



भौतिक अनुसंधान प्रयोगशाला, अहमदाबाद

Physical Research Laboratory, Ahmedabad

<https://www.prl.res.in/prl-eng/prlat75>

76_PRL Ka Amrut Vyakhyaan

Monday, 30 January 2023

@ 9:30 AM (IST)

**“My Professional Forays-
People, Challenges & Anecdotes”**

Dr. K. Kasturirangan

Padma Vibhushan

Honorary Distinguished Advisor, ISRO

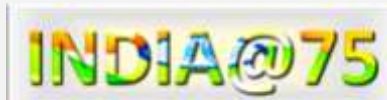
Former Chairman, ISRO & Secretary, Dept. Of Space, GoI

Member, Atomic Energy Commission, India

Former Member of Rajya Sabha and Planning Commission



<https://youtu.be/gqiZ13QD99Q>



76_PRL ka Amrut Vyakhyaan

Title: “My Professional Forays- People, Challenges & Anecdotes”

Speaker: Dr. K Kasturirangan

Padma Vibhushan Awardee

Honorary Distinguished Advisor, ISRO, Former Secretary/Chairman Dept. Of Space (ISRO), India,

Member Atomic Energy Commission, India

Former Member of Rajya Sabha and Planning Commission

On Monday, 30 January 2023

Abstract

“On the eve of the 75th Anniversary of PRL coming into being, I consider it my special privilege to be with all of you and share some of the memories that have left a permanent imprint on me. I am grateful to Prof Anil Bhardwaj and the present management of PRL, for inviting me to give a talk befitting this august occasion. I shall touch upon some interesting episodes of my research career at PRL, including working with Dr Vikram Sarabhai, its legendary Founder and being guided by such mentors like Prof P D Bhavasar and Prof N W Nerurkar. I started my forays into India’s Space Program thanks to the persuasive power of Vikram Sarabhai and in the next thirty years or so made a very interesting, challenging and most memorable journey working in satellites, applications, space science and overseeing the overall program in the final stages of my career in ISRO as its Chairman. A brief account of some of the related memories, that I hold from that period shall be narrated with particular focus on my unique association with my illustrious predecessor Chairmen - Vikram Sarabhai, MGK Menon, Satish Dhawan and UR Rao. Subsequent developments in my professional trajectory beyond space and some of the resulting excitements and challenges will be narrated as a part of my role as Member of Rajya Sabha, Member of Erstwhile Planning Commission and more recently, Chairman, National Education Policy Committee. To me, this totality of roles spread over nearly fifty years, prove to be an extraordinary journey in understanding the issues of development of this Nation, with its complexity, diversity and plurality. I owe the humble service that I could render for this Nation, to individuals, leaders of political systems, many institutions and the most crucial support that I received from my colleagues and well-wishers; on this historic occasion I remember all of them through this talk.”

The Speaker

Dr Krishnaswamy Kasturirangan, an Astrophysicist, completed his Bachelor of Science with Honours and Master of Science in Physics from Bombay University and received his Doctorate in Experimental High Energy Astronomy in 1971 while working at the Physical Research Laboratory, Ahmedabad. He has wide ranging interests in space science applications, technologies, national and international science related policies and legal regimes.

Dr Kasturirangan had been with the Indian Space Research Organisation (ISRO) for over a period of nearly 35 years including nearly 10 years as its Chairman from 1994-2003. He worked on the design and development of early satellite systems of ISRO and played a key role in shaping of India’s remote sensing satellite capabilities.

Dr Kasturirangan is currently Chancellor, Central University of Rajasthan; Chairman, Governing Board, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune; Chairperson, NIIT University, Neemrana; Member, Atomic Energy Commission, Emeritus Professor at National Institute of Advanced Studies (NIAS), Bangalore, Member of Council and Trust, Raman Research Institute (RRI), Bangalore and Honorary Distinguished Advisor, (ISRO). He had been a Nominated Member of Rajya Sabha (2003-2009) and later Member of the erstwhile Planning Commission (2009-2014). More recently (July 2017-December 2018), he had been the Chairman of the Committee that drafted the National Education Policy; presently he is the Chairman of the National Steering Committee for developing the National Curricular Framework.

Dr. Kasturirangan is a Member of all the National Science Academies of India and several International academies. He is a Member of the International Astronomical Union and a Fellow of The World Academy of Sciences (TWAS). He is an Academician of the Pontifical Academy of Sciences, Vatican City and Honorary Fellow of Cardiff University, UK. Dr. Kasturirangan is the only Indian to be conferred with the Honorary Membership of the International Academy of Astronautics.

He has won several awards including Shanti Swarup Bhatnagar Award (1983), 4th SIES Sri Chandrasekarendra Saraswathi National Eminence Award from South Indian Education Society, Mumbai (2001), Brock Medal (2004), Allan D Emil Memorial Award (2004), Theodore Von Karman Award (2007), Basava Shri Prashasthi award from Shri Muruga Mutt, Karnataka (2020) among others. He has been conferred with the Rajyotsava Prashasthi from Government of Karnataka (2014), the highest civilian honours Padma Shri (1982), Padma Bhushan (1992) and Padma Vibhushan (2000) by the President of India, and Award of ‘Officer of the Legion d’honneur’ (2002) by the President of the French Republic, France.



About PRL

The Physical Research Laboratory (PRL), known as the “cradle of space science” in India, is one



of the premier research institutes founded in 1947 by Prof. Vikram Sarabhai, a renowned Cosmic Ray Scientist, a great visionary and institution builder. PRL played a seminal role in producing a highly motivated cadre of space scientists and the technologists of highest international repute. The first scientific rocket launched from Thumba on 21st November-1963 and many other rockets launched thereafter contained payloads developed at PRL. Dr. Sarabhai initiated many of these scientific and technical activities at PRL which eventually led to the formation of the Indian Space Research Organization (ISRO). Therefore, PRL is known as the “cradle of space science” in India. Further, the research in the area

of Plasma Physics expanded to the formation of the Institute of Plasma Research (IPR).

As an institution PRL is unique in that it conducts fundamental research in a wide range of research areas from the Earth to the cosmos, and comprising Astronomy and Astrophysics; Solar Physics; Space and Atmospheric Sciences; Theoretical Physics; Geosciences; Atomic, Molecular and Optical Physics, Astrochemistry; and Planetary Sciences and Space Exploration. PRL is one of the rare research institutes of international repute wherein research in such diverse fields of sciences is carried out using several state-of-the-art experimental facilities that exist under one umbrella.

Along with the ongoing research, several new initiatives have been taken up during the last few years. The Multi-Application Solar Telescope (MAST) at Udaipur Solar Observatory has been operationalized. PRL initiated scientific programmes in frontier areas of research, which include a search for exo-planets, laboratory studies of interstellar grains, laboratory synthesis of cold astro-molecules and experimental studies in the field of quantum optics. PRL is also developing several scientific payloads as a part of ISRO’s larger vision and contributing to roadmap for competitive scientific exploration of the solar system and beyond. In particular, PRL has been contributing significantly not only in building instruments for space missions, such as Chandrayaan-1, Chandrayaan-2, AstroSat and upcoming Aditya-L1, Chandrayaan-3 and planetary and space missions, but also by bringing out new and insightful science results.

PRL contributes to several national and international research programmes and to human resource development through its Doctoral and Post-Doctoral Programmes, capacity building programmes, such as UN Course on Space Science, and science and engineering internship programmes. PRL contributes significantly to society through its Outreach Programmes by periodically organizing science exhibitions and Open Houses, planned visits of students of various school and college to PRL, and popular talks at various institutions to not only share the excitements of the advancements of contemporary scientific findings but also to encourage students to take up sciences as their research career.

