

BIO-DATA OF DR. SATISH KUMAR, DIRECTOR, NIT KURUKSHETRA

Dr. Satish Kumar joined National Institute of Technology Kurukshetra as the Director on 06th October, 2016. Prior to this assignment he was working as Director General, Missiles & Strategic Systems, DRDO Headquarter, New Delhi.

Dr. Satish Kumar is a distinguished aerospace Scientist of national repute with outstanding contribution to the missiles and strategic systems. He has unique distinction of leading important strategic establishments over a decade and laying the foundation for futuristic technological growth in critical areas. A graduate in Aeronautical Engineering from Punjab Engineering College, Chandigarh, he obtained Masters degree in Aerospace from IIT, Kanpur and Doctorate in Mechanical Engineering from REC, Warangal.

He played a key role in the development of first ever indigenously developed Liquid propellant (LP) rocket engine for Prithvi missile. He was instrumental in productionization of highly complex LP engines at Hindustan Aeronautics Limited (HAL) and private industry. His contribution in development of Cold and Hot gas Reaction Control systems led to better control of missile systems at higher altitudes, thus increasing the accuracy of the missiles. He played a vital role in the development of Propellant transfer systems and Storage facilities at various forward Army locations. His dynamic leadership played a key role in providing training to Army personnel and support Induction process for Prithvi missile into the Armed Forces arsenal.

He has done pioneering work in the field of Supersonic Combustion in India and its related test facility at DRDL, Hyderabad in collaboration with premier institutes. This has culminated in a major hypersonic technology development program today. As, Director Missiles and Head, Programme Office at DRDO HQ, he played a vital role in the finalization of Mission Mode projects like MRSAM and LRSAM missiles with Israel.

Dr. Satish Kumar served as an Outstanding Scientist and Director of Terminal Ballistics Research Laboratory (TBRL) Chandigarh, which is a DRDO laboratory that deals with development of conventional and non-conventional weapon systems. He transformed TBRL into a vibrant and proactive laboratory through his technology drive and initiatives. Considering the future requirements of strategic systems, he took initiatives for development and realisation of critical technological facilities which were denied to India by technologically superior

nations. Within TBRL, he initiated a series of new projects, which upon fruition will fulfil the needs of India's Strategic program in the years to come. He was at the helm of the Strategic program science 2011 steering the critical activities of programme of national importance and was promoted to Distinguished Scientist in December 2013 for his significant contributions.

In line with the focus of the Government on indigenous development of Defence technologies, he was appointed Chief Controller (Technology Management) at DRDO HQ to lead technology programmes in collaboration with premier academic and research institutions. He was instrumental in facilitating the formation of incubation centres which have been established in certain academic institutes in India. These centres will initiate research on critical technologies for defence applications. In 2015, he was promoted to Director General (Missiles & Strategic Systems), at DRDO HQ to lead DRDO's key programmes in the areas of missiles and strategic systems.

He has been honoured with many awards for his outstanding contributions which include the Technology Award by Ministry of Defence, Prime Minister's Special Award for Development of Strategic Weapons and Performance Excellence award by DRDO. In 2016, he was conferred prestigious 'Padma Shri' award in recognition of his multi-faceted experience of more than three decades in design and development of tactical and strategic missiles involving development of path breaking technologies, denied under MTCR. He played significant role in the development of missiles and strategic systems in India. Starting his career with India's prestigious Integrated Guided Missile Development Programme (IGMDP) as a Liquid Propulsion specialist, he continued his research in the area of Hypersonic Flight Vehicles, Propulsion Systems for the Agni and Prithvi missiles and the strategic warhead systems.

He has more than 40 research papers to his credit and two patents obtained in US, China, Russia, Germany and India. These achievements go a long way in demonstrating his technical excellence. He continues to promote development of technologies in the industry through dissemination of knowledge and exchange of information through technical societies. He is a fellow of Aeronautical Society of India, High Energy Materials Society of India, Shock Wave Society of India, International Society for Energy, Environment and Sustainability. He is Life member of Astronautical Society of India and Combustion Institute of India and has been leading the initiatives for encouragement of research in these disciplines.