



Prof. Satya Chakravarthy: Brief Biographical Sketch

Satya Chakravarthy is a Professor of Aerospace Engineering at the Indian Institute of Technology Madras, Chennai, India.

He received his Bachelor of Technology degree in Aerospace Engineering in 1991 from IIT Madras, and went to obtain his Master of Science in Aerospace Engineering degree in 1992 and Doctor of Philosophy in 1995, both from the Georgia Institute of Technology, Atlanta, GA, USA.

After a brief post-doctoral stint at Georgia Tech, he joined the Department of Aerospace Engineering at IIT Madras in 1997, where he was appointed Assistant Professor in 1998, and Associate Professor in 2003. He is serving as Professor there since 2009. In between, he has visited Georgia Tech in 2000-2001, and Technische Universitat Darmstadt in 2002, 2003, 2006, and 2009.

Satya Chakravarthy works in the areas of propulsion and combustion, and researches on different aspects of combustion in gas turbine and rocket engines. He heads the National Centre for Combustion Research & Development (NCCRD) at IIT Madras supported by the Department of Science and Technology, Government of India, with a fund of Rs. 47 crore, which is augmented by research funding over Rs. 54 crores with 33 industry projects on different aspects of combustion in automotive, aerospace, thermal power, and fire research. The NCCRD is the largest of its kind in the world, with a 5-storey building that houses the state-of-the-art facilities on combustion research, including a 33 metre-tall microgravity drop tower. Recently, Satya Chakravarthy is also heading the Centre of Propulsion Technology supported by DRDO with funding of Rs. 84 crores.

He has over 80 peer-reviewed archival journal publications to his credit, and presented over 200 conference papers, delivered many keynote/plenary/invited lectures, visited many universities such as MIT, Cambridge, TU Berlin, TU Munich, etc., and industries such as GE, FM Global, etc. He is on the editorial board of Progress in Energy and Combustion Science, and is a Colloquium Co-Chair on Solid Fuel Combustion for the International Symposium on Combustion, Dublin, 2018.

He has been awarded the HAL Prize for the best undergraduate in aerospace engineering in 1991, the Young Engineer Award by the Indian National Academy of Engineering in 2003, the Young Faculty Recognition Award by IIT Madras in 2009, the Dalmi-HEMSI-ACRHEM Award by the High Energy Materials Society of India in 2009, and the DRDO Academic Excellence Award by the Defence Research and Development Organization twice, in 2009 and 2016.