



NATIONAL INSTITUTE OF ADVANCED STUDIES

INDIAN INSTITUTE OF SCIENCE CAMPUS, BENGALURU-12

## First Baldev Raj Memorial Lecture

**Prof Baldev Raj - A Personal Tribute :  
A Visionary, Technology Leader and a  
Citizen of the World**

By

**Prof. Srinivasa Ranganathan**

**Wednesday, 28 February, 2018**

JRD Tata Auditorium, NIAS, IISc Campus

**6.00 PM (Coffee/Tea at 5.30PM)**

A recipient of Padma Shri, Prof. Baldev Raj took over as Director of NIAS in September 2014 and led the Institute to newer heights in terms of multi-disciplinary pursuits. An eminent scientist, Prof Raj was former Director of the Indira Gandhi Centre for Atomic Research at Kalpakkam, where he helped advance several challenging technologies related to fast reactors and associated fuel cycle technologies. He nurtured excellent schools of global stature in materials, mechanics, non-destructive evaluation, nanoscience and technology, robotics and automation. He contributed substantially to the interdisciplinary domains of energy, cultural heritage, medical technologies, nanoscience and technology for education. He was responsible for providing solutions to many unsolved problems in strategic and security sectors. Author of around 1000 academic papers in peer reviewed journals and more than 70 books, he was recognized by more than 100 awards and assignments in more than 30 countries. His awards include Life Time Achievement Award of the Indian Nuclear Society, Homi Bhabha Gold Medal and Nayudamma Memorial Award. He was member of: the Circle of Advisors (Cambridge University), the Search Group for the Queen Elizabeth Prize in Engineering and the Court of Jawaharlal Nehru University, Delhi; Fellow of: the Indian National Science Academy and the World Academy of Sciences; Chairman of: the Board of Governors of IIT Gandhinagar and Academy of Scientific and Innovative Research (AcSIR).

**Abstract :** Baldev Raj was born on April 4, 1947 in Kashmir in a family of modest means. Amrit Kaur, his mother was a strong influence on him. He inherited a love for learning, hard work and ethics from her. He was blessed with many gifts . But it is the deliberate choices that he made at crucial points in his life that enabled him to make magnificent contributions to several domains of technology innovation, education and cultural heritage. He was inspired by Homi Bhabha in these choices. His major contribution has been the development of Fast Breeder Reactors at Kalpakkam over four decades He assisted PSG Tech at Coimbatore to scale new heights. In a short time of three years he increased the faculty, resources and visibility of the National Institute of Advanced Studies, Bangalore. He passed away on January 6, 2018. In this span of seventy years his work was that of many lifetimes.

His positive attitude made an impact on the numerous individuals, who came under his spell. He bridged disciplines, societies and nations. The special way he brought academia, industry and Government together is remarkable. His contributions are extensive and without parallel in the annals of Indian metallurgy and materials engineering. The privilege of guiding him for his doctoral thesis and the subsequent interactions gave insights into the functioning of his brain and heart. His gentle smile and the twinkle in his eye drew people of all ages and from all walks of life to him. His work will continue to inspire.

As one who has been in constant interactions for more than four decades, Prof S Ranganathan will bring out the unique journey of Prof. Baldev Raj in moving from excellence to eminence

**About the Speaker :** Srinivasa Ranganathan is currently NASI Platinum Jubilee Fellow at the Indian Institute of Science and Honorary Visiting Professor at the National Institute of Advanced Studies. His interests cover physical metallurgy, history of science and materials heritage. He has coauthored a book on India's Legendary Wootz Steel: An advanced material of the ancient world.

He enabled as coordinator the ambitious DST Programme on Indian Digital Heritage – Hampi. He took leadership in securing recognition to the Delhi Iron Pillar as a Historical Landmark by the American Society for Materials International. He is a Fellow of four Indian Academies of Science and Engineering and the World Academy of Sciences (TWAS).

