



DEPARTMENT OF AEROSPACE ENGINEERING

Defence Institute of Advanced Technology (DU)
Girinagar, Pune - 411025, INDIA



Dr. Ganapati N. Joshi

Ph.D. (IIT Delhi)

Associate Professor, Department of Aerospace Engineering

12 Years Experience in Teaching & Research

Research Areas

1. Shock-Boundary Layer Interaction and control
2. Aerodynamic Characteristics of Grid Fins
3. Tubercles on wings & propellers

Awards

- DRDO Titanium medal for best oration on National Technology Day
- National Doctoral Fellowship, AICTE
- Institute Fellowship, I.I.T. Delhi
- University Gold Medal for securing 1st rank in M. Tech.

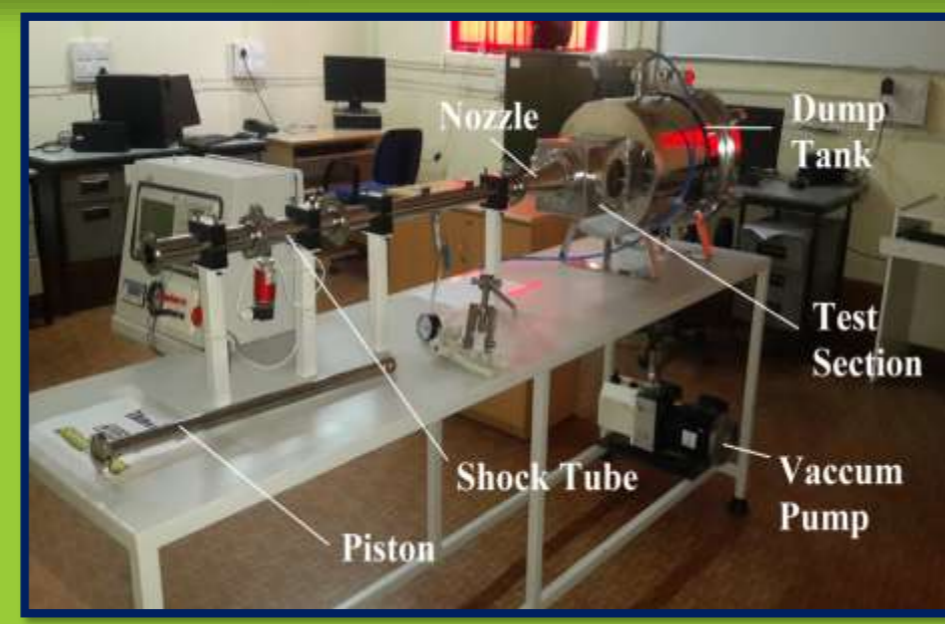


Publications (Total)	Journals	Conferences	CEPs/ STTP Conducted	Invited Talks	PhDs Guided	M.Tech/Master's Theses Guided
73	22	53	15	50+	02 (Completed) 05 (Ongoing)	88

Facilities Developed

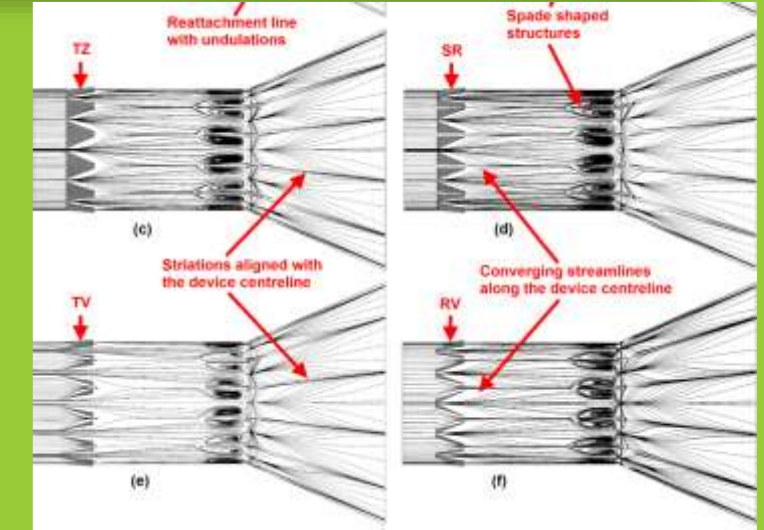
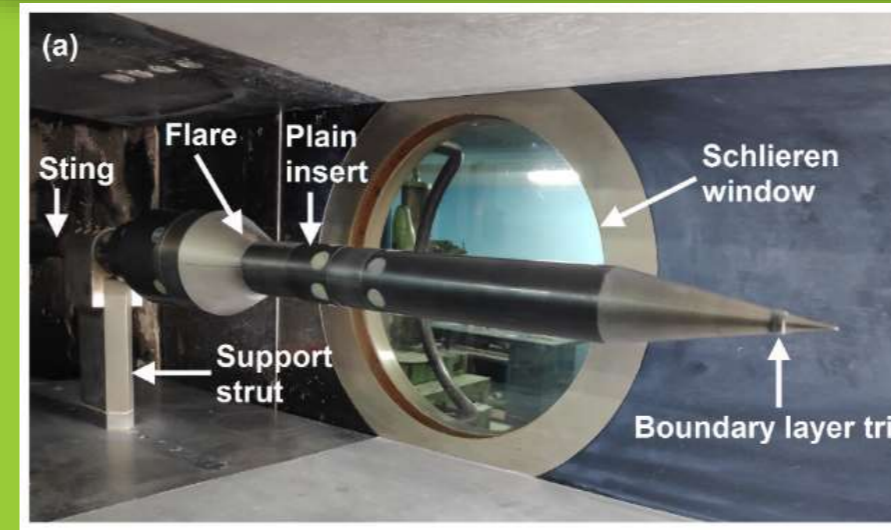


Subsonic Wind Tunnel



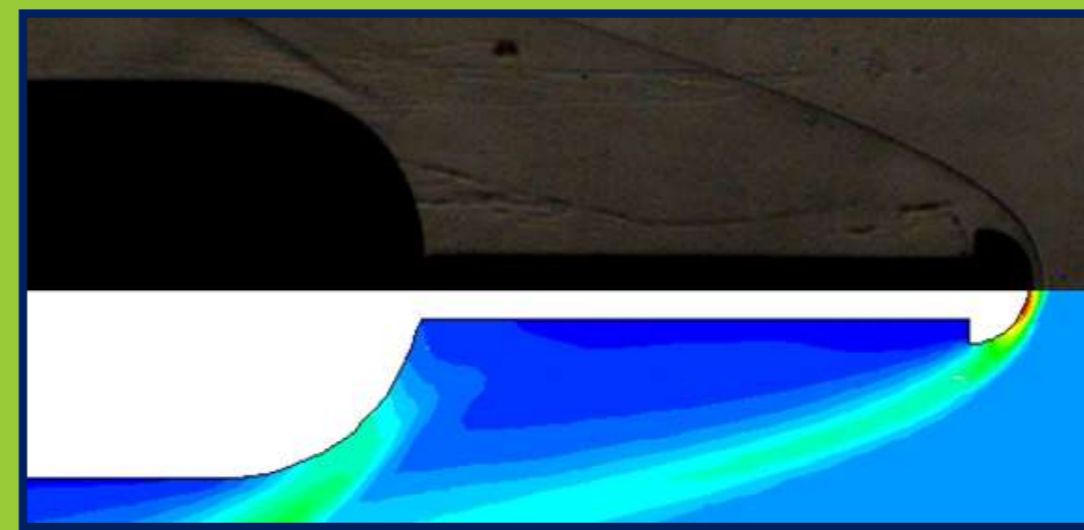
Hypersonic Shock Tunnel

Research Highlights



Professional Membership

- LIFE MEMBER Aeronautical Society of India (AeSI)
- LIFE MEMBER National Society of Fluid Mechanics and Fluid Power(NSFMFP)
- LIFE MEMBER Indian Society for Applied Mechanics (ISAM)



Sponsored R & D Projects

1. "Aerodynamic Characterization Of Grid Fins subsonic Regime" ARMREB (Co-PI) (PI – Dr. Ajay Misra)
2. "Development of Technology for Production of Non-flammable Hydrogen Gas and its Application in Lighter than Air (LTA) Vehicle" Funded by ER & IPR DRDO (Co-PI)
3. "Attenuation of flow field unsteadiness to flare induced shock/boundary layer interaction using Micro Vortex generators: Funded by DST-SERB (PI)
4. "Development of non-flammable hydrogen using selected inhibitors and study of its lifting ability" Funded by AR&DB (Co-PI) (PI- Dr. Prashant Kulkarni)
5. "Study of Flare Induced Shock-Boundary Layer Interactions." Funded by DIAT Grant-in-Aid (PI)

Peer Reviewed Journal Publications (Recent 5)

1. T. Nilavarasan, G. N. Joshi, A. Misra, C. Manisankar and S. B. Verma (2023), 'Mitigation of shock induced flow separation over an axisymmetric flared body using ramped vanes.' Journal of Visualization.
1. T. Nilavarasan, and G. N. Joshi, (2023), 'Ramped vane control of a compression corner-induced flow separation', International Journal of Aeronautical & Space Sciences.
1. G. S. Biradar, Majid Hassan Khan, Sumit Bankey, Abhishek Mishra, Ganapati Joshi, Amit Agrawal, (2023), Bio-inspired corrugated airfoil aerodynamics under external turbulence at low Reynolds numbers, Journal of Visualization and Image Processing.
1. G. S. Biradar, Majid Hasan Khan, Sumit Bankey, Abhishek Mishra, Ganapati Joshi, Amit Agrawal, (2022) Effect of free stream turbulence intensity on corrugated airfoils at ultra low Reynolds numbers', Sadhana.
1. T. Nilavarasan, G. N. Joshi, A. Misra, C. Manisankar and S. B. Verma, (2022), Control of flow separation over an axisymmetric flared body using ramped vanes, European Journal of Mechanics - B/Fluids.