

## National Science Day Speech 2021

by

Padma Bhushan Dr. Thirumalachari Ramasami

on

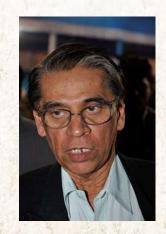
"Discovery to Ground Breaking Science"

28<sup>th</sup> February 2021, 6:00 PM

YouTube live streaming:

https://www.youtube.com/iisertvm

Dr. Thirumalachari Ramasami, former secretary, Government of India, Department of Science and Technology, is a technologist-turned-scientist and a scientist-turned-civil servant. Born at Srivilliputtur in Tamil Nadu, Dr. Ramasami had his early education from Madras University (B.Tech and M.Tech in Leather Technology) and obtained Ph.D. degree in Chemistry from the University of Leeds, UK. His research interests span a wide range of topics in diverse areas of science. He has made seminal contributions to the understanding of factors controlling reactivities of chromium and related transition metal ions in aqueous medium. He has been involved in the development of experimental probes and methods for quantitative analyses of



nuclear and electronic factors influencing substitution and electron-transfer reactivities of octahedral complexes. His research includes synthesis of some novel chromium (III) complexes, stabilization of unknown oxidation states of chromium, quantification of electronic factors in outer sphere electron transfer, probing of active site chemistry of some copper and iron proteins and molecular orbital calculations of spectroscopic parameters. He came back to India in 1984 and joined CSIR-Central Leather Research Institute (CLRI), the world's largest leather research institute. He served as its Director from 1996 to 2006. He played a pivotal role in translating fundamental science to technologically and socially relevant projects and products. In a moment of crisis, his leadership to CSIR-CLRI helped in saving 250,000 jobs, facilitating Rs. 6000 crores of annual turnover and Rs. 3500 crores of annual export. He is credited with the massive transformation of over 900 tanneries of Tamil Nadu going green in just about 18 months. He has published more than 250 scientific papers, filed over 50 patents and developed 12 process know-hows. Several technologies developed by his group are in extensive commercial use in the country. Two of his technologies that relied on the understanding of metal-ligand interactions, viz., the Alutan and Alcrotan, were the first of its kind in the world. They established the indigenous effort of India in leather auxiliaries. With his leadership, he catapulted CSIR-CLRI to a global leadership in leather research. His contributions in strengthening academic research and industry partnerships in leather sector are well known.

Dr. Ramasami served as the Secretary, Department of Science & Technology in the Government of India during May 2006 to May 2014. Under his stewardship, several new programmes, mechanisms for R&D funding and many novel schemes were initiated, which have made a paradigm change in the science landscape of India. Some of these include (i) INSPIRE, which has emerged as the game changer in attracting talent to science, (ii) PURSE, focused on rejuvenation of Research in Indian Universities and (iii) establishment of Science and Engineering Research Board (SERB) aimed at de-bureaucratization of R&D funding. He was a major contributor to the formulation of Science, Technology and Innovation Policy 2013 of India.

For his contributions to chemical science, Dr. Ramasami was awarded the Shanti Swarup Bhatnagar Prize for chemical sciences in 1993. For his outstanding contributions to Science and Technology, he was conferred Padma Sri in 2001 and Padma Bhushan in 2014. He is an elected Fellow of Indian National Science Academy, Indian Academy of Sciences, National Academy of Sciences of India, Indian National Academy of Engineers and The World Academy of Sciences. He is currently a Member of ABEO, Organization for the Prohibition of Chemical Weapons and Honorary Professor in IISER Mohali and Kolkata. He is currently the Nayudamma Abdul Wahid Chair Professor at the Department of Leather Technology, Anna University, where he teaches UG and PG students the fundamentals of leather science.

## National Science Day Speech - Program

Sunday, February 28, 2021

05:30 PM High Tea

06:00 PM Inaugural Remarks

Prof. J. N. Moorthy, Director, IISER Thiruvananthapuram

06:10 PM National Science Day Speech "Discovery to Ground Breaking Science"

Dr. Thirumalachari Ramasami

07:00 PM Vote of Thanks