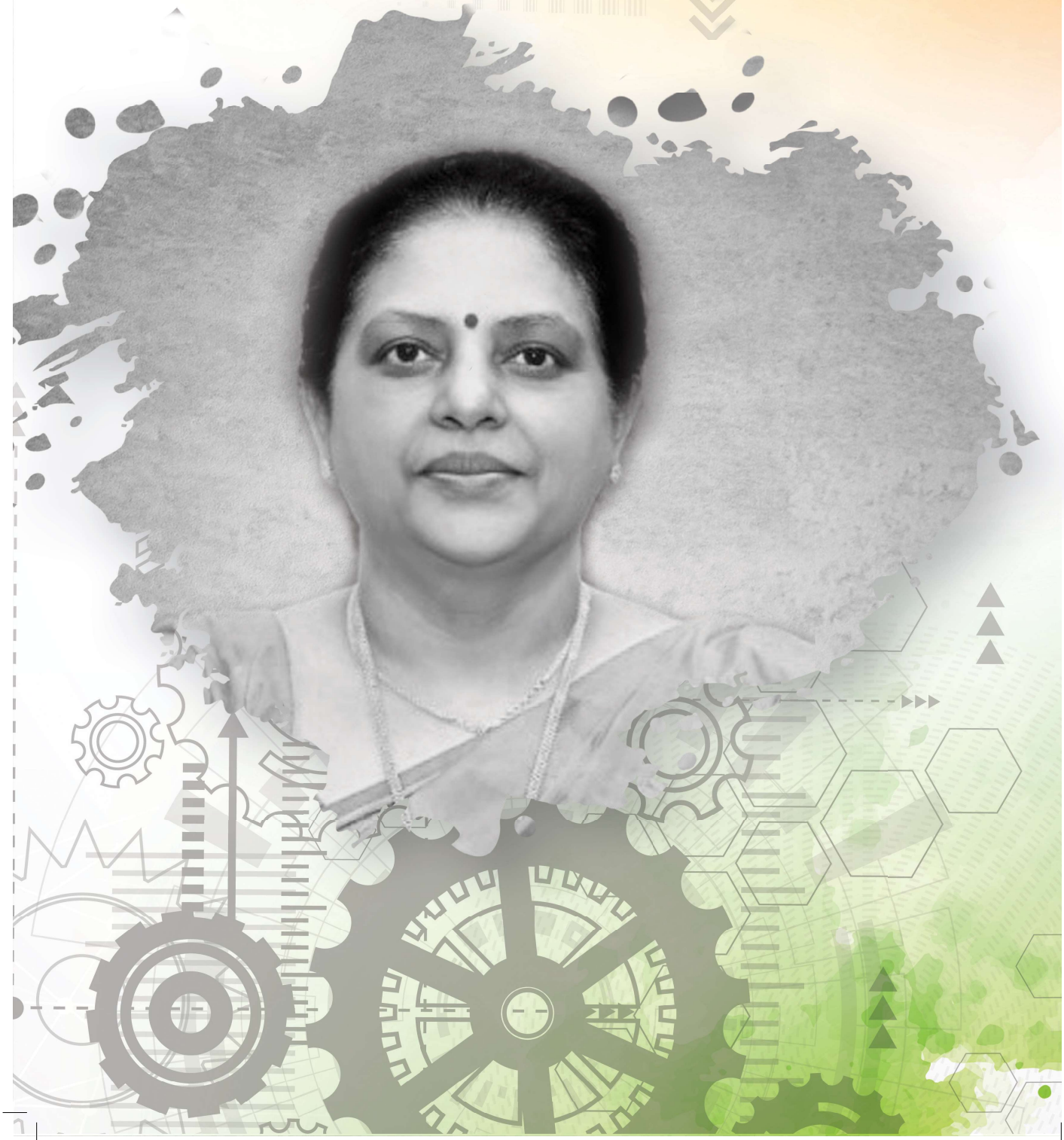
Tessy Thomas



Tessy Thomas was born in 1963 in Alleppey, Kerala, to Thresiamma Thomas, a homemaker and late T.J. Thomas, an Accountant. She is married to Cmdre Saroj Kumar Patel (Retd), Indian Navy, and has a son Tejas Patel. She did her schooling at Alleppey. She completed B. Tech in Electrical Engineering from Govt. Engg. College Trichur under Calicut University; ME in Guided Missiles from Institute of Armament Technology (IAT) (presently Defence Institute of Advanced Technology) under Pune University; MBA in Oper¬ations Management from IGNOU, New Delhi; and PhD in Missile Guidance from Jawaharlal Nehru Technological University, Hyderabad.

Tessy was Faculty in Guided Missiles, IAT Pune; Scientist in DRDO at DRDL, RCI & ASL and worked in various capacities as Guidance Designer & Mission Designer for Solid propelled Agni Systems. She led Agni-4 project as Project Director for the-state-of-art-system with many new technologies like Composite rocket motor casing, low stock, Stage Separation systems, integrated avionics etc.

She led a major project, Agni-4 as Project Director for the-state-of-art-system with many new technologies leading to weight & space optimization and mass fractions, with the development of composite rocket motor casing and advanced avionics.

Tessy was associated with Agni Programme right from its developmental flights. She designed the guidance scheme for long range missile systems which is used in Agni missiles and underwater weapon systems. She contributed in Guidance, Control, Inertial Navigation, Trajectory Simulation and Mission Design. As Project Director, AGNI-4 she developed technologies in the missile systems leading to weight & space optimization and mass fractions, with the development of composite rocket motor casing and advanced avionics. She was appointed Director, Advanced Systems Laboratory, DRDO. She held multi-dimensional roles and responsibilities in strategic mission planning and infrastructure developments and led strategic missile systems development. In 2018, she was appointed as the Director General Aeronautical Systems Cluster Laboratories, responsible for designing and developing state-of-the-art UAVs, Manned and Unmanned Aircraft, Aero Gas Turbine engine technology, Airborne surveillance systems, technologies, and systems related to parachute for the Armed forces. Under her guidance, the subsonic cruise missile Nirbhay was technically reviewed to meet all user specifications and flight-tested successfully leading to multiple cruise missiles for Long-range land attack and submarine launch cruise missiles. Also, Light Combat Aircraft, LCA Tejas had its Final Operational Clearance for induction to IAF, leading to production of 83 Nos. of LCA Aircrafts by HAL.

Tessy is the recipient of several awards and honours including Lal Bahadur Shastri National award for excellence in public Administration Academics and Management; DRDO Agni Award for Excellence in Self-Reliance; DRDO Award for Path-breaking Research/Outstanding Technology Development; DRDO Scientist of the Year; DRDO Performance Excellence Award for Agni 4; DRDO Performance Excellence Award for Agni 5; Dr. Kalpana Chawla Memorial Lecture honour by Aeronautical Society of India; India Today Woman of the Year and the "Bharat Ratna Sir Mokshagundam Visvesvaraya Award" in recognition of outstanding contributions towards the design, development and realization of indigenous missile systems. She was conferred with "Outstanding Woman Achiever" award in the field of Science and Technology by Women in Science and Engineering, India; Honoured with "First Ladies" Award for First Missile Woman of India from the Hon'ble President of India and "Eminent Engineer Award" by Engineering Council of India. She received the Doctor of Science (Honoris Causa) from IIT Kharagpur and IIT Kanpur. She was felicitated with Doctor of Literature (Honoris Causa) from Symbiosis International, Pune. •