

**Report on the
110th National workshop on
“Radiochemistry and Applications of Radioisotopes”
at
Department of Pure and Applied Chemistry, University of Kota,
Kota, Rajasthan, India, during March 03-07, 2025**

The 110th BRNS-IANCAS National Workshop on “Radiochemistry and Applications of Radioisotopes” was organized at the Department of Pure and Applied Chemistry, University of Kota, Kota, Rajasthan, during March 03-07, 2025. Dr. Chhavi Agarwal was the coordinator and Dr. Vijay Karki was the practical coordinator of the Workshop. Dr. Neelu Chouhan, Head, Department of Pure and Applied Chemistry was the Chairman and Dr. Bhawani Singh, Department of Pure and Applied Chemistry was the convener of the Workshop. There were 87 registered participants in the workshop which included faculty members, research scholars and post graduate students from various Departments of the University. A member each from Delhi Jal Board and RAPS were also present to enhance their knowledge on the subject. Dr. Rajesh V. Pai, Head, Fuel Chemistry Division, BARC inaugurated the workshop. In his inaugural address, Dr. Pai described about various activities of IANCAS like organizing symposiums, National Workshops and Awards for researchers/scientists working in nuclear and allied sciences. Later on, he also delivered a Keynote address on the topic “Atomic Energy Program of India in Service of Nation”. Dr. Chhavi Agarwal briefed about the aim of organizing this Workshop and structure of the Workshop. The technical program of the Workshop (enclosed) comprised of 13 lectures and 4 experiments. A total of 5 resource persons conducted the workshop (List enclosed). The lectures were held during the morning sessions and the afternoon sessions were reserved for the practicals. Experiments with G.M. counter, NaI(Tl) scintillation gamma ray spectrometer and radioimmunoassay were conducted. Each experimental session involved discussion and interaction with the participants. Participants found the lectures and practicals very interesting and had long productive discussions with the resource persons. On each day at the end of forenoon technical session, quiz was conducted on topics discussed in previous lectures and participation of students and research scholars was overwhelming. Valedictory function was held in the afternoon of March 07, 2025 and Dr. S. Jeyakumar, Head, RCD, BARC was the Chief Guest. He also made the participants aware of the various career opportunities in BARC and encouraged them to opt for them. A few participants, including students, shared their feedback about the workshop. Dr. S. Jeyakumar responded to the feedbacks and emphasized the participants to utilize radioisotopes in their research work. On behalf of IANCAS, G.M. Counter was donated to the host-institute for their academic use. All the participants were given workshop participation certificates. The Workshop was concluded with a vote of thanks by Dr. Vijay Karki. The workshop was well covered by local media, covering the prominent places in News Papers (enclosed).

Technical Programme

Keynote Address by the Chief Guest	Dr. R. V. Pai
L1: Theory of Radioactive Decay- Part I	Dr. Chhavi Agarwal
L2: Theory of Radioactive Decay- Part II	Dr. Chhavi Agarwal
L3: Interaction of Radiation with Matter	Sh. G. Meena
L4: Introduction to Nuclear Reactors	Dr. Vijay Karki
L5: Radiation Detection and Measurements	Sh. G. Meena
L6: Isotope production	Dr. Rohit Sharma
L7: Radiation processing: A versatile technique for Food preservation	Dr. Nilanjali Misra
L8: Application of Radioanalytical Techniques in Research	Dr. Vijay Karki
L9: Application of Radioisotopes and Radiation in Industry	Dr. Nilanjali Misra
L10: Radioisotopes in Health care	Dr. Rohit Sharma
Keynote Lecture by the Chief Guest	Dr. S. Jeyakumar
L11: Radiation Safety and Setting up a Radiological Laboratory	Dr. G. Chourasia, Ex-BARC
L12: Career opportunities in DAE, Professional Courses, Degrees, Diploma & Certificates offered by DAE /BRNS and UGC-DAE Collaborations	BARC Resource Person
Valedictory function, Instrument Donation & Distribution of Participation Certificates.	

Coordinator of the workshop: Dr. Chhavi Agarwal, RCD, BARC

Practical coordinator of the workshop: Dr. Vijay Karki, FCD, BARC

Other Members: Dr. Nilanjali Misra

Dr. Rohit Sharma

Shri. G. Meena

Experiments:

1. GM Counter - (Plateau, Dead time)- Dr. Vijay Karki

2. NaI(Tl) - (Determination of resolution of detector & attenuation Coefficient)- Dr. Nilanjali Misra

3. GM Counter (Statistics)- Shri. G. Meena

4. Radio-immuno Assay— Dr. Rohit Sharma

Few Glimpses and media coverage of the workshop

