Dr. Kamali. C, Chief Scientist, CSIR-NAL

Dr Kamali C., joined National Aerospace Laboratories, CSIR in the year 2004 after gaining experience in teaching for about 7 years.

Since December 2021 she was Chief Scientist and heading the Flight Simulation Group, Flight Mechanics and Control Division with a ***total service of almost 21 years***.

She has extensively contributed to the simulation activities for LCA, SARAS, AMCA, Mirage, Jaguar, Learjet, NAL MAV's such as Black kite, Sly bird in terms of the 6 DoF model development, Model Based Design frame work for the flight dynamics and subsystem models.

She was given a challenging task to develop attitude estimation without forward acceleration sensor for India's Light Combat Aircraft. She successfully designed an algorithm that was implemented onboard LCA. This activity was critical for achieving FOC certification for ALSR and gravity compensation control laws.

With the success of this project, ADA sanctioned several other technology development projects with her as the Project leader, such as, airdata calibration, development of FADS algorithm, inertially aided airdata estimation, etc. The airdata tables obtained through this technique are also flying onboard LCA.

She was instrumental in developing a compact variable stability Simulator for IAF, Test pilot school, that has saved substantial foreign exchange. She has developed models for limited avionics dynamics mission simulator for LCA. This work is being utilized by LCA avionics group, ADA. She was instrumental in developing low-cost desktop simulators for academic research purposes. These simulators are commercialized and are delivered to academic institutes such as Indian Institute of Science and IIT, Mumbai. She has set up a Hardware in Loop Simulation for MAV using Model Based Design frame work.

She has taken initiative in setting up the real time model-based simulation frame work and involved in designing of the ETS for SARAS Mk2 System Integration Facility and Iron bird. She was invited to RCI, ADE, DRDO as a committee member to investigate and review Nirbhay's INS, Abhyas INS and attended FRR meetings. She is a review board member for Multi Sensor Guidance System developed by ADE, DRDO. In the year 2017,

She was awarded with CSIR Raman Research Fellowship. She carried out research at Technische Hochschule Ingolstadt Faculty of Mechanical Engineering. She obtained travel grants from DST and CSIR to attend AIAA conference at Boson, USA in the year 2013. She has won NAL's Best woman Scientist Award in the year 2008. She is recipient of CSIR-NAL technology shield in 2012,2017 and 2019. She has about 40 research papers in peer reviewed journals and conferences and is a reviewer of many national and international journals, she has reviewed PhD thesis. She's a recognized Professor in ACSIR teaching Flight Mechanics.

She was felicitated during Aero India 2023 as one among the 24 Indian Women Professionals in Aviation & Aerospace (IWPA)

Dr. Kamali. C was born on 30th June 1973 in Sirkali, Tamilnadu, to Smt. Susila. C and Sri. Chandrasekaran. R. She is married to Dr. Sivakumar. B who is a Professor, Dr. Ambedkar Institute of Technology, Bangalore. She is blessed with a daughter Dhivya. S who is a BE., MBA and working as a Senior Application Development Analyst in Accenture, Bangalore.

She completed her schooling from Chidambaram Chettiar Girl's Higher Secondary School, Kottaiyur, Tamilnadu. She obtained her BE (Electrical and Electronics Engineering) degree with distinction from Alagappa Chettiar Govt College of Engineering and Technology, Karaikudi, Tamilnadu. Subsequently, she completed her ME degree with distinction (Power Electronics) from BMS College of Engineering, Bangalore University, Bangalore, Karnataka. She completed her PhD for the thesis titled 'Real Time Parameter Estimation for Aircraft Fault Tolerant Control Systems' from Visvesvaraya Technological University. Belgaum, Karnataka.

While the work will be remembered in the scientific community, we express our deepest condolences and pray Almighty for peace to the bereaved soul.