

Prof. C Balaji

**T.T. Narendran Institute Chair
Professor IIT Madras, Chennai,
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Contact

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Work Experience

Research guidance (Completed)

43 (Ph.D.), 14 (M.S.), 75 (M.Tech/M.E.)

Sponsored and Consultancy projects

Total Number: 27

Total Value: 180 million INR

Total research and teaching experience

31 years (at IIT Madras since 1998).

Education

- **Humboldt Fellowship**, Hamburg University of Technology, Germany, (2005-2006), Asymptotics in heat transfer.
- **Ph.D.**, IIT Madras, 1995, Heat Transfer.
- **M. Tech.**, IIT Madras, 1992, Heat Transfer.
- **B.E.** College of Engineering, Guindy, 1990, Mechanical

Fields of Specialization

Experimental and numerical heat transfer, Radiative heat transfer in engineering and atmospheric science, Optimization in heat transfer, Inverse heat transfer, Machine learning in heat transfer, Electronic cooling, Battery thermal management, Satellite Meteorology, Numerical weather prediction and Radiance assimilation, Climate change and Weather model calibration.

Papers and Books Published

- Number of publications in standard refereed international journals: 233 (h-index: 40- June 2025, Scopus)
- List of papers published in Conferences/Symposia/Seminars, etc.: 110
- Books published: 15 (7 Graduate Text books, 4 Research Monographs, 4 Motivational books)

Honor and Awards

- T.T. Narendran Institute Chair Professor, 2020 -
- Mid-Career Research Award, awarded by IIT Madras, 2015.
- Marti Gurunath Award for Excellence in Teaching, awarded by IIT Madras, 2013.
- Elected Fellow, Indian National Academy of Engineering, 2012.
- Tamilnadu Scientist Award, Govt. of Tamilnadu, 2010.
- Swarna Jayanthi Fellowship, Govt. of India, (Earth and atmospheric science), 2008.
- Prof.K.N. Seetharamu Medal and Prize for excellence in research, Indian Society for Heat and Mass Transfer, 2008.
- Young Faculty Recognition Award for excellence in Teaching and Research, IIT Madras, 2007.
- University Gold Medal, Anna University, 1990 (B.E).

Editorships

Member - Editorial Board, International Journal of Thermal Sciences. Elsevier, 2011-2016.

Editor-in-Chief, International Journal of Thermal Sciences. Elsevier, 2016-

Video Courses

S. No	Name of the Course	No. of Lectures
1	Inverse Methods in Heat Transfer	34
2	Design and Optimization of Energy Systems	40
3	Introduction of Atmospheric Science	41
4	Conduction and Radiation	46
5	Heat Transfer	48

Total No. of Views: More than 1 Million