



INDIAN NUCLEAR SOCIETY

INS Workshop-cum-Public Outreach program on Nuclear Science & Technology for Sustainable development

Venue: Bijlal Biyani College, Amaravati, Maharashtra

Day-1: March 24, 2023 (Friday)

Objective

Day-1 will cover all aspects of "*Nuclear Medical Diagnostics Techniques*". The Workshop will inform the student-audience of the importance of Nuclear Medicine Imaging (SPECT and PET) in the diagnosis of a variety of human diseases. Since SPECT and PET use physiological imaging, they can visualize the disease process in the body, thereby, providing better diagnostic information than anatomical imaging like X-ray and CT-imaging. Fusing SPECT and PET images with CT-images gives the clinician better information for diagnosis and patient management. Since the SPECT and PET radioisotopes emit radiation, it is important the Nuclear Medicine Staff handle the radioisotopes and administer them to patients following safe procedures, and how this is managed will be covered. Further, since the SPECT and PET Radiopharmaceuticals are administered into patients, they are prepared under environmentally controlled and aseptic conditions and the processes are thoroughly validated and required Quality Control tests done before they are released for patients' use.

Program Details

Topic	Speaker
Nuclear Medicine Imaging Techniques	Smt. Sushama Awasare, SO/G, BARC
SPECT radiopharmaceuticals – preparation and their applications	Shri Mukhtikanta Ray, SO/G, BARC
PET Radiopharmaceuticals – preparation and their applications	Dr. MGR Rajan, Ex-BARC
Radiation Safety in Nuclear Medicine Practice	Dr. Kamaldeep, SO/G, BARC
GMP and Pharmacopoeia Quality Assurance in producing Radiopharmaceuticals for Human use	Dr. Savita Kulkarni, SO/H, BARC



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Day-2: March 25, 2023 (Saturday)

Objective

With an aim to sensitize the public on the indispensable role of nuclear energy and its technologies in sustainable development of the nation, INS has organized this event. The program proposes to discuss the technical facts of nuclear energy with the people/public and engage them in meaningful conversation on the subjects discussed. It is expected that the discussions and deliberations will clarify any mis-conceptions and allow sustainable growth of nuclear energy, that is clean and green.

Program Details

Topic	Speaker
Nuclear energy program in meeting sustainable development	Dr B N Jagatap, President, INS
Present Nuclear energy scenario in India	Sri Kishore Agarwal, NPCIL
Nuclear Energy in Food and Agriculture	Dr Suprasanna, BARC(retired)
Technologies developed at NCCCM for the detection and remediation of contaminants in water	Dr S Thangavel, NCCCM, Hyderabad
Demonstration of technologies developed	Dr G. Venkateswarulu, NCCCM, Hyderabad
Hydrogen, a clean and renewable fuel	Dr Mrinal Pai, BARC
Careers in DAE	Dr Adish Tyagi, BARC
Concluding remarks and discussion	