

“Azadi ka Amrit Mahotsav”

‘Prof. R. Ananthakrishnan’ Colloquium



Late Prof. R. Ananthakrishnan (Ex-Director and Honorary Fellow of IITM, Pune started his research carrier as a research scholar in the field of light scattering under the guidance of noble laureate Prof. C.V. Raman and awarded D.Sc. in 1937 from University of Madras. Then he joined IMD and occupied several positions up to DDG

and then he worked as Director IITM during 1968-1971. He was awarded Padmashree by President of India in 1969 and C.V. Raman Centenary Medal in 1988. He was elected as an INSA Fellow in 1961 and was also member of many learned and professional societies like (Indian Academy of Sciences, Maharashtra Academy of Sciences). He was associated with some technical committees and working groups of WMO Geneva. He was editor of some national and international reputed journals in Meteorology.

Prof. Ananthakrishnan was deeply associated in organizing and teaching MSc./M.Tech. courses in Meteorology in University of Cochin and University of Pune. Under his able guidance 12 persons have awarded Ph.D.

Research contribution of Prof. R. Ananthakrishnan includes various topics viz. Light scattering and Raman Effect, Solar Physics and Meteor Astronomy and Meteorology. In the field Meteorology his work covers different topics: Aerology, Dynamics, Thermodynamics, Errors in upper air data, monsoon circulation, Tracks of storms and depressions. Atmospheric pressure and oscillations, Indian rainfall and features associated with onset of southwest monsoon. To meet defense need he organized the publications entitled ‘Climatology of Himalayas, Tibet and adjoining areas. There are 110 national/international (research papers/ technical contributions) papers to his credit and one book entitled ‘An Introduction to Meteorology’. This textbook is found extremely useful to all the new comers in the field of meteorology. Prof. R. Ananthakrishnan pursuit his research and guidance in the field of atmospheric sciences after retirement as a honorary fellow in the IITM till his last days.



Title of the talk "**Quantum Technologies**"

CV: Prof. Aditi Sen De is currently a **Professor ‘H’** at the Harish-Chandra Research Institute (HRI), Allahabad. Along with Prof. Ujjwal Sen and Arun K Pati, she has started the quantum information and computation group (QIC) at HRI in 2009. Currently, the group consists of 3 faculty members, Arun K Pati, Ujjwal Sen, and Prof. Aditi Sen De, 15 PhD students and 5 postdoctoral fellows. Prof. Sen De did her doctoral work in the University of Gdansk under Prof. Marek Zukowski and subsequently was an Alexander von Humboldt Postdoctoral Fellow with Prof. Maciej Lewenstein in Hannover, a Ramon y Cajal fellow in ICFO- The Institute of Photonic Sciences, Barcelona, and an Assistant Professor in the Jawaharlal Nehru University, Delhi. Prof. Aditi Sen De was awarded prestigious Bhatnagar Award in the year 2018 for her research work on Quantum information and computation.

Abstract: The quantum theory of nature, formalized in the first few decades of the 20th century, contains elements that are fundamentally different from those required in the classical description of nature. Based on the laws of quantum mechanics, in recent years, several discoveries have been reported which can revolutionize the way we think about modern technologies. I will talk about such inventions in the field of communication and some of our recent results towards building communication network

Date: Thursday, 18 March 2021, 1630hrs

<https://youtu.be/3cLKZ7Rioc4>

#AmritMahotsav