## INDIAN NATIONAL ACADEMY OF ENGINEERING

## Life Time Contribution Award in Engineering 2007

## Dr. C.G. Krishnadas Nair

Padmashree Dr Chandrathil Gouri Krishnadas Nair born on 17<sup>th</sup> August 1941 had his primary education in Kerala and graduated with distinction in Metallurgical Engineering from IIT, Madras, Chennai in 1964. He obtained Masters Degree (Mechanical Engineering - 1966) and PhD in Engineering (1968) from the University of Sask, Canada. He was Former Chairman, Hindustan Aeronautics Limited and is recognized for outstanding contributions in Engineering Science and Technology. During his distinguished professional career spanning over 36 years, he has made significant lifetime contributions in Engineering, Education, Research and Industry Management.

Dr. Krishnadas Nair, after a brief teaching career as Assistant Professor in Regional Engineering College (the present KNIT), Suratkal and visiting faculty at the University of Sheffield, UK, joined Hindustan Aeronautics in the design and development department in 1972.

He converted the HAL's central materials testing laboratory into an R&D lab for materials and processes technologies, recognized by the Department of Science and Technology. Through in-house research and in collaboration with academic and other R&D labs he developed high strength aluminum and magnesium alloys, titanium alloys, special steels, high temperature alloys and composites and precision forgings, ring roll products and creep formed complex sheet metal components for aircraft, satellite and launch vehicle applications, saving hundreds of crores in Foreign Exchange.

Moving from the development department to management he was appointed as General Manager of Foundry & Forge and Aero-Engine divisions and later as Managing Director and Chairman of HAL. He continued to develop the R&D culture in the organization stimulating and leading R&D in technology and products.

Dr Nair rose to head HAL as its CEO and Chairman, India's largest defence public sector industry. He transformed HAL into a globally competent and profitable aerospace industry with a paradigm shift to R&D diversification, export and partnership with private sector. The long term strategic plan and a new work culture in HAL based on India's traditional values and professional ethics with excellent team work, under his leadership led the way for the growth of HAL with a 10 fold increase in turnover with substantial profits. Dr. Nair with a

visionary approach initiated and guided a number of major R&D programmes in HAL, which included the New Jet Trainer, The Advanced Light Helicopter, the Lancer, Light Observation Helicopter and the Multirole Transport Aircraft (MTA).

He is the founder Chairman of Society of Defence Technologists (SODET) incorporating Defence PSUs & Ordnance factories, represented by their respective CMD & Directors and has contributed towards synergy among these organizations in technology development and sharing of facilities. Dr Nair's contribution in the Small and Medium Scale Enterprise (SMEs) sector is praiseworthy. He founded Society of Indian Aerospace Technologies & Industries (SIATI) in 1991 to train and support SME's to develop aerospace components & Systems indigenously.

He championed Industry -academy interaction and established HAL links with IITs and IISc and other Engineering Colleges for research and teaching. After retirement from HAL as Chairman, he served as AICTE-INAE Distinguished Visiting Professor for two terms. He has contributed significantly as member board of directors of several leading public sector and private sector industries. He has also been member of various scientific advisory councils and committees. He has presented and published 193 papers at national and international conferences in the field of aerospace materials, process technologies, management and international co-operation in aerospace and has authored 20 books

Dr Nair has served as President of both Aeronautical Society of India, and Indian Institute of Metals. He has won several awards and honors that include Padmashree from Government of India in 2001, Scope Award for best Chief Executive and Gold Plaque, Birla Gold Medal, Indira Gandhi Priyadarshini Award, National Aeronautical Prize, Vasvik Research Award, Omprakash Bhasin Award, Dr Ambedkar Bharath Shree Award, Rashtriya Ratna Award, National Metallurgist Award, IIM Platinum Award, Szoadeshi Science Puraskara, Enterprise Excellence Award, National Award for R&D, FIE Foundation Award and National Award for Best Employer of Physically Handicapped. Dr. Nair is a Fellow of the Indian Institute of Metals, Institution of Engineers (India) and the Indian National Academy of Engineering.