

**4<sup>th</sup> International School on Radiation Research  
(4<sup>th</sup> ISRR-2025)**

**Dec. 18-19, 2025**

**SCIENTIFIC PROGRAM**

**Venue: Auditorium, ICMR-BMHRC, Bhopal**

| <b>DAY 1 (DEC. 18, 2025, THURSDAY, 8:00 AM-7:30 PM)</b> |   |
|---|---|
| 8:00-9:00   | : REGISTRATION  |
| 9:00-9:40   | : <b>PL-1: Identification and validation of biomarkers for radiation injury and radiation medical countermeasure efficacy</b><br>Dr. V. K. Singh, Armed Forces Radiobiology Research Institute (AFRRI), Uniformed Services University of Health Sciences, Bethesda, USA |
| 10:00-11:00   | : INAUGURATION CEREMONY   |
| 11:00-11:30   | : MEET & GREET  |
| 11:30-12:00   | : HIGH TEA  |
| 12:00-1:00  | : <b>SESSION-I: Radiation Biomarkers and Radiation Countermeasures</b><br>Chairperson: Dr. Nils Cordes, Helmholtz Center Dresden-Rossendorf, Dresden, Germany and Dr. Manisha Shrivasta, BMHRC, Bhopal  |
| 12:00-12:25   | : <b>IL-1: Radiation Countermeasures and Biodosimetry: R&amp;D Gaps in India</b><br>Dr. N. K. Chaudhury, Former Scientist, Institute of Nuclear Medicine and Allied Sciences, New Delhi   |
| 12:30-12:55   | : <b>IL-2: New Era of Radiation Biology for Cancer Radiotherapy and Radiation Protection</b><br>Dr. Amit Kumar, Radiation and Cancer Biology Section, RB&HSD, Bhabha Atomic Research Centre, Mumbai   |
| 1:00-2:00   | : LUNCH BREAK   |
| 2:00-3:30   | : <b>SESSION-II: Tumor Radiobiology for Radiotherapy</b><br>Chairperson: Dr. Kazuyo Igawa, Okayama Univ, Neutron Therapy Res. Center, Okayama, Japan and Prof. K. P. Mishra, Founder President, SRR, Ex-Head, BARC, Mumbai and Former-VC, NGBU                          |
| 2:00-2:40   | : <b>PL-2: The Biology behind the Beam</b><br>Dr. Nils Cordes, OncoRay - National Center for Radiation Research in Oncology and Dept. of Radiation Oncology, Helmholtz Center Dresden-Rossendorf, Dresden, Germany  |
| 2:40-3:05   | : <b>IL-3: Identification of Twist1 and Mylk overexpression in migratory phenotypes of pancreatic cancer and radiosensitization by targeted inhibition</b><br>Dr. Sophie Dobiasch, Department of Radiation Oncology, Technical University of Munich, Munich, Germany    |
| 3:05-3:30   | : <b>IL-4: Hypoxia - the Hidden Driver of Cancer Genome Instability</b><br>Dr. Hiroshi Harada, Kyoto University, Japan  |
| 3:30-4:00   | : Coffee Break  |
| 4:00-5:00   | : <b>SESSION-III: Radiation Biodosimetry and Cancer Radiotherapy</b><br>Chairperson: Dr Hiroshi Harada, Kyoto University, Japan and Dr. Anurag Yadava, Medical Superintendent, BMHRC, Bhopal  |
| 4:00-4:25   | : <b>IL-5: Radiopharmaceuticals: a multidisciplinary payload for cancer treatment</b><br>Dr. Chandan Kumar, Radiopharmaceutical Division, Bhabha Atomic Research Centre, Mumbai   |
| 4:25-4:50   | : <b>IL-6: Cytogenetic biomarkers of radiation exposure—overview</b><br>Dr. Tamizh Selvan G, NITTE, KSHEMA, Mangalore   |
| 5:00-6:00   | : <b>Demonstration in Radiation Cytogenetics Lab, BMHRC, Bhopal (for PhD/PG students)</b>   |
| 6:00-7:30   | : Cultural Program  |
| 7:30  | : DINNER  |

## DAY 2 (DEC. 19, 2025, FRIDAY, 9:30 AM-5:00 PM)

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|--------------------|---|---|
| <b>9:30-12:30</b>  |   | <b>SESSION-IV: Applied and Translational Radiobiology</b><br>Chairperson: Dr. Sophie Dobiasch, Department of Radiation Oncology, TUM, Munich, Germany and Dr. Puneet Gandhi, Professor & Head, BMHRC, Bhopal  |
| 9:30-10:10         | : | <b>PL-3: Current Status and Challenges of Accelerator-Based Boron Neutron Capture Therapy</b><br>Dr. Kazuyo Igawa, Neutron Therapy Research Center, Okayama Univ, Okayama, Japan  |
| 10:10-10:50        | : | <b>PL-4: Recognition and repair of DNA double strand breaks : from molecular mechanisms to cancer therapy</b><br>Dr. Yoshihisa Matsumoto, Institute of Science Tokyo, Tokyo, Japan  |
| 10:50-11:15        | : | <b>IL-7: Differential Effects of Ionizing Radiation Dose, Cell Cycle Phase, and Chromatin Modulation on DNA Double-Strand Break Repair Pathway Choice</b><br>Dr. Aashish Soni, Division of Experimental Radiation Biology, University of Duisburg-Essen Medical School, Germany   |
| <b>11:15-11:40</b> |   | <b>COFFEE BREAK</b>   |
| 11:40-12:05        | : | <b>IL-8: Cellular Response to Combined Exposure of Gamma Radiation and Cigarette Smoke</b><br>Dr. Prabodh Meher, Stockholm University, Dept. of Molecular Biosciences, The Wenner-Gren Institute, Stockholm, Sweden   |
| 12:05-12:30        | : | <b>IL-9: Mitochondrial Ribosomal Small Subunit (MRPS) Genes in Health and Disease: Putative role of extraribosomal functions in radiation response</b><br>Dr. Gopal Gopisetty, Indo American Cancer Hospital & Research Institute, Hyderabad  |
| 12:30-12:55        | : | <b>IL-10: Radiation-Induced Normal Tissue Toxicity and Its Mitigation Using Probiotics</b><br>Dr. Kamlesh Mumbrekar, Manipal School of Life Sciences, Manipal Academy of Higher Education, Manipal  |
| <b>1:00-2:00</b>   | : | <b>Lunch Break</b>  |
| <b>2:00-2:40</b>   | : | <b>SESSION-V: Oral Presentation (4 presentations, 7+3 min each)</b><br>Chairperson: Dr. Prabodh Meher, Wenner-Gren Inst., Sweden and Dr. Saikat Das, AIIMS, Bhopal  |
|                    |   | Dr. Anuj Kumar: Development of radiolabeled antimicrobial peptide as an Infection Imaging Probe<br>Dr. Dev D. Patel: Tylophora indica leaf extract as a radioprotector: amelioration of $\gamma$ -irradiated intestinal injury in mice<br>Dr. Meenakshi Samartha: Aromatic Plants as Emerging Radioprotective Agents: A Cytogenetic and Phytochemical Perspective<br>Dr. Priyadarshi Meena: Oxidative Stress Modulation and Antitumour Potential of Calligonum polygonoides Stem Extract  |
| <b>2:40-3:10</b>   | : | <b>SESSION-VI: Oral Presentation (6 presentations, 5 min each)</b><br>Chair: Dr. Ashish Soni, Univ. of Duisburg-Essen, Germany and Dr. R. M. Samartha, BMHRC, Bhopal  |
|                    |   | Aravindh SP: Identification of a novel role for Mitochondrial Ribosomal Small Subunit Protein 23 (MRPS23) in radiation response and DNA repair in Breast Cancer<br>Amshumala B L: Mechanistic Insights into the Radioprotective Action of Ferulic Acid<br>Anjusha K Johnson: Understanding HDAC6 driven radioresistance: mechanisms and future directions in cancer therapy<br>Poonam Kumari Pathak, Computational Investigation of Glycosmis pentaphylla Bioactives Targeting UV-Induced DNA Damage Pathways in Skin Cancer<br>Pavitra Sengar: Diagnostic Accuracy of AI-Enhanced Stethoscopes for Detecting Paediatric Heart Murmurs<br>Rajnikant Parte: Retrospective study on recurrence pattern of triple negative breast cancer |
| <b>3:10-3:30</b>   | : | <b>FINAL REFLECTIONS AND NEXT STEPS</b><br>Prof. Dr. K. P. Mishra, Founder President, Society for Radiation Research-India  |
| <b>3:30-4:30</b>   |   | <b>VALEDICTORY FUNCTION</b>   |
| <b>4:30-5:00</b>   | : | <b>HIGH TEA</b>   |

PL: Plenary Lecture, 40 min (30+10 min)

IL: Invited Lecture, 25 min (20+5 min)

OP: Oral Presentation in two sessions, 10 (7+3) and 5 (4+1) min