

## CV

**Name** Ramesh Sundaram

**Designation** **Retd** Chief Scientist & Head ACD, CSIR- NAL

### Education

1990 Ph.D, Polymer Science, University of Akron, Akron, Ohio, USA

### Work Experience

**1992 – 2022** **Scientist**, Advanced Composites Division, National Aerospace Laboratories, Bangalore. ( 2016-2022: Chief Scientist & Head Advanced Composites Division)

**1990-1992** **Applications specialist**, Shimadzu Scientific Instruments, Columbia, MD, U.S.A.

**1987-1990** **Research Associate**, Applied Research, Dept. of Polymer Science, University of Akron, Akron, Ohio, USA

**Publications** 25 journal papers; Conferences-124

### Other Information

1. Elected as Fellow of INAE from November 1st 2021
2. Former President (2013-15) of Indian society for advancement and process engineers (ISAMPE)
3. Conferred Honorary membership of ISAMPE in October 2022

### Key Achievements:

1. Major contribution by Division for LCA- Tejas. Aircraft (now in series production) 165 parts D&D. Successfully completed first 20 sets of 13 complex parts with production partner, TAML in 2019. Next 20 sets now in progress. ACD successfully brought a R&D technology to “production Technology”.
2. Successful indigenization of ABD 2000 Fin antenna Radome for Mirage aircraft; Presently flying on many of the aircraft
3. Division successfully developed 2 seater HANSA NG; Awaiting final certification.
4. ACD is recognized as a Centre of excellence in composites by AR&DB. As co-coordinator ensured successful completion of Phase 2 (2004-2009) and Phase 3 (2012-2017)
5. Coordinator in joint SHM project with ADE, Tel Aviv university (Israel) and Israeli Aircraft industry; Successfully flight tested SHM system on Nishant UAV taking NAL into the elite group of 9% of people worldwide who have tested SHM systems
6. Division Received **prestigious JEC award 4 times!** Probably not many others in the world with this cap!

## Major Awards Received by the Division

1. **CSIR Technology prize for engineering Technology-2005** for Development of advanced composite technologies for aerospace applications. (Awarded to a team of 6 persons)
2. **NAL Technology Shield for Outstanding Group Achievement** for the year 2013-2014, given to Advanced Composites Division of NAL and ADA team for 'Development of Airworthy High Temperature Resistant Composite Engine Bay Door for LCA -TEJAS'
3. Kotresh M Gaddikeri, M. Govindan Kutty, G. Radhakrishnan, BL. Dinesh, G. Padmakara, Vinayak Patil, R. Chidambaram, P. Ravi Kumar and Ramesh Sundaram received **NAL Technology Shield for Outstanding Group Achievement** for 'Development of Complex Cured Stiffened Composite Structures for Centre Fuselage of Light Combat Aircraft (LCA-Tejas) for Enhanced Build Quality for Series production', September 2015
4. **NAL Technology shield** for outstanding group achievement award for the work on "Design, Development, Assembly and Static Testing of integrally stiffened Carbon Epoxy (CE) shell" The division has won the technology shield for three consecutive years.
5. **JEC Asia 2013 innovation award in Aeronautics category** for development SARAS Horizontal tail co-cured bottom skin
6. **JEC 2015 Asia innovation award in the category of thermosets** for 'Development of Coinfused and Cured Fully Integral Wing Interspar Box using VERITY Process', October 21, 2015
7. **JEC Asia 2016 Innovation Awards** for the "Development of a 14 Seater Civil Aircraft: 'SARAS', Integrating The Fuselage Bulkhead with the Composite Dome" at Singapore in November 2016
8. **JEC Asia Innovation Award 2018**, Seoul, South Korea in November 2018, for 'Innovative Skin rib Cured Carbon-BMI Composites'
9. **CSIR Technology Award for Business Development & Technology Marketing, 2020** for successful commercialization of composite technology towards Light Combat Aircraft (LCA)- Tejas for IOC Series Production
10. **CSIR Diamond Jubilee award 2020** (NAL & TASL) for 'Successful commercialization of indigenously developed state of the art composite technologies for Series production of LCA (Tejas aircraft)'

## Patents

1. Ramesh Sundaram, Kundan Kumar Verma, Kailash Singh, Kotresh M. Gaddikeri & Dinesh BL "Process for Manufacturing Co-Cured Composite Structures And Products Manufactured thereof" Filed on 31.03.2009, Patent Application Number 0053NF2009, National Patent. Patent granted on 30/4/2020.
2. Nitesh Gupta, Augustin MJ, Ramesh Sundaram [Filed, 2447DEL2012 filed on 6/8/2012], 'A system and method for visualizing real time resin flow front in resin infusion technology for manufacturing composites'. Received in September 2021

## Copyright

1. Augustin MJ, Nitesh Gupta, Ramesh Sundaram, "QuickVIEW© – A Flight Data play back Software for Structural Health Monitoring Application" Reg no.SW-7582/2013 Dated 24/12/2013