

Ramaiya Naidu Memorial Oration 2025

Dr. Badanidiyoor Srinivasa Rao

Dr. Badanidiyoor Srinivasa Rao began his career as a Scientific Officer at BARC after graduating from the 12th batch of the BARC Training School in 1969. He earned his PhD in Biophysics in 1978 from the erstwhile Cancer Research Institute and pursued post-doctoral studies in mammalian cell radiobiology at the Department of Therapeutic Oncology, MCMC, Wisconsin, USA (1980–82). His research primarily focused on the biophysical aspects of radiation quality, radiobiology, radiation cytogenetics, and mutagenesis, contributing significantly to the understanding of radiation effects on biological systems. He was teacher for the Dip.R.P. course at BARC.

In 1995, Dr. Rao was awarded the prestigious Madam Marie Curie Fellowship by the European Commission, during which he worked on the application of translocation assay in biodosimetry at the University of Leiden, The Netherlands. He served as an IAEA expert in biodosimetry and published over 100 research papers in reputed peer-reviewed journals. He was also a member of the Editorial Board of the International Journal of Radiation Biology (UK) and edited the Journal of Radiation Protection and Environment and the EMSI Newsletter for several years. After an illustrious career spanning over three decades, he retired from BARC in 2005 as the Head of the Radiological Physics and Advisory Division.

Dr. P. S. Iyer Oration 2025

Prof. T. Rockwell Mackie

Prof. T. Rockwell Mackie is an internationally acclaimed medical physicist whose pioneering work has transformed radiation therapy and medical imaging. He earned his PhD in Medical Physics from the University of Wisconsin–Madison, where he later served as Professor in the Departments of Medical Physics, Human Oncology, Biomedical Engineering, and Engineering Physics. Prof. Mackie is renowned for developing convolution/superposition dose-calculation algorithms, tomotherapy, and advanced radiation treatment-planning systems. As a principal inventor of the Hi-Art Helical TomoTherapy system, he revolutionized cancer care by integrating intensity-modulated radiotherapy (IMRT) with on-board CT imaging, enabling highly precise image-guided treatments. His innovations have had a lasting global impact on radiotherapy research and clinical practice.

A prolific researcher and entrepreneur, Prof. Mackie has published over 200 peer-reviewed papers and holds numerous patents in radiation oncology. He co-founded several successful ventures, including TomoTherapy Inc. and Leo Cancer Care, exemplifying his dedication to translating innovation into patient care. Throughout his distinguished career, he has received numerous international awards for his outstanding contributions to medical physics, radiotherapy technology, and education. Even as Emeritus Professor at the University of Wisconsin–Madison, he continues to mentor and inspire future generations of medical physicists through his leadership and vision. In recognition of his groundbreaking contributions and global leadership in advancing medical physics.

Young Physicist Awards

Young Investigator Award

Dr. Vysakh Raveendran, Medical Physicist, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) Kharghar, Navi Mumbai,

Meritorious Medical Physicist Award

Dr. Athiyaman Mayilvaganan, Associate Professor, Medical Physicist & R.S.O, Dept of Radiological Physics, S.P. Medical College & A.G. Hospitals, Bikaner.