

Seminar Series

Since 2022, the Centre for Medical and Radiation Physics (CMRP), NISER, has been organizing a regular Seminar Series as part of its academic activities. The series provides students and research scholars opportunities to interact with experts from hospitals, academic institutions and research centres, and to learn about current developments and professional practices in medical physics and related areas.

The seminars cover a broad range of topics, including radiation therapy, medical imaging, radiobiology, dosimetry, quality assurance, proton therapy, brachytherapy, radiation oncology, artificial intelligence and emerging technologies. Conducted in both online and offline modes, the series also provides students with perspectives on research directions, clinical practice and career opportunities.

Details of the seminars organized since 2022 are given below.

2026				
Date	Speaker	Institution	Title/Topic	Mode
05-Jan-2026	Dr. Anoop K. Srivastava	Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow	Future aspects of AI in medical imaging and radiation dosimetry	Offline
12-Jan-2026	Dr. Radhakrishna Nair	Fortis Memorial Research Institute, New Delhi	MR medical linac	Online
16-Feb-2026	Dr. Bidhu K Mohanti	Bagchi Sri Shankara Cancer Centre & Research Institute, Bhubaneswar	Clinical radiobiology for medical physicists	Offline
13-Mar-2026	Dr. Dayananda S. Sharma	Apollo Proton Cancer Centre, Chennai	Career progression of medical physicists in proton therapy	Offline
12-Aug-2026	Dr. Narayan Sahoo	The University of Texas MD Anderson Cancer Center, Houston, Texas	Integration of technology and biology for improving the efficacy of proton therapy	Offline
10-Sep-2026	Dr. Prabhakar Ramchandran	Princess Alexandra Hospital, Brisbane, Australia	Auto-segmentation and image translation in radiation oncology: beyond the commercial black box	Online
2025				
Date	Speaker	Institution	Title/Topic	Mode
13-Jan-2025	Dr. Avinav Bharati	All India Institute of Medical Sciences, New Delhi	Radiomics and its application in oncology	Online
27-Jan-2025	Dr. Nagesh N. Bhatt	Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai	Radiobiology of charged particles and heavy ions used in radiotherapy	Online
06-Mar-2025	Shri Kantaram Popat Darekar	Advanced Centre for Treatment, Research and Education in Cancer, Mumbai	Commissioning of proton therapy accelerators	Offline
08-Mar-2025	Dr. Rajesh Kumar	Radiological Physics and Advisory	Calibration of therapy level dosimeter	Offline

		Division, Bhabha Atomic Research Centre, Mumbai		
09-Sep-2025	Dr. T. Ganesh	All India Institute of Medical Sciences, New Delhi	Minimizing workflow errors in the radiation oncology department	Online
13-Oct-2025	Dr. Ponnusamy	National Institute of Mental Health and Neuro Sciences, Bengaluru	Stereotactic radiosurgery by gamma knife	Online
2024				
Date	Speaker	Institution	Title/Topic	Mode
12-Jan-2024	Dr. Manoj Semwal	Army Hospital (Research and Referral), New Delhi	Basics of MRI and future challenges	Online
12-Feb-2024	Dr. Reena Sharma	Advanced Centre for Treatment, Research and Education in Cancer, Mumbai	TBI/TSET commissioning	Online
11-Mar-2024	Dr. Lalit M. Agrawal	Banaras Hindu University, Varanasi	Brachytherapy basics and plan evaluation of interstitial implants	Online
08-Apr-2024	Shri Ashish Masanta	Kalinga Institute of Medical Sciences, Bhubaneswar	Quality assurance of imaging devices associated with medical linear accelerators	Offline
10-Sep-2024	Dr. Avtar Kular	Homi Bhabha Cancer Hospital and Research Centre, Punjab	Spectral CT	Online
2023				
Date	Speaker	Institution	Title/Topic	Mode
14-Apr-2023	Shri Narender Kumar	Mahamana Pandit Madan Mohan Malaviya Cancer Centre, Varanasi	Production of artificial radioisotopes and their use	Online
01-Aug-2023	Dr. S. D. Sharma	Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai	Roles and responsibilities of medical physicists and RSO; emerging technologies and the future of radiation therapy	Offline
12-Sep-2023	Dr. Satyajeet Rath	Bagchi Sri Shankara Cancer Centre & Research Institute, Bhubaneswar	Cancer biology and treatment	Offline
17-Oct-2023	Dr. Avinav Bharati	All India Institute of Medical Sciences, New Delhi	CT technology and instrumentation	Online
07-Nov-2023	Dr. Dayananda S. Sharma	Apollo Proton Cancer Centre, Chennai	Proton therapy and future challenges	Online
2022				
Date	Speaker	Institution	Title/Topic	Mode
09-Sep-2022	Shri Lalatendu Mishra	National Institute of Science Education and Research (NISER), Bhubaneswar	Introduction to radiation therapy	Offline
16-Sep-2022	Dr. Lokesh Kumar	Panjab University, Chandigarh	Indian participation at CERN	Offline

23-Sep-2022	Dr. Saroj Kumar Das Majumdar	All India Institute of Medical Sciences, Bhubaneswar	Bridging of cancer care	Offline
03-Oct-2022	Smt. Lakshmi	Homi Bhabha Cancer Hospital and Research Centre, Visakhapatnam	Production of X-rays and their use	Online
28-Oct-2022	Dr. Santosh Babu Gunda	National Institute of Science Education and Research (NISER), Bhubaneswar	Discussion on gamma-gamma coincidence	Offline