

## Mr. MANJUNATH S V



<b>Designation</b>	<b>Assistant Professor</b>
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<b>Joining Date</b>	<b>01-10-2021</b>

### Educational Qualifications

- DTDM, Govt.Tool Room & Training Centre, Bengaluru - 2006
- B. E., Visvesvaraya Technological University, Belgaum - 2010
- M. Tech., Visvesvaraya Technological University, Belgaum -2013
- PhD , Visvesvaraya Technological University, Belgaum -Pursuing

<b>Past Experience</b>				
<b>Field</b>	<b>Positions held</b>	<b>Name of the institution</b>	<b>From</b>	<b>To</b>
Industrial Experience	Team Leader – ProCAST	Advanced Forming Technology Center, Bengaluru	May 2005	August 2007
Academic Experience	Lecturer	Acharya Polytechnic, Bengaluru	June 2010	July 2013
	Assistant Professor	Acharya Institute of Technology, VTU, Bengaluru	July 2013	March 2015
	Assistant Professor	Alliance College of Engineering and Design, Alliance University, Bengaluru	March 2015	June 2021
	Assistant Professor	Gopalan College of Engineering and Management, VTU, Bengaluru	Oct 2021	<b>Till Date</b>

### Areas of Interest

- Aircraft Propulsion Systems
- Rockets and Missiles
- Thermal Science Engineering
- Material Science
- Advanced Manufacturing Process
- CADD and CAE
- Computational Fluid Dynamics
- Multiphase Flow

### Responsibilities Held in Past Institutions

- Dept. NAAC Coordinator,
- Dept. NBA Coordinator,
- Dept. Academic Cell Coordinator,
- Students Forum Coordinator,

- Mentor,
- Internal Assessment Test Coordinator,
- Class Timetable Coordinator.

## Professional Memberships

- Indian Society for Technical Education : Life Member
- Indian Institution of Production Engineers : Life Member
- Institute for Engineering Research and Publication : Professional Member
- The Institution of Engineering and Technology, IET India : Member
- The Institute of Indian Foundry men : Member

## Subjects Handled

### UG Programme:

- Thermal Engineering,
- Aircraft Propulsion,
- Rockets and Missiles,
- Composite Materials,
- Theory of Machines,
- Strength of Materials,
- Machine Drawing,
- Theory of Vibrations,
- Finite Element Method,
- Computer Aided Machine Drawing,
- Aerodynamics-II

## B.E. Projects guided

### B. E student project guided more than 15 projects. To Name a few:

1. Design and Development of Low speed Vertical Axis Wind Turbine.
2. Numerical Study on Effect of Tip Clearance on Performance of a Centrifugal Compressor.
3. Design, fabrication and flying of Unmanned Aerial Vehicle (UAV)/Drone.
4. Design and analysis of Landing gear for Lockheed T-33 Jet Trainer Aircraft.
5. Design and CFD Analysis of Combustion chamber for Turbojet engine.
6. CFD Analysis of Cascade Axial Compressor blades used in turbojet engine.
7. Design and development of a Pneumatic operated Robotic arm.
8. Numerical and experimental investigation of exhaust flow in diffuser unit in afterburner system.
9. Experimental investigation on mechanical and Tribological properties of Al6061/WC/Gr hybrid composites.
10. Experimental investigation on mechanical and Tribological properties of Al6063/ZrSiO<sub>4</sub>/Al<sub>2</sub>O<sub>3</sub> hybrid composites.
11. Experimental investigation on mechanical and Tribological properties of Al7075/WC/Fly Ash hybrid composites.
12. Design and fabrication of High Pressure Boiler.
13. Design and fabrication of Turbo jet Engine.

## Journal publications

1. 'A Study of Nucleate Boiling Phenomenon of Water Undergoing Phase Change over Two Rotating Heated Cylinders in Tandem Arrangement at Different Spacing and Surface Roughness', published in International Journal for Research in Engineering Application & Management (IJREAM), Vol-08, Issue-02, pp. 21-27, May 2022.
2. 'Bayesian Inference of Volume Fraction of Vapor Formed During Nucleate Boiling Phenomenon of Water Undergoing Phase Change over Two Heated Cylinders in Tandem Arrangement', published in International Journal of Innovative Research in Technology (IJIRT), Vol. 8, Issue 12, pp. 411-418, May 2022.
3. 'Numerical Analysis of Heat Transfer over Horizontal Rotating Cylinder in Presence of Axial Flow', published in International Journal of Engineering Applied Sciences and Technology, Vol. 4, Issue 12, pp. 301-304, 2020.
4. 'Study of Effects of Rotational Rate of a cylinder on the Film Boiling Phenomenon of Water Undergoing Phase Change Over Two Heated Cylinders in Tandem Arrangement', published in, International Journal of Modern Engineering Research (IJMER), Volume.8, Issue 12, December -2018.

5. 'Design and Structural Analysis of Main Landing Gear for Lockheed T-33 Jet Trainer Aircraft" published in, International Journal of Engineering Research and Advanced Technology (IJERAT), Volume.4, Issue 8, August - 2018.
6. 'Numerical Investigation Of Flow And Temperature Characteristics Enhancement In Tube annular Combustor', published in International Journal of Engineering Sciences & Research Technology, Vol. 5, No. 3, pp. 151-156, 2016.
7. 'Numerical Analysis of Combustor Flame Tube cooling', published in International Journal of Science, Engineering and Technology Research, Volume 5, Issue 7, pp. 2366-2370, 2016.
8. 'Study on Mechanical & Tribological Properties of Al7075 / Zircon Sand / Al2O3 Hybrid Composite', published in the International Journal of Emerging Trends in Engineering and Development, Issue 5, Vol. 4, pp.524-530, 2015.
9. 'Study on Mechanical & Tribological Properties of AL 6063 / Tungsten Carbide / Fly Ash Hybrid Composite', published in the International Journal of Emerging Trends in Engineering and Development, Issue 5, Vol. 4, pp. 531-540, 2015.
10. 'Mechanical and Tribological properties of As-cast Al6061-Tungsten carbide metal matrix composites', published in Material Science Research India, Vol. 7(2), 355-368, 2010.

### Conference Publications

1. "Study of effect of rotational rate of a cylinder on the volume fraction of vapor formed during nucleate boiling phenomenon of water", "ISBN- 978-93-92403-23-1", Joint Conference of ICTACEM 2021, APCATS 2021, AJSAE 2021 and AeSI 2021, IIT-KGP, 20-22 Dec, 2021.
2. Presented in All India Seminar on "Effect of Freely Rotating Cylinder Mounted near the Trailing Edge of the Wing for Boundary Layer Separation Delay", in Engineering Insight into Design and Testing of Aircraft Engine Components, sponsored and organized by Institution of Engineers (India), on 19 th Sept 2018.
3. Presented in 8th NCWE on "Numerical Simulation of Flow Around Two Heated Circular Cylinders in Tandem Arrangement", ISBN-978-93-5268-181-5, organized by IIT, BHU, 16-17 Dec 2016.
4. Presented in Engineering Insight into Design and Testing of Aircraft Engine Components, on "Effect of Freely Rotating Cylinder Mounted near the Trailing Edge of the Wing for Boundary Layer Separation Delay", sponsored and organized by Institution of Engineers (India), on 19 th Sept 2018.
5. Organized national conference on "Academic and Industrial Research in Mechanical and Aeronautical Engineering", Indian Society of Aeronautical Engineers in Tirunelveli, 4th March 2017.
6. Participated in the VTU International CANEUS Symposium on Aerospace & Energy Sectors 'VICAS 2013' organized by VTU Belgaum region.
7. Won the best technical paper presentation award in State level student symposium 'README-10' organized by Shayadri College of Engineering, Mangalore, in 2010.
8. Presented in National conference on "Role of Process Modelling in production of Quality Castings" in Advanced Forming Technologies, AFT-10 organized by R.V. College of Engineering, Bangalore, in 2010.
9. Presented in National level student symposium on "Tribological Characteristics of Aluminum Matrix Composites with Solid Lubricant Particulate Reinforcement" in MECHFUSION-10 organized by Don Bosco Institute of Technology, Bangalore, in 2010.
10. Participated in the National Workshop on 'Emerging trends in modern Casting methods' organized by AFTC in Association with International Institute of Information Technology, Bangalore, 2007.

### Achievements/Awards

1. Member of **Board of Examinations** for VTU from 2021 – till date.
2. Winning **Best New Entry** for the University's **RAKSHAK** entry in the Undergraduate category in the **33rd Annual AHS Student Design Competition – Air Launched Unmanned Disaster Relief Delivery Vehicle - sponsored by Bell Helicopter, Textron**.
3. Won **First Place in south zone "Boeing –IIT National Aeromodelling Competition"** -National Programming League held at the Indian Institute of Technology, Madras (IITM), 2016.
4. **Won the National Level Quiz** on "Fluid Mechanics" organized by the Department of Civil Engineering, K L Deemed to be University, Guntur, Andhra Pradesh.
5. **Won a 85% scholarship** for the **Certified Design Thinking Master Practitioner Program**, by scoring well in the quiz on Design Thinking.
6. **GATE (Mech.)** qualified in 2010.