiautomatic TLD Reader System	<sup>1</sup> TLD Laboratory, Kudankulam Nuclear Power Project, Tamil Nadu – 627106 <sup>2</sup> Directorate of Health Safety & Environment, Nuclear Power Corporation of India Limited, Mumbai – 400094	<a href="mailto:kbjashi@npcil.co.in">kbjashi@npcil.co.in</a>
P11	Krishna Shekhawat <sup>1</sup> , P.Y. Bansode <sup>1</sup> , Sadhana Bhattacharya <sup>1</sup>	Networked Radiation Monitoring System for Safety in Accelerator Application	<sup>1</sup> Electronics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:krathore@barc.gov.in">krathore@barc.gov.in</a>
P12	K.Sreekumar, S.Ajeshkumar, Sujata R, S.K.Jha, M.S.Kulkarni	Development of Indian Network of Environmental Radiation Tracking System (INERTS).	Health Physics Division, Bhabha Atomic Research Centre, Mumbai 400085, India	<a href="mailto:oic.hpu-mk@irel.co.in">oic.hpu-mk@irel.co.in</a>
P13	M. Manohari P. Sugumar and R. Mathiyarasu	Commissioning of twin HPGe based lung monitoring system for the measurement of <sup>241</sup> Am in the lungs and liver	Safety, Quality and Resource Management Group, Indira Gandhi Centre for Atomic Research, Kalpakkam	<a href="mailto:manohari@igcar.gov.in">manohari@igcar.gov.in</a>

P14	J. Chakraborty <sup>1,3</sup> , S. Anand <sup>1,3</sup> , M. Joshi <sup>2</sup> , M K Sureshkumar <sup>1</sup>	Experimental Validation of the Coupled Aerosol-Computational Fluid Dynamics Code	1Health Physics Division, Bhabha Atomic research centre, 2Radiological Physics and Advisory Division, Bhabha Atomic research centre, 3Homi Bhabha National Institute-BARC	<a href="mailto:joychakra@barc.gov.in">joychakra@barc.gov.in</a>
P16	Vipin Chander, P. S. Viridi, K. Uma Sarma and S.K. Ghosh	Experiences of Regulatory Inspection of Operating Nuclear Power Plants in Radiological Safety	Directorate of Regulatory Inspection, Atomic Energy Regulatory Board, Mumbai- 400094, India	<a href="mailto:vipinchander@aerb.gov.in">vipinchander@aerb.gov.in</a>
P17	A.Dhanasekaran, K.C.Ajoy, R.Santhanam, S. Chandrasekaran and M T Jose	Optimization of counting time to meet the operational limits of artificial radionuclide concentration in air	Radiation Safety section, Health and Industrial Safety Division, Indira Gandhi centre for Atomic Research, Kalpakkam 603102, India	<a href="mailto:adhana@igcar.gov.in">adhana@igcar.gov.in</a>
P21	Usha Pujala <sup>1,2*</sup> , V. Subramanian <sup>1,2</sup> , Amit Kumar <sup>1</sup> , P.N. Sujatha <sup>1,2</sup> , , C.V. Srinivas <sup>1,2</sup> , R. Venkatesan <sup>1</sup> and R. Baskaran <sup>1</sup>	Bipolar Charging of Mono-disperse PSL Aerosols by Gamma Radiation and its Effect on Aerosol Processes	1Radiological & Environmental Safety Division, IGCAR, Kalpakkam – 603102, India 2 Homi Bhabha National Institute, India	<a href="mailto:vsn@igcar.gov.in">vsn@igcar.gov.in</a>
P22	A.Chandrasekaran	Correlation treatment of hydro-geochemical data of groundwater in Kanchipuram District, Tamilnadu	1Department of Physics,SSN college of Engineering Chennai-603110 Tamilnadu	<a href="mailto:chandrasekarana@ssn.edu.in">chandrasekarana@ssn.edu.in</a>
P23	Pankaj Kumar <sup>1</sup> , Anish A Ansari <sup>1</sup> , Piyali Banerjee <sup>2</sup> , J P N Pandey <sup>1</sup> , G Ganesh <sup>1</sup>	Quick determination of <sup>14</sup> C in presence of <sup>3</sup> H by dual liquid scintillation counting method	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2 Nuclear Recycle Board, Bhabha Atomic Research Centre, Tarapur – 401502, India	<a href="mailto:pkbarc72@gmail.com">pkbarc72@gmail.com</a>
P24	Samsul Arefin <sup>1</sup> , S. K. Suman <sup>1</sup> , Amit Sharma <sup>2</sup> , M. T. Saify <sup>2</sup> , R. V. Kolekar <sup>1</sup>	Shielding Design of Uranium Crop Storage Box in Uranium Fuel Fabrication Facility	1Health Physics Division, 2Atomic Fuels Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:samsul@barc.gov.in">samsul@barc.gov.in</a>
P25	Faby Sunny, <sup>1</sup> Manish Chopra, <sup>1</sup> R. B. Oza	Coastal Sea Contaminant Transport Model For Regulatory Applications	1Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:fabys@barc.gov.in">fabys@barc.gov.in</a>
P26	V V Satyanarayana G <sup>1</sup> , N S Siva Kumar V <sup>2</sup> , Srinivasulu A <sup>1</sup> , Surendra K <sup>1</sup> , P V Lakshminarayana <sup>1</sup> , ADP Rao <sup>1</sup> , Vidya Sagar D <sup>3</sup>	Environmental Radiation Levels and Effective dose to personnel in and around Visakhapatnam, Andhra Pradesh, India	1Department of Nuclear physics, Andhra University,	<a href="mailto:venkats.gvvs@gmail.com">venkats.gvvs@gmail.com</a>
P27	Baskar S*, Jose M.T and Venkatraman B	Shielding computations for Micro Analytical Characterization Facility in Radio Metallurgical Laboratory at IGCAR	2Gitam institute of Science, GU, Visakhapatnam, 3HPU, NFC, Hyderabad	<a href="mailto:sba@igcar.gov.in">sba@igcar.gov.in</a>
P28	Suresh.S1, Sannappa J 2, Nagabhushan S. R2, Rangaswamy D.R3, Srinivasa E4	Estimation of Terrestrial Gamma Radiation Dose and Evaluation of Annual Effective	1 Department of Physics, MPE Society's SDM Degree College, Honnavar Karnataka 581334, India.	<a href="mailto:sureshhnv@gmail.com">sureshhnv@gmail.com</a>

		Dose in Uttara Kannada District of Karnataka State, India.	2 Department of studies and research in Physics, Kuvempu University, Shankarghatta 577451, India. 3 Department of Science and Humanities, PES University, Electronic City Campus, Bangalore, India. 4 Department of Physics, IDSG Government College, Chikkamagalure 577102, India.	
P29	Ajesh kumar. S, K. Sreekumar, Sujata R, Jha S. K and Kulkarni M. S	Radiological Aspects in the production of NGADU from secondary uranium sources	Health Physics Division, Bhabha Atomic Research Centre, Mumbai 400085, India	<a href="mailto:irehpu@gmail.com">irehpu@gmail.com</a>
P30	Manisankar Dhabal1, Durgesh Lingampalle2, O P Ullas3,	Development of an advance Radiological Ventilation Control System for Hot Cells of NHCF, RLG	<sup>1,2,3</sup> HLU& ESS, Bhabha Atomic Research Centre, Trombay, Mumbai 400085	<a href="mailto:msdhabal@barc.gov.in">msdhabal@barc.gov.in</a>
P31	Swarup Supakar1, Srijith Valsan V1, Dipjyoti Deka, Jaya Prasad, Dhana Nagarjuna, Vikas, Venkataramana K, Ramasomayajulu M	Computation of Gamma Dose Rate at Different Downwind Distance due to Atmospheric release of Xe133 using Numerical Integration method	Health Safety & Environment Group, Nuclear Power Corporation of India Limited, Mumbai 400094, India,	<a href="mailto:swarups@npcil.co.in">swarups@npcil.co.in</a>
P32	Jayan M.P1, Krishnakumar P1, H.C.M Pillay1, Sureshkumar M.K1, Sankhla Rajesh2, and Gopalakrishnan R.K1	Operational Experience of In-Vivo Measurement of Fission Products at a Radio Chemical Facility at Trombay	1 Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2 Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:jayan@barc.gov.in">jayan@barc.gov.in</a>
P35	Saitya. A. 1, 2, B. A. Arul Anantha Kumar 1, C. T. Subba Rao	Translocation dose response curve for <sup>137</sup> Cs $\gamma$ rays using fluorescent probes of chromosome 1, 2 & 4 and their specific translocation frequency details	1 Radiological and Environmental Safety Division, IGCAR, Kalpakkam 603102, 2 Homi Bhabha National Institute, BARC, Mumbai 400085, India	<a href="mailto:saithyamula18@gmail.com">saithyamula18@gmail.com</a>
P36	<u>V.T.Hridya</u> <sup>1&amp;2</sup> , D.Khanna <sup>1</sup> , Raj.As wathi <sup>1&amp;2</sup>	Dose linearity and Monitor unit linearity of a Truebeam STx linear accelerator	<sup>1</sup> Department of Physics, Karunya Institute of Technology and Sciences, Coimbatore <sup>2</sup> Department of Oncology, Aster Mims, Calicut	<a href="mailto:Hridya.rema@gmail.com">Hridya.rema@gmail.com</a>
P37	Malti P Kumar1, Shailesh M1, Vikas Pol1, S. K. Suman1, R V Kolekar1, and S Chowdhury2	Estimation of MgF2 levels and its toxicity in Uranium Handling facility	Health Physics Division1, Uranium Extraction Division2 Bhabha Atomic Research centre, Trombay, Mumbai 400085, India	<a href="mailto:malti@barc.gov.in">malti@barc.gov.in</a>
P38	Malay Ghosh1, Smithri Manilal2, G. Ganesh2, H. A. Balasubramanya 1	Analysis of ground water samples for natural radioactivity	1 Chemical Technology Group, Bhabha Atomic Research Centre, Mysore - 571130 2 Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai - 400085	<a href="mailto:malayg@barc.gov.in">malayg@barc.gov.in</a>

P39	Shailesh M1,Malti P Kumar1, Vikas Pol1,S K Suman1, R V Kolekar1 Tanmoy Das1& S K Satpati2	Aerosol Size Distribution studies during Sodium diuranate dissolution operation	Health Physics Division1, Uranium Extraction Division2 Bhabha Atomic Research centre, Trombay, Mumbai 400085, India	<a href="mailto:sshailes@barc.gov.in">sshailes@barc.gov.in</a>
P40	Selvaganapathy.S1, Atul Prakash2, Suresh.B1, Murugan.S1, Ganesh.G1, Dr. Kulkarni.M.S1,3	Determination of Gamma Activity Coefficient from Dose Rate Measurements for pipelines carrying radioactive liquid streams	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2Waste Immobilisation Plant, INRP(K), NRB, Kalpakkam 603102, India 3Homi Bhabha National Institute, Anushakti Nagar, Mumbai 400094, India	<a href="mailto:ssg@igcar.gov.in">ssg@igcar.gov.in</a>
P41	R. Shrivastava, Indumathi S. Iyer and R. B. Oza	Variation in Ground Level Concentration due to Choice of Dispersion Parameters in the Gaussian Plume Model	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Mumbai - 400085, India	<a href="mailto:roopa@barc.gov.in">roopa@barc.gov.in</a>
P42	N. Hari Krishnan1*, D. Rajendiran1, A. Chandrasekaran2, R. Ravisankar3	The Application of Magnetic Susceptibility Measurements to Characterizing the Sediments, Periyakalpet to Parangaipeitai Coastal Area, Tamilnadu, India	1Post Graduate and Research Department of Physics, Shanmuga Industries Arts and Science College, Tiruvannamalai - 606603, Tamilnadu, India 2Department of Physics, SSN college of Engineering, Chennai - 603110, Tamilnadu, India 3Post Graduate and Research Department of Physics, Government Arts College, Tiruvannamalai - 606603, Tamilnadu, India	<a href="mailto:harikrish.physics05@gmail.com">harikrish.physics05@gmail.com</a>
P45	Usha Yadav, K. B. Shirsath, U. N. Desai, Nagesh N. Bhat, B. K. Sapra	Fluorescent in-situ hybridization based multiparametric rapid biodosimetry with premature chromosome condensation	Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai-400085	<a href="mailto:nageshnb@barc.gov.in">nageshnb@barc.gov.in</a>
P46	K. N. Narasimhamurthy1, G.V. Ashok2*, T. S. Shashi Kumar3, N. Nagaiah4, M B KarthikKumar4	The radiation exposure due to indoor radon, dissolved radon and ambient gamma radiation in Mandya, South India	1Government First Grade College, Tumkur-572101, INDIA 2Government College (Autonomous), Mandya – 571 40, INDIA 3Department of Physics, PES Institute of Technology, Mandya – 571401, INDIA 4Department of Physics, Banaglore University, Bangalore-560 056, INDIA	<a href="mailto:ashok.godekere@gmail.com">ashok.godekere@gmail.com</a>
P48	B. K. Rana1, M. R. Dhumale1, S. Chinnaesakki1, Samim Molla1, S. K. Jha1,2, M. S. Kulkarni1,2	Disequilibrium study in dolostone rock of Tummalapalle deposit and use of HPGe gamma spectrometric technique for assessment of grade of uranium ore	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai-400085, India 2Homi Bhabha National Institute, Mumbai-400094, India	<a href="mailto:barendragargi@gmail.com">barendragargi@gmail.com</a>
P49	<u>S.Kumaravel</u> , V.Ramakrishna, G.Ganesh	A Method for Estimation of 3HActivity in the Used Cotton Waste	Health Physics Division, BARC, Mumbai-400 085, India	<a href="mailto:skumaravel@igcar.gov.in">skumaravel@igcar.gov.in</a>

P50	Munish Kumar	On the photon energy response of some natural TL/OSL phosphors	Radiological Physics & Advisory Division, Bhabha Atomic Research Centre (BARC), Mumbai-94. *Assistant Professor, Physical Sciences, Homi Bhabha National Institute (HBNI), Mumbai-94	<a href="mailto:munishk@barc.gov.in">munishk@barc.gov.in</a>
P51	Rajoo Kumar	Exemption and clearance of radiation sources from regulatory control	Resources & Documentation Division, Atomic Energy Regulatory Board, Mumbai - 400094, India	<a href="mailto:rajookr@aerb.gov.in">rajookr@aerb.gov.in</a>
P52	S K Srivastava*1, D Vidyasagar1, S K Jha2, M S Kulkarni2	Quality Control for Determination of Thorium in Soil	1Health Physics Unit, Nuclear Fuel Complex PO:ECIL, Hyderabad-62 2Health Physics Division & HBNI, Bhabha Atomic research Centre, Trombay, Mumbai-85	<a href="mailto:sksnfc@rediffmail.com">sksnfc@rediffmail.com</a>
P54	O. Annalakshmi1, G. V. Bharathilashmi2, E. Yasotha, Sreeletha Choudhary2, R. Mathiyarasu and B. Venkatraman1	Performance of TLD personnel Monitoring Services in EURADOS International Intercomparison exercise (IC2018ph)	Health Safety and Environment Group, Indira Gandhi Center for Atomic Research, Kalpakkam – 603102 1Homi Bhabha National Institute, Indira Gandhi Center for Atomic Research, Kalpakkam – 603102 2Health Physics Division, BARCF, Kalpakkam - 603102	<a href="mailto:anna@igcar.gov.in">anna@igcar.gov.in</a>
P55	A Y Balbudhe*, K Vishwa Prasad, D Vidya Sagar, S K Jha, MS Kulkarni	Natural radionuclides in the cereals and pulses commonly consumed in Hyderabad, India	Health Physics Division, Bhabha Atomic Research Center, Hyderabad 500062	<a href="mailto:ayb@nfc.gov.in">ayb@nfc.gov.in</a>
P56	D.Vidya Sagar1, Swaroopa Lakshmi1,A Y Balbuddhe1,K.Vishwa Prasad1, , S.K.Srivastava1, Amritpal Singh1, S.K.Jha2,M.S.Kulkarni2	Aerosol Distribution in Work Places of Uranium Fuel Fabrication Facilities, NFC, Hyderabad	1Health Physics Unit(HPD,BARC), NFC, Hyderabad, 2Health Physics Division, Bhabha Atomic Research Centre,Mumbai-85,India	<a href="mailto:dvs@nfc.gov.in">dvs@nfc.gov.in</a>
P57	K. Vishwa Prasad1, Balbudhe A.Y1, R. Balram Kumar1, D. Vidya Sagar1, Jha S.K1, Kulkarni M.S2	Build up of Beta Activity along with Uranium Particulate activity in Fuel fabrication plant.	1Health Physics Division, Bhabha Atomic Research Centre, ECIL Post, Hyderabad-500062 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85	<a href="mailto:vishwa@nfc.gov.in">vishwa@nfc.gov.in</a>
P58	V. S. Srivastava1, B. L. Dandapat2, R. Hansda2, R. L. Patnaik3, V. N. Jha3, S. K. Sahoo4, S. K. Jha4, M. S. Kulkarni	Comparison of Internal Doses of U-Mine Workers Using Ambient and Passive Techniques	Health Physics Unit, 2UCIL,1Narwapahar / 3Jaduguda, Singhbhum East, Jharkhand-832111 4Radiation Protection Section (NF), 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:vivek_srivastava12@rediffmail.com">vivek_srivastava12@rediffmail.com</a>

P59	Anirudh Chandra	Evacuation during a Site Emergency: A vehicle allocation optimization problem	Radiation Safety Systems Division Bhabha Atomic Research Centre, Mumbai 400085	<a href="mailto:anirudhc@barc.gov.in">anirudhc@barc.gov.in</a>
P60	Jayant Krishan* <sup>1,2</sup> , S. Anand <sup>1,2</sup> and Kapil Deo Singh <sup>1</sup>	Radiological Safety Analysis for <sup>131</sup> I tracer experiment study in a typical Biogas Digester	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2Homi Bhabha National Institute, Mumbai – 400085, India	<a href="mailto:jayantk@barc.gov.in">jayantk@barc.gov.in</a>
P62	Hemachandar V, Saparya Chattaraj, D K Patre, Ashokkumar P & R K Gopalakrishnan	Study on Particle Size Distribution of Radioactive Aerosols in Common Glove Box Exhaust System	Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:saparya@barc.gov.in">saparya@barc.gov.in</a>
P64	D.Durgaprasad <sup>1</sup> , S.K.Pal <sup>1</sup> , K.Venkataramana <sup>2</sup>	Radiological aspects during cutting and removal of L-08 coolant channel (Pressure tube) from the core of 540 MWe TAPS-4	1Health Physics Unit, Tarapur Atomic Power Station-3&4, Tarapur Maharashtra Site, TAPP-401504, India 2Directorate of Technical (HSE), NPCIL HQ, Mumbai-40085, India	ddprasad@npcil.co.in
P65	<sup>1</sup> Anuj Soni*, <sup>2</sup> S. Agarwalla, <sup>1</sup> D. R. Mishra, <sup>1</sup> D. Datta	Development of Laser based OSL reader for its application in radiation dosimetry	1Radiological Physics and Advisory Division, 2Laser and Plasma Technology Division,	anujsoni@barc.gov.in
P67	D.Karthikeyan, R.Santhanam, S.Chandrasekaran	Development of RFID & Bar code based TLD issue and receipt system	Radiation Safety Section, Health and Industrial Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam	dkk@igcar.gov.in
P68	Deepa Anilkumar <sup>1</sup> , Brij Kumar <sup>1</sup> , P. Bhargava <sup>1</sup> , A.P.Jakhete, N. Sur, S.Wadhwa <sup>2</sup> , and K D Singh <sup>1</sup> and M.S.Kulkarni <sup>1</sup>	Assessment of dose rate profile of a ventilation pre-filter of WIP, Trombay	1.Health Physics Division BARC, Waste Management Division 2.Bhabha Atomic Research Centre, Trombay, Mumbai	akdeepa@barc.gov.in
P69	1.Deepa Anilkumar, Brij Kumar, P. Bhargava, K D Singh <sup>1</sup> and M.S.Kulkarni 2 Aniruddha. D, Sumnesh Wadhwa,	Accident analysis of the Cask for Transport of Vitrified Waste Product	1Health Physics Division Bhabha Atomic Research Centre, Trombay, Mumbai 2.Waste Management Division Bhabha Atomic Research Centre, Trombay, Mumbai	akdeepa@barc.gov.in
P70	N Khandelwal, S K Pawar, S K Dubey and J Koley,	Radiological Trend Analysis of Operating Indian NPPs	Directorate of Radiation Protection and Environment (DRP&E), Atomic Energy Regulatory Board, Anushaktinagar, Mumbai	nkhandelwal@aerb.gov.in
P73	1.Arun Aravind 2.C. V. Srinivas 3.R. Shrivastava. 4.M. N. Hegde, B. N. Dileep 5.Vinod Kumar .6.H. Seshadri, D. K. Mohapatra	Numerical Study of the Topographically Induced Flows over Kaiga	1Homi Bhabha National Institute. 2Radiological & Environmental Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam, 3Radiation Safety Systems Division, 5Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay,	aravind@igcar.gov.in



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P74	Priyanka Reddy, Sonal M. Wankhede, Prakash Mandal# and Pramilla D. Sawant	Intra-laboratory inter-comparison exercise for tritium measurement using Zero Detection Threshold Technique	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai	pmandal@barc.gov.in
P75	Prakash Mandal, Sonali Gondane and Pramilla D. Sawant	Cost effective estimation of Polonium in Bioassay sample using Stainless Steel Planchettes	<sup>1</sup> Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai	pmandal@barc.gov.in
P76	I.Parthasarathi Prusty, Abinash Sahu, S K Jha*, M S Kulkarni*	Measurement of thorondisequilibrium ratio using two gross a-count method in REEP	<sup>1</sup> Health Physics Division, Bhabha Atomic Research Centre, Mumbai, *Professor, Homi Bhabha National Institute, Mumbai	<a href="mailto:jugun540@gmail.com">jugun540@gmail.com</a>
P77	1,2 N.Chitra,V.Subramanian, R.Venkatesan, M.T. Jose, and B. Venkatraman1, S. 1.BalaSundar	Estimation of thoron exhalation rate using LR-115 based passive technique.	1Radiological and Environmental Safety Division 2 2Homi Bhabha National Institute, Indira Gandhi Center for Atomic Research, Kalpakkam-603102, Tamilnadu	<a href="mailto:nchitra@igcar.gov.in">nchitra@igcar.gov.in</a>
P78	1.Abinash Sahu, P. Prusty, R. P. Patra, S. K.Jha* <sup>1</sup> , M. S. Kulkarni* <sup>1</sup>	Spectrometric study of monazite content in various heavy minerals from MSP, OSCOM	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai, *Professor, Homi Bhabha National Institute, Mumbai, India	abinash_sahu31@yahoo.co.in
P80	R Ramesh <sup>1</sup> , M Uday Kishor <sup>1</sup> , S Niranjan <sup>1</sup> , E K Murukan <sup>1</sup> , K Ramakrishna <sup>1</sup> , V Prabhakaran <sup>1</sup> , K Venkataramana <sup>2</sup> , Sunil Gadgil <sup>1</sup> & G P Reddy <sup>1</sup>	USE OF TRITIUM SWIPE METHOD FOR LEAK IDENTIFICATION ON HPFCS AT KGS-1&2	1Kaiga Generating Station 1&2, India 581400, 2Directorate of Technical, NPCIL, Mumbai	rameshr@npcil.co.in
P81	Baskar S*, Jose M.T, and Venkatraman B	Shielding computations for the B92A area in hot cells of Demonstration Fast Reactor Reprocessing Plant (DFRP)	Health and Industrial Safety Division, Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam	sba@igcar.gov.in
P86	T. Sambamurty*, J. Sudhakar, N.S. Krishna, P. Lenka <sup>1</sup> , P. Padma Savitri, A. Vinod Kumar	Estimation of natural radiation exposure from building materials used in BARC facilities, Visakhapatnam.	Environmental Monitoring & Assessment Division, BARC, Visakhapatnam 1.Health Physics Division, BARC, Mumbai	sambam@barc.gov.in
P87	P. Padma Savitri*, T. Sambamurty, J. Sudhakar, N.S. Krishna, A. Vinod Kumar	Estimation of ingestion dose to various age groups, due to Uranium from ground water consumption in and around upcoming BARC at Visakhapatnam, Andhra Pradesh	Environmental Monitoring and Assessment Division, BARC, Visakhapatnam	ppsavitri@barc.gov.in

P89	S. Jakathamani <sup>1,2</sup> , O. Annalakshmi <sup>1,2</sup> , R. Mathiyarasu <sup>1</sup> , M. T. Jose <sup>1,2</sup> , R. Venkatesan <sup>1,2</sup> , B. Venkatraman <sup>1,2</sup>	Mobile Display glass as a retrospective dosimeter	1Safety, Quality & Resource Management Group, IGCAR, Kalpakkam, India. 2Homi Bhabha National Institute, Indira Gandhi Centre for Atomic Research, Kalpakkam, India	<a href="mailto:jakathamani@gmail.com">jakathamani@gmail.com</a>
P90	Vijayalakshmi I* Arun B, Viswanathan S, Subramanian V	Assessment of natural radioactivity and radiological hazards in M-SAND an alternative to river sand used as building material	1Radiological and Environmental Safety Division, SQRMG, IGCAR, Kalpakkam, India.	<a href="mailto:vijisan@igcar.gov.in">vijisan@igcar.gov.in</a>
P91	G. V. Bharathilashmi <sup>3</sup> , O. Annalakshmi <sup>1,2</sup> , S. K. Singh <sup>4</sup> , Liji Shaiju <sup>4</sup> , R. Mathiyarasu <sup>1</sup> , R. Venkatesan <sup>1,2</sup> and B. Venkatraman <sup>1,2</sup>	Response of CaSO <sub>4</sub> :Dy TLD cards in mixed photon fields	1Health Safety and Environment Group, Indira Gandhi Center for Atomic Research, Kalpakkam 2Homi Bhabha National Institute, Indira Gandhi Center for Atomic Research, Kalpakkam 3Health Physics Division, KARP, BARCF, Kalpakkam . 4RSSD, BARC, Mumbai	<a href="mailto:anna@igcar.gov.in">anna@igcar.gov.in</a>
P92	E.Yasotha, G.V.Bharathilashmi*, Sreeletha Choudhary*, Shailesh Joshi, O. Annalakshmi <sup>1</sup> , R. Mathiyarasu, B. Venkatraman <sup>1</sup>	Blind Test as part of Quality Assurance of TLD Personnel Monitoring Services at IGCAR	Health Safety and Environment Group, IGCAR, Kalpakkam 1Homi Bhabha National Institute, IGCAR, Kalpakkam *KARP, BARCF, Kalpakkam	<a href="mailto:yasotha@igcar.gov.in">yasotha@igcar.gov.in</a>
P93	M.Y. Nadar ,D.K. Akar, I. S. SinghP. D. Sawant	Age Specific organ content and Excretion rates due to daily intake of natural Uranium through drinking water	Radiation Safety Systems Division , Bhabha Atomic Research Centre, Trombay, Mumbai 4	<a href="mailto:minalyn@barc.gov.in">minalyn@barc.gov.in</a>
P94	D.K. Akar, M. Y. Nadar, H.K. Patni and P. D. Sawant	ESTIMATION OF SKELETAL DOSE DUE TO EXTERNAL NEUTRON BEAM	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumba	<a href="mailto:minalyn@barc.gov.in">minalyn@barc.gov.in</a>
P95	1,2 Lokpati Mishra 1. Minal Y. Nadar 1. I. S. Singh 1.P.D. Sawant	EVALUATION OF BUILDUP OF <sup>241</sup> Am IN THE LUNGS DUE TO DECAY OF Pu <sup>241</sup>	1. Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 2.Homi Bhabha National Institute, Anushaktinagar, Mumbai	<a href="mailto:minalyn@barc.gov.in">minalyn@barc.gov.in</a>
P96	Akila.R1, Jaffar.I, R.Sarangapani, S.Chandrasekaran and M.T.Jose	Dose rate mapping for SEM examination of small irradiated fuel pin cut sections	1Radiation Safety Section, 2Healthand Industrial Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam	<a href="mailto:akila@igcar.gov.in">akila@igcar.gov.in</a>
P97	Jis Romal Jose Ashutosh Gupta, M.K. Sharma Probal Chaudhury	Development of Android Application for Backpack Gamma Spectrometry System	Radiation Safety Systems DivisionBhabha Atomic Research Centre, Trombay, Mumbai	<a href="mailto:jisromal@barc.gov.in">jisromal@barc.gov.in</a>
P98	I. S. Singh, M.Y. Nadar, Lokpati Mishra , P.D. Sawant.	METHODOLOGY TO ESTIMATE URANIUM EMBEDDED IN WOUND AND TRANSLOCATED TO AUXILIARY LYMPH NODES	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai	<a href="mailto:issingh@barc.gov.in">issingh@barc.gov.in</a>



P99	Meghnath Sen <sup>1,3</sup> , Rakesh Shukla <sup>2</sup> , V. Sathian <sup>1</sup> and A. K. Tyagi <sup>2,3</sup>	Synthesis, structural and TL based dosimetric characterization of Al <sub>5</sub> BO <sub>9</sub> :Ce <sup>3+</sup>	1Radiation Safety Systems Division, Bhabha Atomic Research Centre, Mumbai 2Chemistry Division, Bhabha Atomic Research Centre, Mumbai 3 Homi Bhabha National Institute, Anushakti Nagar, Mumbai	meghms@barc.gov.in
P100	Manikanda Bharath K , Usha Natesan, Srinivasalu S,Kannan Vaidyanathan, Chandrasekaran S,Sankaran Pillai G.	Natural radioactivity levels and heavy mineral concentrations in Shore Sediments along the Chennai Metropolitan Coast in South India	Institute for Ocean Management, Anna University, Chennai 2.Centre for Water Resource ,Anna University, Chennai . 3.Radiological Safety Division Health Safety and Environmental Group, Indra Gandhi Centre for Atomic Research, Kalpakkam	Not provided
P101	H.K. Patni, D.K. Akar, M.Y. Nadar and P.D. Sawant	Effect of beta particles of <sup>60</sup> Co on organ doses	Internal Dosimetry Section, Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai, Maharashtra, India, 400085	patnihk@barc.gov.in
P102	Vaishali M Thakur <sup>1</sup> , Amit Jain <sup>1</sup> , Biju K. <sup>2</sup> , Vitisha Suman <sup>2</sup> , Probal Chaudhury <sup>1</sup> , and L. M. Chaudhari <sup>3</sup>	Design and Development of Electronics for BF <sub>3</sub> Detector based High Energy Neutron REM Meter	1Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 3Department of Physic, Nowrosjee Wadia College, Pune	vmthakur@barc.gov.in
P104	A. Patel N.V. <sup>1</sup> , B. Sparsh.K.Sharma <sup>1</sup> , C. M.N. Korgaonkar <sup>1</sup> , D. Parag. A. Punekar <sup>1</sup> , E. N.Ramkumar <sup>1</sup> , F. Abhijit Manna <sup>2</sup> , G. V. Madhavi <sup>2</sup>	Up-gradation of Bulk Coolant Gamma (BCG) Monitors of Dhruva	1Research Reactor Maintenance Division, 2Electronics Division, Bhabha Atomic Research Centre, Trombay	<a href="mailto:patelnv@barc.gov.in">patelnv@barc.gov.in</a>
P106	Pradeep Kumar Singh, H.K. Patni and Pramilla D. Sawant	Estimation of contribution due to <sup>241</sup> Am distributed in various organs on detection efficiency of lung monitoring system	Internal Dosimetry Section, Radiation Safety System Division,Bhabha Atomic Research Centre, Trombay, Mumbai	pradeepsingh@barctara.gov.in
P107	Nanda Raveendran, Sonali Godane, Smita Thakur, J.R.Yadav and Pramilla Sawant	Assessment of uranium intake through drinking water at Tarapur Locations	Internal Dosimetry Section,RSSD, BARC, Trombay-400085	nanda@barctara.gov.in
P108	A.Dhanasekaran, K.C.Ajoy, R.Sanathanam, S. Chandrasekaran and M.T. Jose	Comparison TLD and EPD performances during blind tests	Radiation Safety section, Health and Industrial Safety Division, Indra Gandhi centre for Atomic Research, Kalpakkam 603102, India	adhana@igcar.gov.in
P109	Vivek Bara, U V Deokar, G Ganesh and R K Gopalakrishnan	FLUKA Simulation of Neutron Production in Borosilicate Glass	Health Physics Division, BARC, Trombay, Mumbai-400085	<a href="mailto:rkgopal@barc.gov.in">rkgopal@barc.gov.in</a>

P110	1Shashikala Ojha, <sup>1</sup> Sanjay Singh, <sup>2</sup> S K Singh <sup>2</sup> Anand Gangadharan 1Anil P Jakhete and 1R. K Gopalakrishnan	Estimation of Airborne Release Fraction (ARF) during centrifugation of radioactive slurry	1Health Physics Division, <sup>2</sup> Waste Management Division Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	tshashi@barc.gov.in
P111	P Mathew <sup>1</sup> , U V Deokar <sup>1</sup> , A R Khot <sup>1</sup> , K Patra <sup>1</sup> , G.Ganesh <sup>1</sup> , M. S. Kulkarni <sup>2</sup>	Exposure control and implementation of ALARA practices during piping end connection work in AVS basement gallery	1Health Physics Unit, INRPO-WM, NRB, BARC, Tarapur 401502 2Homi Bhabha National Institute (HBNI), Mumbai, 400094	prabham@barctara.gov.in
P112	Kankan Patra <sup>1</sup> , U V Deokar <sup>1</sup> , V K Mittal <sup>1</sup> , T.P.Valsala, G Ganesh <sup>2</sup>	Effect of radioactive contaminants on stainless steel metal surface	1Health Physics Unit, INRPO-WM, NRB, BARC, Tarapur 401502 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	kpatra@barctara.gov.in
P113	J P N Pandey <sup>1</sup> , Pankaj Kumar <sup>1</sup> , G Ganesh <sup>1</sup> , M S Kulkarni <sup>1,2</sup>	Analysis of Dose fractions in Collective dose for a Reprocessing Plant	1 Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2 Homi Bhabha National Institute, Anushaktinagar, Mumbai - 400 094	jnpandey@barctara.gov.in
P114	P.Kothai and S. Sharma,	Comparison of loose powder and pressed pellet techniques in soil analysis using EDXRF	Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	kothai@barc.gov.in
P115	S. Sharma and P. Kothai,	Measurement of gross alpha and beta activity concentrations around Trombay based on biomonitors	Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	kothai@barc.gov.in
P116	KS Babu, Saurav, Vajpyee LK, R Sharma, Rakesh Ranjan <sup>5</sup>	Radiological assessment of Decommissioned Reactor System Components for Material Clearance and Unrestricted release	Health Physics Division, <sup>5</sup> Reactor Operations Division, BARC, Trombay	ksbabu@barc.gov.in
P117	R Jana <sup>1</sup> , T Sambamurty <sup>2</sup> , N S Krishna <sup>2</sup>	Significance of temperature gradient for determination of dry deposition factor of radionuclides on site specific limited area using Gaussian puff model	1Radiation Safety Systems Division, <sup>2</sup> Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:rinajana@barc.gov.in">rinajana@barc.gov.in</a>
P118	Lalit Vajpyee <sup>1</sup> , Saurav <sup>1</sup> , H.C.M.Pillay <sup>1</sup> , Arkel R S <sup>2</sup> , Kiran T. Badgujar <sup>2</sup> and R K Gopalakrishnan <sup>1</sup>	Shielding Design Evaluation of Cask for Transport of Vitrified Waste Canister using Monte Carlo Technique	1Health Physics Division, <sup>2</sup> Nuclear Recycle Board Bhabha Atomic Research Centre, Mumbai-85	lvajpyee@barc.gov.in
P119	Saurav <sup>1</sup> , Lalit Vajpyee <sup>1</sup> , Sajin Prasad <sup>1</sup> , Sanjit Pal <sup>2</sup> and Ranjit Sharma <sup>1</sup>	Radiological Measurements for Evaluating Effectiveness of Delay Tank in Primary Heat Transport System of a Nuclear Research Reactor	1Health Physics Division, <sup>2</sup> Reactor Operations Division Bhabha Atomic Research Centre, Mumbai-85	ssaurav@barc.gov.in
P121	R.K.B.Yadav, M.Harikumar, S.Murali	Caterization of radiation workers: Guidelines and its Applicability in Indian Context	1Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	rkby@barc.gov.in

P122	R.K.B.Yadav, M.Harikumar,S.Murali	Enhancement of the Capacity for Handling Potential Radiation Emergency Scenarios	1Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	rkby@barc.gov.in
P125	Padi Srinivas Reddy, R. Prakash, R. Amudhu Ramesh Kumar and M. Geo Mathews	Online Functional Testing of Visual and Audio Alarms of Field Radiation Monitors	Reprocessing Group, Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu-603 102, India	<a href="mailto:padi@igcar.gov.in">padi@igcar.gov.in</a>
P127	B. C. Muduli <sup>#</sup> , Ajay Rawat, S.Chandrasekaran, M.T.Jose and B.Venkatraman	Development of GUI to evaluate single parameter sub-critical limits: A primer tool for radiation safety professionals	Radiation Safety section, Health and Industrial Safety Division, Indira Gandhi centre for Atomic Research, Kalpakkam 603102, India <sup>3</sup> Homi Bhabha National Institute, Trombay, Mumbai – 400 085, India	schand@igcar.gov.in
P128	Supreetha Prabhu <sup>1,3</sup> , Seema Chaudhary <sup>1</sup> , Suja A. Kumar <sup>1</sup> and M. S. Kulkarni <sup>2,3</sup>	Rapid separation of Pu & Am from Bioassay Samples	1Radiation Safety Systems Division, <sup>2</sup> Health Physics Division, Bhabha Atomic Research Centre,	spprabhu@barc.gov.in
P129	B. R. Manupriya <sup>1</sup> , Shalaka Paradkar <sup>3</sup> , Vijay Kadwad <sup>3</sup> , Lathika <sup>1</sup> , H. M. Somashekarappa <sup>2</sup> , K. Bhasker Shenoy <sup>1</sup>	Identification of capture-detector antibody pair for quantification of rat C-peptide in serum by immunoradiometric method.	1Department of Applied Zoology, <sup>2</sup> Centre for Application of Radioisotopes and Radiation Technology (CAART), Mangalagangothri, Mangalore University, Mangalore – 574199, India	kshenoyb@gmail.com
P130	Tanmay Sarkar <sup>1,2,*</sup> , S Anand <sup>1,2</sup> , Kapil Deo Singh <sup>1</sup> , and M.S. Kulkarni <sup>1,2</sup>	Shielding effectiveness of water pool for storage of radioactive materials using Monte-Carlo method	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India, Homi Bhabha National Institute, Anushaktinagar, Mumbai 94, India	<a href="mailto:tanmays@barc.gov.in">tanmays@barc.gov.in</a>
P131	Triveni Khan <sup>1</sup> , Clinton S A F <sup>1</sup> , R M Maladkar <sup>2</sup> , S K Suman <sup>1</sup> and R V Kolekar <sup>1</sup>	Health Physics Challenges during Natural Uranium Recovery from Underground Effluent Tank in U-Handling Facilities	Health Physics Division <sup>1</sup> , Atomic Fuels Division <sup>2</sup> Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:tikhan@barc.gov.in">tikhan@barc.gov.in</a>
P132	B. K. Rana <sup>1</sup> , S. Molla <sup>1</sup> , S. K. Sahu <sup>2</sup> , Alivia Haldar <sup>3</sup> , S. K. Jha <sup>1,4</sup> , M. S. Kulkarni <sup>1,4</sup>	Assessment of ambient gamma radiation level by CaSO <sub>4</sub> :Dy based thermoluminescence dosimeters around the Turamdih mining complex, Jharkhand	1HPD, 2EMAD, Bhabha Atomic Research Centre, Mumbai-400085, India 3HPU,Uranium Corporation of India Limited, Jharkhand-832107, India 4Homi Bhabha National Institute, Mumbai-400094, India	<a href="mailto:barendragargi@gmail.com">barendragargi@gmail.com</a>
P133	B. K. Rana <sup>1</sup> , Samim Molla <sup>1</sup> , P. Kumar <sup>2</sup> , S. Ranjan <sup>2</sup> , S. K. Jha <sup>1</sup> , 3, M. S. Kulkarni <sup>1,3</sup>	Diurnal variation of <sup>222</sup> Rn, progeny concentration and Equilibrium factor in Banduhurang open cast uranium mine, Jharkhand	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai-400085, India 2HPU, Uranium Corporation of India Limited, Jharkhand-832107, India 3Homi Bhabha National Institute, Mumbai-400094, India	<a href="mailto:barendragargi@gmail.com">barendragargi@gmail.com</a>
P134	Samim Molla <sup>1</sup> , B. K. Rana <sup>1</sup> , S. K. Jha <sup>1</sup> , 2, M. S. Kulkarni <sup>1,2</sup>	Distribution of <sup>226</sup> Ra in groundwater around the uranium mining site at Tummalapalle, Andhra Pradesh	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai-400085, India 2Homi Bhabha National Institute, Mumbai-400094, India	<a href="mailto:barendragargi@gmail.com">barendragargi@gmail.com</a>

P135	S. Molla <sup>1</sup> , B. K. Rana <sup>1</sup> , Ranjit Kumar <sup>1</sup> , Subhendu Jha <sup>2</sup> , S. K. Jha <sup>1, 3</sup> , M. S. Kulkarni <sup>1,3</sup>	Distribution of <sup>210</sup> Po in groundwater around the uranium mining site at Turamdih, Jharkhand, India	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai-400085, India 2Homi Bhabha National Institute, Mumbai-400094, India	<a href="mailto:barendragargi@gmail.com">barendragargi@gmail.com</a>
P136	Abhishek Jain <sup>1</sup> , A .K. Patra <sup>1</sup> , D. P. Nankar <sup>1</sup> , I. V. Saradhi <sup>2,3</sup> , A.Vinodkumar <sup>2,3</sup>	Studies on the rainfall intensity by using different instruments at Kakrapar site	1ESL (ESS, EMAD, BARC), KAPS, P.O. Anumala, Surat District, Gujarat-394651 2Env. Monitoring and Assessment Division, BARC, Mumbai-400 085 3Homi Bhabha National Institute, Anushaktinagar, Mumbai-400085	abhishekjain@npcil.co.in
P138	M.S.Vishnu <sup>1</sup> R.K.Manjunath <sup>1</sup> M.N.Hegde <sup>1</sup> , R.M Joshi <sup>1</sup> , B.N.Dileep <sup>1</sup> ,	Monitoring of rain temperature during south west monsoon season at Kaiga site	1Environmental Survey Laboratory, EMAD, BARC, Kaiga, Karnataka. 2Environmental Monitoring and Assessment Division , Bhabha Atomic Research Centre, Trombay, Mumbai	<a href="mailto:mrvishnu@barc.gov.in">mrvishnu@barc.gov.in</a>
P139	Preetha <sup>1</sup> , Jayasudha <sup>1</sup> , Thomas George <sup>1</sup> , B. Vijayakumar <sup>1</sup> , I.V.Saradhi <sup>2</sup>	Correlation study of Dew point with humidity at Kudankulam coastal site	1 Environmental Survey Laboratory. Kudankulam Nuclear Power project, TamilNadu– 627 120 2 Environmental Monitoring and Assessment Division, BhabhaAtomic Research Centre, Trombay, Mumbai 400085	<a href="mailto:vijayeskk@gmail.com">vijayeskk@gmail.com</a>
P140	T. Jesan <sup>1</sup> , C. Manonmani <sup>1</sup> , S. Ramkumar <sup>1</sup> , I.V. Sarathi <sup>2</sup> , A. Vinod Kumar <sup>2,3</sup>	Atmospheric Dispersion Patterns due to releases at Kalpakkam site	1 Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam, 603102, India 2 Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094, India	<a href="mailto:tjesan@barc.gov.in">tjesan@barc.gov.in</a>
P141	C.Manonmani <sup>1</sup> , T. Jesan <sup>1</sup> , I.V. Saradhi <sup>1</sup> , A. Vinod Kumar <sup>1,2</sup>	Analysis of Atmospheric Stability Patterns at Kalpakkam Site	1 Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam, 603102, India 2 Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094, India	<a href="mailto:tjesan@barc.gov.in">tjesan@barc.gov.in</a>
P142	Rajpal Gill <sup>1</sup> , Balram Meena <sup>1</sup> , M C Meena <sup>1</sup> , S.N. Tiwari <sup>1</sup> , I.V.Saradhi <sup>2</sup> , A.Vinodkumar <sup>2</sup>	External Dose validation using gamma Tracer & Gaussian Plume Model at selected locations around RAPS Rawatbhata Rajasthan Site	1ESL Rawatbhata Rajasthan Site, Rawatbhata Via Kota, Rajasthan 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	rajpalgill@npcil.co.in

P143	Sanyam Jain <sup>1</sup> , T. L. Ajith <sup>1</sup> , J. P. James <sup>1</sup> , B. N. Dileep <sup>1</sup> , I. V. Saradhi <sup>2</sup> , A. Vinod Kumar <sup>2</sup>	<sup>7</sup> Be activity in plants and influence of site specific parameters at Kaiga	1Environmental Survey Laboratory, Environmental Monitoring Assessment Division, Bhabha Atomic Research Centre, Trombay, Kaiga Site 581400, Karnataka, India 2Environmental Monitoring Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:sanyam@barc.gov.in">sanyam@barc.gov.in</a>
P144	T.Selvarani <sup>1</sup> , B.S.Selvi <sup>1</sup> , M.Balamurugan <sup>1</sup> , P.S.Rajan <sup>1</sup> , Thomas George <sup>1</sup> , B.Vijayakumar <sup>1</sup> , I.V.Saradhi <sup>2</sup> , A.Vinod Kumar <sup>2</sup>	Background Radiation Monitoring Around Kudankulam Nuclear Power Plant	1Environmental Survey Laboratory, Kudankulam Nuclear Power Project, Kudankulam, Tamilnadu 627120, India 2 Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:vijayeslkk@gmail.com">vijayeslkk@gmail.com</a>
P145	S Ramkumar <sup>*1</sup> , K S Rao <sup>1</sup> , T Jesan <sup>1</sup> , I V Saradhi <sup>2</sup> , A VinodKumar <sup>2, 3</sup>	Transfer coefficient studies of <sup>137</sup> Cs and <sup>40</sup> K from feed to Milk at Kalpakkam	1Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam-603102, India 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai-400085, India 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094, India	<a href="mailto:ramkumar@igcar.gov.in">ramkumar@igcar.gov.in</a>
P147	Vimal Kumar <sup>#</sup> , Deepak Kumar, Y P Gautam, Avinash Kumar, Sanjeev Kumar, I V Saradhi <sup>*</sup> , and A Vinod Kumar <sup>*</sup>	Wind Profile study and Estimation of Surface Layer Scaling Parameters for NAPS Narora site	Environmental Survey Laboratory, Narora Atomic Power Station, Narora <sup>*</sup> Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400 085	<a href="mailto:vimalkumar@npcil.co.in">vimalkumar@npcil.co.in</a>
P148	Vineet Kumar <sup>#</sup> , Y P Gautam, Deepak Kumar, J. Kumar, Sanjeev Kumar, A K Sharma, B. Singh, A R Tripathi ,I V Saradhi <sup>*</sup> and A Vinod Kumar <sup>*</sup>	Distribution of Uranium concentration in different water bodies around Narora Atomic Power Station	Environmental Survey Laboratory, Narora Atomic Power Station, Narora <sup>*</sup> Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400 085	<a href="mailto:vineetk@npcil.co.in">vineetk@npcil.co.in</a>
P149	Y P Gautam <sup>#</sup> , Deepak Kumar, Amit Kumar Sharma , Alok Tripathi, Jaivendra Kumar, Vineet Kumar, Avinash Kumar, Bhikam Singh, Vimal Kumar, I V Saradhi <sup>*</sup> and A Vinod Kumar <sup>*</sup> .	Assessment of Natural Radioactivity & Evaluation of external dose around NAPS Narora	Environmental Survey Laboratory, Narora Atomic Power Station, Narora <sup>*</sup> Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai- 85	<a href="mailto:ypgautam@npcil.co.in">ypgautam@npcil.co.in</a>

P150	Y P Gautam, Deepak Kumar, A K Sharma, A R Tripathi ,Sanjeev Kumar, Vineet Kumar, Vimal Kumar, J.Kumar, Avinash Kumar I.V.Saradhi* and A.Vinod Kumar*	Temporal Variation of Be-7 Concentration in the Surface Air (2016-2019) around Narora	Environmental Survey Laboratory, Narora Atomic Power Station, Narora *Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85	<a href="mailto:ypgautam@npcil.co.in">ypgautam@npcil.co.in</a>
P152	Tejpal Menaria1, AK Gocher1, S.N. Tiwari1, I.V.Saradhi2, A.Vinodkumar2	Radiation levels and distribution of radionuclides in soil near Bansawara, Rajasthan	1ESL Rawatbhata Rajasthan Site, Rawatbhata Via Kota, Rajasthan 2Environmental Monitoring and Assessment Division, BARC, Mumbai-85	<a href="mailto:tejpalmenaria@npcil.co.in">tejpalmenaria@npcil.co.in</a>
P153	Ajay Gocher1, Mohit Sisodia1, S P Tailor1, M K Meena1, S. N. Tiwari1, I V Saradhi2, A Vinodkumar	Distribution of Uranium in groundwater samples collected during pre & post monsoon season within 30 km radial distance of Rawatbhata Rajasthan Site.	1Environment Survey Laboratory, Rawatbhata Rajasthan Site, 2Environmental Monitoring and Assessment Division, BARC, Mumbai-85	<a href="mailto:msisodia.barc@npcil.co.in">msisodia.barc@npcil.co.in</a>
P154	Mohit Sisodia1, I V Saradhi2, A Vinodkumar2	Monitoring water movement through mango plant sapling using tritiated water as tracer	1ESL Rawatbhata Rajasthan Site, Rawatbhata Via Kota, Rajasthan 2Environmental Monitoring & Assessment Division, BARC Trombay, Mumbai-85	<a href="mailto:msisodia.barc@npcil.co.in">msisodia.barc@npcil.co.in</a>
P155	J. Thulasi Brindha1, T. Jesan1, K.R. Sreedevi1, C. Manonmani1, I.V. Saradhi2, A. Vinod Kumar2,3	Comparative Study of Air Tritium at Kalpakkam	1Environment Survey Laboratory, BARC, Kalpakkam 603102, India; 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400 085, India 3Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-94, India	<a href="mailto:brindha@igcar.gov.in">brindha@igcar.gov.in</a>
P156	K.R. Sreedevi1, T. Jesan1, A. Thilakavathi1, P.G. Shetty2, S.K. Sahu2, I.V. Saradhi2, A.Vinodkumar2,3	Spatial monitoring of gamma dose level using Environmental TLD at Kalpakkam Environment	1Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam 603102, India Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400 085, India Homi Bhabha National Institute, Anushakthi Nagar, Mumbai 400 094, India	<a href="mailto:sreedevi@igcar.gov.in">sreedevi@igcar.gov.in</a>
P157	A.Thilakavathi1, C. Manonmani1, K.R. Sreedevi, S. Ramkumar1, T. Jesan1, I.V. Saradhi2, A. Vinod Kumar	Estimation of Deposition Velocities for Kalpakkam site using <sup>7</sup> Be as Tracer	1 Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam, 603102, India 2 Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094, India	<a href="mailto:tjesan@barc.gov.in">tjesan@barc.gov.in</a>



P158	Jha M K1, Patra A. K.1, Joshi C.P 1, Saradhi, I. V.2,3, Vinodkumar A.2,3	Studies on root uptake of $^3\text{H}$ and its distribution as Tissue Free Water Tritium (TFWT) in different compartment of Rice plant	1ESL (ESS, EMAD, BARC), KAPS, P.O. Anumala, Surat District, Gujarat-394651 2Env. Monitoring and Assessment Division, BARC, Mumbai-400 085 3Homi Bhabha National Institute, Anushaktinagar, Mumbai-400085	mukeshjha@npcil.co.in
P159	B. K. Rana1, S. Molla1, S. Suman2, Shrinivash Kumar2, S. K. Jha1,3, M. S. Kulkarni1,3	$^{222}\text{Rn}$ and gamma radiation mapping around Uranium Mining, Processing and Tailing management facilities at Turamdih, Jharkhand	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai-400085, India 2HPU, Uranium Corporation of India Limited, Jharkhand-832107, India 3Homi Bhabha National Institute, Mumbai-400094, India	barendragargi@gmail.com
P160	Amit Bhatnagar, Ashish Arvind, Sureshkumar M K, Gopalakrishnan R K	Review of Derived Working Levels (DWL) for Skin Contamination	Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	bamit@barc.gov.in
P161	Samim Molla1, B. K. Rana1, Kumaraswamy V.1, S. K. Jha1, 2, M. S. Kulkarni1,2	Assessment of radioactivity in flora and fauna around Tummalapalle uranium mining site, Andhra Pradesh	1Health Physics Division, Bhabha Atomic Research Centre, Mumbai-400085, India 2Homi Bhabha National Institute, Mumbai-400094, India	barendragargi@gmail.com
P162	Brij Kumar, P. Bhargava, Deepa Anilkumar, K D Singh and M.S.Kulkarni	Source Non-Uniformity and its Impact on Radiation Shielding	Health Physics Division, BARC, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	brij@barc.gov.in
P163	Vidhya Sivasailanathan, N. Suriya Murthy, Allu Ananth	Calibration and testing the suitability of $\beta$ contamination monitor for Skin monitoring during nuclear emergency	1Health Physics Unit, Prototype Fast Breeder Reactor, BHAVINI, Kalpakkam Tamil Nadu 603 102. India.	<a href="mailto:vidhya_bhavini@igcar.gov.in">vidhya_bhavini@igcar.gov.in</a>
P165	Tanmay Sarkar1,2, Brij Kumar1*, P. Bhargava1, K. D. Singh1 and M.S.Kulkarni1,2	Shielding estimation for neutron dose from an alpha waste drum	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2Homi Bhabha National Institute, Anushaktinagar, Mumbai 400094, India	brij@barc.gov.in
P166	T. Sudhasini, G. Shanthi, N.Suriyamurthy and Allu Ananth	Testing of TLD reader linearity and estimation of photon dose from fuel subassembly	Personnel Monitoring Laboratory, BHAVINI, Kalpakkam – 603 102	<a href="mailto:sudhasini_bhavini@igcar.gov.in">sudhasini_bhavini@igcar.gov.in</a>
P167	N. Suriya Murthy, Vidhya Sivasailanathan, Allu Ananth	Operational HP experience during transportation and storage of MOX Fresh fuel subassembly in PFBR	Health Physics Unit, Prototype Fast Breeder Reactor, BHAVINI, Kalpakkam Tamil Nadu 603 102. India.	suriya@igcar.gov.in
P168	T. Sudhasini, G. Shanthi, N.Suriyamurthy and Allu Ananth	Commissioning of Personnel Monitoring Calibration Facility (PMCF) Equipped with Automated Irradiator at PFBR	Personnel Monitoring Laboratory, BHAVINI, Kalpakkam – 603 102	<a href="mailto:udhasini_bhavini@igcar.gov.in">udhasini_bhavini@igcar.gov.in</a>

P169	G. Shanthi , T. Sudhasini, N.Suriyamurthy, Allu Ananth	Experience on fulfilling the proficiency testing prior to accreditation of TLD laboratory	Personnel Monitoring Laboratory, BHAVINI, Kalpakkam – 603 102	<a href="mailto:shanthi@bhavini.in">shanthi@bhavini.in</a>
P170	P.S.Sharma	Migration of radionuclides in groundwater from waste storage facilities	Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	pssharma@barc.gov.in
P171	B. Arun1,2, I. vijayalakshmi1, S. Viswanathan1, M.T. Jose1,2, V. Subramanian1,2, R. Venkatesan1,2 and B. Venkatraman1,2.	Measurement of Carbon-14 in air by passive sampling technique	1Radiation, Safety and Environmental Division, Indira Gandhi Centre for Atomic Research, Kalpakkam-603102, Tamilnadu, India. 2HomiBhabhaNational Institute, Trombay, Mumbai 400085, India	arunhcu09@igcar.gov.in
P172	Deepika Jat, Vivek Bara, Tanmoy Das and R V Kolekar	Detection and Estimation of Gamma Sources using CZT based Portable Spectrometer	Health Physics Division, BARC, Trombay, Mumbai-400085	tanmoyd@barc.gov.in
P173	A. K. Patra 1 *, Joshi C.P 1, Jha M K1, Saradhi, I. V.2,3, Vinodkumar A.2,3	Assessing the Impact of Radioactive Discharges due to the Operation of Kakrapar Atomic Power Station-A Model Approach	1ESL (ESS, EMAD, BARC), KAPS, P.O. Anumala, Surat District, Gujarat-394651, 2Env. Monitoring and Assessment Division, BARC, Mumbai-400 085, 3Homi Bhabha National Institute, Anushaktinagar, Mumbai-400085	<a href="mailto:akpatra@npcil.co.in">akpatra@npcil.co.in</a>
P174	B.S .Selvi1, M.Balamurugan1,T.Selvarani1, , B.Vijayakumar1, I.V.Saradhi2, A.Vinod Kumar2	Trend analysis of Gross Alpha Gross Beta in Air samples around Kudankulam Nuclear Power Plant	1Environmental Survey Laboratory, Kudankulam Nuclear Power Project, Kudankulam,Tamilnadu 627120, India 2 Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	bsselvi78@gmail.com
P176	Jayasudha1, B. Preetha1, Thomas George1, B. Vijayakumar1, I.V.Saradhi2	Roughness Length (z0) and Friction velocity(U*) for Kudankulam Site	Environmental Survey Laboratory1. Kudankulam Nuclear Power project, TamilNadu– 627 120 2 Environmental Monitoring and Assessment Division,BhabhaAtomic Research Centre, Trombay, Mumbai 400085	vijayeslkk@gmail.com
P177	A.Thilakavathi1, T.Jesan1, C.Manonmani1, K.R. Sreedevi1, S.Ramkumar1 I.V.Saradhi2, A.Vinod Kumar2,3	Study of Gross Alpha, Gross Beta and 7Be in Air Particulates at Kalpakkam site	1Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam – 603 102 India. 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai – 400 085. 3Homi Bhabha National Institute, Bhabha Atomic research Centre, Mumbai – 94.	tjesan@barc.gov.in

P178	Anitha Manu <sup>1</sup> , T.Jesan <sup>1</sup> , C.Manonmani <sup>1</sup> , A.Thilakavathi <sup>1</sup> , K.S.Rao <sup>1</sup> , I.V.Saradhi <sup>2</sup> A.Vinod Kumar <sup>2,3</sup>	Response function of Plastic Scintillator for different Beta sources	1 Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam - 603102, India. 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India. 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094.	tjesan@barc.gov.in
P179	K.S.Rao <sup>1</sup> , AnithaManu <sup>1</sup> , S. Ramkumar <sup>1</sup> , T. Jesan <sup>1</sup> , I.V. Saradhi <sup>2</sup> , A. Vinod Kumar <sup>2,3</sup>	Estimation of Potassium, Gross Beta and Gross Alpha in Coconut Water	1 Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam - 603102, India. 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India. 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094. India	tjesan@barc.gov.in
P180	Anitha Manu <sup>1</sup> , T.Jesan <sup>1</sup> , I.V.Saradhi <sup>2</sup> , A.Vinod Kumar <sup>2,3</sup>	Estimation of Percent Recovery of Technetium-99 in Aqueous Samples	1 Environmental Survey Laboratory, Bhabha Atomic Research Centre, Kalpakkam - 603102, India. 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India. 3 Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094, India.	anithap@igcar.gov.in
P181	K. S Rao <sup>1</sup> , S. Ramkumar <sup>1</sup> , T. Jesan <sup>1</sup> , I. V Saradhi <sup>2</sup> , A. Vinod Kumar <sup>2,3</sup>	Study of Indoor and Outdoor External doses at Kalpakkam	1Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Kalpakkam, India 2Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai 400085, India 3Homi Bhabha National Institute, Anushakthi Nagar, Mumbai-400094, India	<a href="mailto:tjesan@igcar.gov.in">tjesan@igcar.gov.in</a>
P182	Sudheendran V1, Baburajan A1, Saradhi I V2 and Vinod Kumar A2	Standardization and measurement of <sup>99</sup> Tc in aquatic matrices at Tarapur	1Environmental Survey Laboratory, Tarapur, Environmental Monitoring and Assessment Division, 2Environmental Study Section, Environmental Monitoring and Assessment Division, BARC, Mumbai	vsudheendran@gmail.com
P183	Vaibhav Bhujbal, Shashank. S. Saindane, Harikumar M, Narsaiah MVR and S.Murali	A Development of Real Time Radiation Early Warning System for Nuclear Facility Using SDLC	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:vaibhavb@barc.gov.in">vaibhavb@barc.gov.in</a>
P185	Govinda Mukherjee, Ashutosh Gupta, Anand Raman, S. D. Wani, & Probal Chaudhury	Development of Gamma Register Software	Radiation Safety Systems Division Bhabha Atomic Research Centre, Mumbai-85	anandr@barc.gov.in

P186	Govinda Mukherjeea, Jayakumar b, Shubangi Wania, Vishal Kharvia, Anand Ramana & Probal Chaudhurya	Development of a $\beta/\gamma$ contamination monitor based on indigenously synthesized detector	(a)Radiation Safety Systems Division (b) Chemistry Division Bhabha Atomic Research Centre, Mumbai-85	anandr@barc.gov.in
P187	Rupali Pal <sup>1,4</sup> , Diptesh G. Naik <sup>2</sup> , Vishnu S. Nadkarni <sup>3</sup> , A.K.Bakshi <sup>1,4</sup> , B.K.Sapra <sup>1</sup>	Indigenous Development Of Novel Polymers (SDAC-Co-ADC) For Use In Fast Neutron Dosimetry	1Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai 400085,India 2P E S College of Arts & Science, Farmagudi, Ponda, Goa 403401, India 3School of Chemical Sciences, Goa University, Taleigao Plateau, Goa 403206, India; 4Homi Bhabha National Institute, Anushaktinagar, Mumbai-400094, India	rupalir@barc.gov.in
P188	N S Siva Kumar V <sup>1*</sup> , V V Satyanarayana G <sup>2</sup> and Lakshmana Das N <sup>1</sup>	Measurements of Indoor Radon -222 levels and Estimation of effective dose to Public due to External Gamma radiation and radon in different types of Dwellings in Odisha and Andhra Pradesh	1Department of Physics, Gitam institute of Science, GITAM University, Visakhapatnam-530045 2Department of Nuclear Physics, Andhra University, Visakhapatnam	vnssk2007@gmail.com
P190	D. K. Patre, Ashokkumar P. and Gopalakrishnan R. K.	Decontamination of Low Level Aqueous Radioactive Waste Using Magnetic Particles	Health Physics Division, Bhabha Atomic Research Centre, Mumbai 400085, India	dpatre@barc.gov.in
P191	Rupali Pal <sup>1,2</sup> , Mudit Beck, A.K.Bakshi <sup>1,2</sup> , B.K.Sapra <sup>1,2</sup>	Use of Boron-doped CR-39 SSNTD for Detection of Thermal Neutrons And its Application in Neutron Dosimetry	1Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2Homi Bhabha National Institute, Anushaktinagar, Mumbai-400094 India	rupalir@barc.gov.in
P192	Amrit Pal Singh <sup>1</sup> , Swaroopa Lakshmi <sup>1</sup> , Dr.D.Vidya Sagar <sup>2</sup> , V.V.Mahesh Kumar <sup>1</sup> , Dr. Dinesh Srivastava <sup>1</sup>	Estimation of Dose to an Individual due to UNRC Storage Shed and Thoria Waste Storage at Solar Evaporation Pond Area at NFC, Hyderabad	1Nuclear Fuel Complex, Hyderabad 2Health Physics Division, Bhabha Atomic Research Centre, Mumbai	<a href="mailto:apsingh@nfc.gov.in">apsingh@nfc.gov.in</a>
P193	V. S. Srivastava <sup>1</sup> , B. L. Dandapat <sup>2</sup> , R. Hansda <sup>2</sup> , R. L. Patnaik <sup>3</sup> , V. N. Jha <sup>3</sup> , S. K. Sahoo <sup>4</sup> , S. K. Jha <sup>4</sup> , M. S. Kulkarni	Dose Assessment of Underground Uranium Mine Workers from Inhalation of Uranium Bearing Ore Dust	Health Physics Unit, 2UCIL, 1Narwapahar / 3Jaduguda, Singhbhum East, Jharkhand-832111 4Radiation Protection Section (NF), 2Health Physics Division, Bhabha Atomic Research Centre, Trombay,	<a href="mailto:vivek_srivastava12@rediffmail.com">vivek_srivastava12@rediffmail.com</a>
P194	Bheema Nenavath, Arif Mohd, Lodha S R, A Ramachandra Rao, BinayKumar,Maruthi Ram A, Dr Dinesh Srivastava	Maintenance Experiences with Radiation Detectors & Monitoring Instruments at Nuclear Fuel Complex, Hyderabad	Utilities Plant, Nuclear Fuel Complex, ECIL Post, Hyderabad-62.	bheema@nfc.gov.in
P197	Khalid 1, D Badhai1, V R Mahangade1, M N Saifee1, S Karthik1, K. Venkataramana2	Simultaneous En-Masse Coolant Channel Replacement (EMCCR) Campaign at KAPS-1 and KAPS-2	1 Health Physics Unit, Kakrapar Atomic Power Station-1&2, Gujarat 394651, India 2 HSE , NPCIL HQ , Mumbai 400094	skarthik@npcil.co.in

P198	Sreekanth Bathula <sup>1,2</sup> , Chaturvedi Shashank <sup>1,5</sup> , S Anand <sup>1,3</sup> , Sapra B K <sup>1,4</sup> , Probal Chaudhury <sup>2</sup>	Modeling the Activity Median Aerodynamic Diameter (AMAD) evolution in the radioactive aerosol from Radiological Dispersal Device (RDD)	1Homi Bhabha National Institute, Anushakthi nagar, Mumbai-94, India 2Radiation Safety Systems Division, 3Health Physics Division, 4Radiation Physics and Advisory Division, Bhabha Atomic Research Centre, Trombay, Mumbai 85, 5Institute for Plasma Research, Gandhinagar 382428 India.	<a href="mailto:bathulas@barc.gov.in">bathulas@barc.gov.in</a>
P200	S. Chinnaesakki <sup>1</sup> , S. Anand <sup>1,2</sup> , S. V. Bara <sup>1</sup> , M. R. Dhumale <sup>1</sup> , S. K. Jha <sup>1,2</sup> , G. Ganesh <sup>1</sup> , M. S. Kulkarni <sup>1, 2</sup>	Low Energy Gamma Spectrometry for <sup>129</sup> I measurement in charcoal	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India 2Homi Bhabha National Institute, BARC, Mumbai, India.	<a href="mailto:esakki@barc.gov.in">esakki@barc.gov.in</a>
P201	MVR Narsaiah, Shashank Saindane and S.Murali	Theoretical Estimation of Whole Body dose due to use of Radioactive contaminated Imitation Jewellery/Ornament	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai - 400085, India	<a href="mailto:mvrn@barc.gov.in">mvrn@barc.gov.in</a>
P202	Praveen Kumar <sup>1</sup> , Anirudh Chandra <sup>2</sup> , Pradeep Bhargava <sup>1</sup> , Krishna Reddy <sup>3</sup> , Ritu Raj <sup>3</sup> , S.P. Laxmanan <sup>3</sup> , Kapil Deo Singh <sup>1</sup> , M.S. Kulkarni <sup>1</sup>	Protection Strategy for nuclear emergency at a 220 MWe PHWR	1Health Physics Division, 2Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India, 3Atomic Energy Regulatory Board, Mumbai 400094, India	pravkmr@barc.gov.in
P203	Sougata Rakshita <sup>b</sup> , Vinatha S. Pa., V. Sathiana, M. S. Kulkarnic	Theoretical evaluation of influential correction factors applicable to beta skin dose measurement by extrapolation ionization chamber.	aRadiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85, India, bHomi Bhabha National Institute, Mumbai-94, India, cHealth Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85, India.	sougata@barc.gov.in
P204	Pratip Mitra <sup>1</sup> , Ashutosh Gupta <sup>2</sup> , G. Priyanka Reddy <sup>1</sup> , Saurabh Srivastava <sup>1</sup> , Probal Chaudhury <sup>2</sup> , A. Vinod Kumar <sup>1</sup>	Design and Development of field deployable Environmental Gamma Spectrometry System (EGSS)	1Environmental Monitoring and Assessment Division, 2Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:pratipm@barc.gov.in">pratipm@barc.gov.in</a>
P205	S. Panigrahi, M.K. Samantara, V. Subramanian, R. Venkatesan, B. Venkatraman	Measurement of <sup>137</sup> Cs, <sup>90</sup> Sr in marine biota and their transfer factor studies in India	Radiation Application and Monitoring Section, Radiological & Environmental Safety Division, SQ & RMG, Indira Gandhi Centre for Atomic Research, Kalpakkam. TN, 603102, India	<a href="mailto:snpanigrahi@igcar.gov.in">snpanigrahi@igcar.gov.in</a>
P206	Ajay Kumar, Manish Kumar Mishra, Sabyasachi Rout, Vandana Pulhani, A. Vinod Kumar	Modelling of leaching rate of <sup>238</sup> U during rock-groundwater interactions	Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai -400085, India	<a href="mailto:ajaykls@barc.gov.in">ajaykls@barc.gov.in</a>
P207	Sugandhi Suresh, V.M.Joshi, Vandana A. Pulhani	Study on the seasonal variation in the ratio of anthropogenic radionuclides at thane creek	Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:sugandhi@barc.gov.in">sugandhi@barc.gov.in</a>

P210	Ajay Kumar, Rupali Chakor Kamat, Manish Kumar Mishra, Sabyasachi Rout, Vandana Pulhani, A.Vinod Kumar	Activity ratio of 235U/ 238U and 234U/238U in cultivated soil as a qualitative indicator of depleted/enriched uranium	Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai -400085, India	<a href="mailto:ajaykls@barc.gov.in">ajaykls@barc.gov.in</a>
P212	Tejpal Menaria, Ajay Gocher, S N Tiwari, S P Tailor , IV Saradhi, A Vinod Kumar	Pre-operational environmental radiological monitoring around proposed Mahi Banswara Atomic Power Project, Banswara district, Rajasthan	1.Environmental Monitoring& Assessment Division , BARC Mumbai-400085	<a href="mailto:tejmenaria76@gmail.com">tejmenaria76@gmail.com</a>
P213	Y P Gautam, Deepak Kumar <sup>#</sup> , V Kumar, Sanjeev Kumar, I V Saradhi*, A Vinod kumar*	Comparison of Atmospheric dispersion factor and Ar-41 gamma dose for unit release using ADMS and Routine long term GPM at Narora Site	Environmental Survey Laboratory, Narora Atomic Power Station, Narora, *Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai -85	<a href="mailto:deepak_kumar@npcil.co.in">deepak_kumar@npcil.co.in</a>
P214	A K Sharma <sup>#</sup> , Y P Gautam, Deepak Kumar, S.Kumar, Vineet Kumar, J Kumar, V.Kumar, A R Tripathi, Avinash Kumar, I V Saradhi* and A Vinod Kumar*	Distribution study of natural radioactivity in two districts of Uttar Pradesh	Environmental Survey Laboratory, Narora Atomic Power Station, Narora, *Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85	<a href="mailto:amitkumarsharma@npcil.co.in">amitkumarsharma@npcil.co.in</a>
P215	Deepak Kumar <sup>#</sup> , Y P Gautam, A R Tripathi, Avinash Kumar, I V Saradhi*, A Vinod kumar*	Study of TFWT& OBT in fruit samples within and beyond site boundary of NAPS Narora	Environmental Survey Laboratory, Narora Atomic Power Station, Narora *Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85	<a href="mailto:deepak_kumar@npcil.co.in">deepak_kumar@npcil.co.in</a>
P216	Sabyasachi Rout*, A. K. Patra, S.S. Wagh, A. Kumar, V. Pulhani, AV Kumar	Change in Speciation of U(VI) in Soil-Pore Water With Time	Environmental Monitoring and Assessment Division, Bhabha Atomic Reserch Centre, Mumbai-400085	<a href="mailto:srout.barc@gmail.com">srout.barc@gmail.com</a>
P217	V. B. Yadav*, Vandana Pulhani and A. Vinod Kumar	Standardisation and calibration of elemental analyser isotope ratio mass spectrometry (EA-IRMS) for $\delta^2\text{H}$ , $\delta^{13}\text{C}$ , $\delta^{15}\text{N}$ and $\delta^{18}\text{O}$ measurement	Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:vbyadav@barc.gov.in">vbyadav@barc.gov.in</a>
P218	J. K. Divkar, T.R.Meena, S.S.Patil and Ratheesh M.P	Demonstration of Environmental Radiation Monitor-Autonomous Vertical Profiler System for underwater measurement	Radiation Safety Systems Division, *Environmental Monitoring and Assessment Division, Bhabha Atomic Research Centre, Mumbai-400085	<a href="mailto:jkdivk@barc.gov.in">jkdivk@barc.gov.in</a>
P219	Amit K. Verma, Amar D. Pant, Bhosale N.A, Narayani K. and Anilkumar S.	Selection of gamma energies of 133Ba and 152Eu for efficiency calibration of HPGe detectors	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:amitv@barc.gov.in">amitv@barc.gov.in</a>
P220	Amar D. Pant, Amit K. Verma, Bhosale N.A., Narayani K. and Anilkumar S.	Use of 63.3 keV and 185 keV peaks of 234Th and 235U in measurement of uranium isotopic concentration by Low Energy Photon Spectrometry	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:amarp@barc.gov.in">amarp@barc.gov.in</a>



P223	Moushumi D Chaudhury <sup>1</sup> , V. B. Yadav <sup>1</sup> , Vandana Pulhani <sup>1</sup> , A.V. Kumar <sup>1</sup> , S.K. Jha <sup>2</sup>	Application of $\delta^{13}C$ and C/N ratio to characterise Organic matter in Coastal Sediment of Mumbai Harbour Bay	1Environmental Monitoring and Assessment Division, 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:mausamdc@gmail.com">mausamdc@gmail.com</a>
P224	S. K. Sahoo and S.K. Jha	Uranium in groundwater – Screening radionuclide for natural radioactivity	1Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai-85	<a href="mailto:sksbarc@barc.gov.in">sksbarc@barc.gov.in</a>
P225	Manikanda Bharath <sup>1*</sup> , S. Chandrasekaran <sup>2</sup> , Usha Natesan <sup>1*</sup> , V. Kannan <sup>1</sup> , S. Srinivasalu <sup>1</sup> , M.T. Jose <sup>2</sup> and B. Venkatraman <sup>2</sup>	Spatial variation of natural radioactivity levels in marine sediments at different depths in Bay of Bengal	1. Institute of Ocean Management, Anna University, Chennai- 600 025 2. Radiation Safety section, Health and Industrial Safety Division, Indira Gandhi centre for Atomic Research, Kalpakkam 603102	krmanibharath93@gmail.com
P226	Rajesh Kumar <sup>1</sup> , S.K. Sahoo <sup>2</sup> , Kumaraswamy V. <sup>1</sup> , Abhigyan <sup>1</sup> ,A. Chandrashekar <sup>1</sup> , S.K. Jha <sup>2,3</sup> and M.S. Kulkarni <sup>2,3</sup>	Distribution and Statistical Analysis of Indoor Radon Concentration around Tummalapalle Uranium Mining Site	1Health Physics Division, Bhabha Atomic Research Centre, Tummalapalle, Andhra Pradesh, 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:rajesh.barc31@gmail.com">rajesh.barc31@gmail.com</a>
P227	Suma Nair, Sonali Gondane and Pramilla D. Sawant	Preliminary Studies to estimate the Urinary Excretion of Uranium in Children using LED fluorimetry Technique	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:sumanair@barc.gov.in">sumanair@barc.gov.in</a>
P228	Shivam Agarwal, Amit Jain, M K Sharma and Probal Chaudhury	Design and Development of an Ultra low power, Compact HV supply (ULPoC HV) for GM tube based Systems	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai-400085, India	<a href="mailto:ashivam@barc.gov.in">ashivam@barc.gov.in</a>
P230	Puneet Jindal, Deepak Akar, M K Sharma, Hemant Patni, Sawant P D and Probal Chaudhury	Development of Remote Requisition Application for Whole Body Monitoring	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Mumbai-85	<a href="mailto:puneetj@barc.gov.in">puneetj@barc.gov.in</a>
P231	M.K.Sharma <sup>a*</sup> , Shivam Agarwal <sup>a</sup> , Jis Romal <sup>a</sup> , Probal Chaudhury <sup>a</sup> and M.S.Kulkarni	Development of FPGA Code for Matching Multiple PMTs Response	aRadiation Safety Systems Division, bHealth Physics Division, Bhabha Atomic Research Centre, Mumbai-85, *Homi Bhabha National Institute, Mumbai-94	<a href="mailto:mksharma@barc.gov.in">mksharma@barc.gov.in</a>
P232	Rekha Anilkumar, Vaishali M Thakur, Amit Jain and Probal Chaudhury	Efficiency Evaluation of NaI(Tl) Detectors Using Simulated Spectra	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	rekhaak@barc.gov.in
P233	Ashutosh Gupta, Ajay Chikara, Vishal Kharvi, Shubangi Wani, Anand Raman, M K Sharma and Probal Chaudhury	Design and Development of wide area Alpha & Beta/ Gamma Contamination Monitor	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	ashutosh@barc.gov.in

P234	G.R.Sridhar <sup>1&amp;2</sup> , H.C.Manjunatha <sup>3</sup> , K.N.Sridhar <sup>1</sup> , M.G.Srinivas <sup>4</sup> , H.B. Ramalingam <sup>5</sup>	Decay chains of Radon and Thoron	1Department of Physics, Government First Grade College, Kolar-563101 Karnataka, 2Research and Development Centre, Bharathiar University, Coimbatore-641046, 3Department of Physics, Government College for Women, Kolar-563101 Karnataka, 4Department of Physics, Government First Grade College, Mulubagal-563131 Karnataka, 5Department of Physics, Government Arts College, Udumalpet-642126, Tamil Nadu	manjunathhc@rediffmail.com
P235	Nagaraja. A.M <sup>1&amp;2</sup> , N. Sowmya <sup>1</sup> , H.C.Manjunatha <sup>1*</sup> , S. Alfred Cecil Raj <sup>2</sup>	Radioactivity of super heavy element Dubnium	1Department of Physics, Government College for Women, Kolar-563101, Karnataka, 2Department of Physics, St. Joseph's College, Tiruchirapalli-62002	manjunathhc@rediffmail.com
P236	H.C.Manjunatha <sup>1</sup> , N.Sowmya <sup>1</sup> , <u>P.S. Damodara Gupta</u> <sup>2</sup>	Synthesis of Uranium using fusion reactions	1Department of Physics, Government College for Women, Kolar-563101, Karnataka, 2Department of Physics, Government First Grade College, Kolar-563101 Karnataka	manjunathhc@rediffmail.com
P237	K.V. Sathish <sup>1&amp;3</sup> , H.C. Manjunatha <sup>1*</sup> , L. Seenappa <sup>1</sup> , K.N.Sridhar <sup>2</sup> , N.Nagaraj <sup>2</sup> , S. Alfred Cecil Raj <sup>3</sup>	Study of X-ray, gamma & neutron shielding parameters of lead alloys	1Department of Physics, Government College for Women, Kolar-563101, Karnataka, 2Department of Physics, Government First Grade College, Kolar-563101, Karnataka, 3Department of Physics, St. Joseph's College, Trichy-620020 Tamil Nadu	manjunathhc@rediffmail.com
P238	M.G.Srinivas <sup>1</sup> , <u>H.C.Manjunatha</u> <sup>2</sup> , N.Sowmya <sup>2</sup> , N.Manjunatha <sup>2</sup> , Alfred Cecil Raj <sup>3</sup>	One and Two-proton radioactivity of lanthanide nuclei	1Department of Physics, Government First Grade College, Mulbagal-563131, Karnataka, INDIA, 2Department of Physics, Government College for Women, Kolar-563101, Karnataka, 3Department of Physics, St. Joseph's college (autonomous), Thiruchirapalli-620002, Tamilnadu	manjunathhc@rediffmail.com
P239	N.Nagaraja <sup>1&amp;3</sup> , H.C. Manjunatha <sup>2*</sup> , L. Seenappa <sup>2</sup> , K.N.Sridhar <sup>1</sup> , H.B. Ramalingam <sup>4</sup>	Specific absorbed fractions and relative dose of lanthanide polymers	1Department of Physics, Govt. First Grade College, Kolar-563101, 2Department of Physics, Government College for Women, Kolar-563101, Karnataka, 3Research & Development Centre, Bharathiar University, Coimbatore-641046, 4Department of Physics, Government Arts College, Udumalpet-642126, Tamil Nadu,	manjunathhc@rediffmail.com

P240	Sajin Prasad.S, 2Sachin Mhatre, 3Sachin Kumar, 1Yogesh Main, 1Ranjit Sharma	Measurement of Gamma Radiation Dose Rate in a Pool Type Research Reactor Using Chemical Dosimeter	Health Physics Division, 2 Radiation Safety Systems Division, 3Reactor Operations Division, Bhabha Atomic Research Centre, Trombay, Mumbai – 85	sajin@barc.gov.in
P242	Avik Kumar Saha, R. Anbarasan, P.C Sandeep, M.S.Gopikrishna, Geo Mathews,	Recent Developments in Testing and Qualification of Radiation Portal Monitors and Associated Standards: A Review	Instrumentation and Control Section, Reprocessing Maintenance Division, Reprocessing Group, Indira Gandhi Centre for Atomic Research, Kalpakkam,603127.	<a href="mailto:geo@igcar.gov.in">geo@igcar.gov.in</a>
P243	Akila. R, R.Sarangapani, S.Chandrasekaran and M.T.Jose	Health Physics surveillance during the impact testing of structural material irradiated at FBTR	Radiation Safety Section, Health Industrial Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam, 603102	<a href="mailto:akila@igcar.gov.in">akila@igcar.gov.in</a>
P244	I.Inigo Valan* <sup>1,2</sup> , N.Chitra <sup>1</sup> , S.Balasundar <sup>1</sup> , A.Stephen <sup>2</sup> , V.Subramanian <sup>1</sup>	Radon study in sediment samples collected from Tamiraparani river, India	<sup>1</sup> Health, Safety and Environment Group, Indira Gandhi Centre for Atomic Research, Kalpakkam 603102, 2Department of Nuclear Physics, University of Madras, Guindy Campus, Chennai 600025, 2Department of Nuclear Physics, University of Madras, Guindy Campus, Chennai 600025	<a href="mailto:inigovalanarasu@gmail.com">inigovalanarasu@gmail.com</a>
P245	Sreeletha Choudhary*, G.V.Bharathi lashmi*, E.Yasotha, Shailesh Joshi, M. Margret, O. Annalakshmi <sup>1</sup> , R. Mathiyarasu, R. Venkatesan <sup>1</sup> , B. Venkatraman <sup>1</sup>	Investigation of unusual occurrence in TL reading during personnel monitoring	Health Safety and Environment Group, IGCAR, Kalpakkam - 603102, 1Homi Bhabha National Institute, IGCAR, Kalpakkam – 603102, *KARP, BARCF, Kalpakkam – 603102	<a href="mailto:hasltld@igcar.gov.in">hasltld@igcar.gov.in</a>
P246	Shraddha S Desai, Rohit M Chandak, Vaibhav Kulkarni, Mala N Rao	Spatial Neutron Flux Mapping Using Indigenous Position Sensitive Detector & Data Acquisition System	Solid State Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	<a href="mailto:ssdesai@barc.gov.in">ssdesai@barc.gov.in</a>
P247	R Ramesh <sup>1</sup> , M Uday Kishor <sup>1</sup> , S Niranjani <sup>1</sup> , E K Murukan <sup>1</sup> , K Ramakrishna <sup>1</sup> , V Prabhakaran <sup>1</sup> , K Venkataramana <sup>2</sup> , Sunil Gadgil <sup>1</sup> & G P Reddy <sup>1</sup>	Use of tritium swipe method for leak identification on hpfc at kgs-1&2	<sup>1</sup> Kaiga Generating Station 1&2, India 581400, <sup>2</sup> Directorate of Technical, NPCIL, Mumbai 400085, India	<a href="mailto:rameshr@npcil.co.in">rameshr@npcil.co.in</a>
P248	R Ramesh <sup>1</sup> , E K Murukan <sup>1</sup> , M Udaykishor <sup>1</sup> , S Niranjani <sup>1</sup> , K Ramakrishna <sup>1</sup> , V Prabhakaran <sup>1</sup> & K Venkataramana <sup>2</sup>	Efficacy of low active gamma source for qualifying shielding flasks	<sup>1</sup> Kaiga Generating Station 1&2, India 581400, <sup>2</sup> Directorate of Technical, NPCIL, Mumbai 400085, India	<a href="mailto:rameshr@npcil.co.in">rameshr@npcil.co.in</a>
P249	R. Ramar, R. Akila M. Menaka, V.Subramanaian, R. Venkatesan, B.Venkatraman	Tomographic Gamma Scanning of Nuclear Waste Drum using WACT system	Radiological & Environmental Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam-603102	<a href="mailto:rramar@igcar.gov.in">rramar@igcar.gov.in</a>
P250	Jaison T. J. <sup>1</sup> , Jha M. K. <sup>1</sup> , Jain S. <sup>1</sup> , Patra A. K. <sup>1</sup> , Saradhi I.V. <sup>2,3</sup> and Vinod Kumar A. <sup>2,3</sup>	Studies on <sup>137</sup> Cs and <sup>40</sup> K in Air Particulate at Kakrapar Gujarat Site	<sup>1</sup> ESL (ESS, EMAD, BARC), KAPS, P.O. Anumala, Surat District, Gujarat-394651, 2Env. Monitoring and Assessment Division, BARC, Mumbai-400 085, 3Homi	jaisontjohn@ymail.com

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P251	Vivek Kaushik, D P Rath, Bhaktivinayagam A, Ashokkumar P, R K Gopalakrishnan & M S Kulkarni	Methodology to estimate ambient radon concentration with Continuous $\alpha$ and $\beta$ Air Monitoring System	Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	vivekk@barc.gov.in
P252	V.N. Jha1, D.B. Sharma1, R. L. Patnaik1, S.K. Jha2 and M.S. Kulkarni2	Assessment of inhalation dose due to airborne U- ore dust at U-ore processing facility, Jaduguda.	1Health physics unit, Jaduguda, 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	dharmendrasharma_87@rediffmail.com
P253	M. K. Singh1, R.L. Patnaik1, V. N. Jha1, S. K. Jha2 and M.S. Kulkarni2	Assessment of Gamma and Radon progeny Exposure in the Vicinity of Uranium Mineralized Zone of Jaduguda Singhbhum , Jharkhand	1Health physics unit, Jaduguda, 2Health Physics Division, Bhabha Atomic Research Centre, Mumbai 400085, India	rlp04@rediffmail.com
P254	R.L. Patnaik , M. K. Singh1, V. N. Jha1 1, V.S. Srivastava2, S.K. Jha2 and M S Kulkarni2	Assessment of Atmospheric $^{222}\text{Rn}$ Conc. and Gamma Level Along embankment of tailings management facility at Jaduguda, Jharkhand	2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	rlp04@rediffmail.com
P255	D. B. Sharma1, V. N. Jha1, S. Singh1, N.K.Sethy1, S.K. Jha2 and M. S. Kulkarni2	$^{210}\text{Po}$ and $^{210}\text{Pb}$ distribution in surface water source around uranium industry at Jaduguda, India	1Health physics unit, Jaduguda, 2Health Physics Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085	dharmendrasharma_87@rediffmail.com
P256	Sarjan Singh1, N Sathy2, D Sharma2, V.N Jha2, S.K Jha3 and M.S Kulkarni3	Uranium uptake in edible plants grown on modified tailings of uranium mill at Jaduguda, India	1Homi Bhabha National Institute, Mumbai, 2Health Physics Unit, Jaduguda, Jharkhand , 3Health Pysics Division, Bhabha Atomic Research Centre, Mumbai	sarjansingh007@gmail.com
P257	N K Sethy, Sarjan Singh, D B Sharma, V N Jha, S K Jha* and M S Kulkurni*	$^{226}\text{Ra}$ uptake by garden vegetables grown on uranium mill tailings	Health Physics Unit, Jaduguda, *Health Physics Division, BARC, Mumbai	sethybarc@rediffmail.com
P258	Tanhaji S Ghodke1, Vijay Kadwad2, I S Rawat2, Manupriya B R1, H M Somashekarappa1, K Bhasker Shenoy	Radioiodination of C-reactive protein an inflammatory marker by Chloramine –T method	1Department of Applied Zoology /Centre for Application of Radioisotopes and Radiation technology (CARRT), Mangalore University, Mangalagangothri-574199, 2Radiopharmaceuticals Programme, Board of Radiation and Isotope Technology (BRIT), Vashi Complex, Sector 20, Vashi, Navi Mumbai- 400085.	bshenoyk@gmail.com
P259	B. Sachin1, S. Trilochana1, K. Sudeep, Kumara1, M. P. Mohan1, S. K. Sahu2, P.G. Shetty2, M. Swarnakar2, R. A. Takale2, Nagaiah N3, and N Karunakara1	TLD based cumulative gamma dose measurements in Karnataka, India	1Centre for Advanced Research in Environmental Radioactivity (CARER), Mangalore University, Mangalagangothri – 574199, Mangalore, India, 2Environmental Monitoring & Assessment Division, Bhabha Atomic Research Centre, Trombay, Mumbai–400 085, 3Gnana Bharathi, Bangalore University, Bengaluru – 560 056	drkarunakara@gmail.com

P260	K Arya Krishnan <sup>1</sup> , Bharath <sup>1</sup> , R.S. D'Souza <sup>1</sup> , K. Stenström <sup>2</sup> , H. Linderson <sup>3</sup> and Karunakara N. <sup>1*</sup>	Annul tree growth rings of tropical high rainfall regions of India can be used for retrospective assessment of Carbon-14 in the environment	1Centre for Advanced Research in Environmental Radioactivity (CARER), Mangalore University, Mangalagangothri – 574199, India, 2Department of Physics, Division of Nuclear Physics, Lund University, P.O. Box 118, 221 00 Lund, Sweden, 3Department of Geology, Quaternary Geology, Lund University, P.O. Box 118, 221 00 Lund, Sweden	drkarunakara@gmail.com
P261	K. Sudeep Kumara <sup>1</sup> , Trilochana Shetty <sup>1</sup> , Y.S.Mayya <sup>1</sup> , 2, N. Karunakara <sup>1*</sup>	Time Series Analysis of Long Term <sup>222</sup> Rn Concentration Data for Determination for Air Exchange Rate (AER)	1Centre for Advanced Research in Environmental Radioactivity, Mangalore University, Mangalagangothri –574199, Mangalore, India,2Department of Chemical Engineering, IIT-Bombay, Mumbai-400 076	drkarunakara@gmail.com
P263	S.Rashmi Nayak <sup>1</sup> , Renita Shiny D'Souza <sup>1</sup> , Bharath <sup>1</sup> , Arya Krishnan <sup>1</sup> , Srinivas Kamath <sup>1</sup> , P.M.Ravi <sup>1</sup> , and N. Karunakara <sup>1*</sup> ,	Organically Bound Tritium in terrestrial biota in the vicinity of PHWR power plant at Kaiga	P.M.Ravi <sup>1</sup> , and N. Karunakara <sup>1*</sup> 1Centre for Advanced Research in Environmental Radioactivity (CARER), Mangalore University, Mangalagangothri – 574199, India	drkarunakara@gmail.com
P264	Shuchita Bahadur*, Shivam Agarwal, Amit Jain and Probal Chaudhury	Development of User Interface for Modbus Based Area Gamma Monitoring System	Radiation Safety Systems Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, India	shuchita@barc.gov.in
P265	Meghraj Singh, D. Datta	Neural Network-Based Modeling of Tote Box for Predicting the Doses of Planes of Product Box	Atomic Energy Regulatory Board, Anushakti Nagar Mumbai-400094, India Homi Bhabha National Institute, Anushakti Nagar Mumbai-400094, India	meghraj@aerb.gov.in
P266	Meghraj Singh, D. Datta	Application of Voronoi Diagram for the placement of dosimeters in planes of product box in commissioning dosimetry in gamma irradiators	Atomic Energy Regulatory Board, Anushakti Nagar Mumbai-400094, India Homi Bhabha National Institute, Anushakti Nagar Mumbai-400094, India	meghraj@aerb.gov.in