Name: Dr. T. SRINIVASA RAO Designation: Professor & Head

Department: Automobile Engineering Mail I'd: srinivasarao_t@vnrvjiet.in



Experience (in years): Teaching: 26 Years Research: 10 Years Others(if any, specify): 1 Year Industry

1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	B.Tech.	1991	Mechanical Engineering
2	M.Tech.	1994	Heat Power (R&AC)
3	Ph.D.	2016	Mechanical Engineering

2. Teaching and Learning:

- 2.1. Teaching Interests: Thermodynamics, Thermal Engineering, Fluid Mechanics, Hydraulic machinery, Heat Transfer, Power Plant Engineering, Refrigeration & Air Conditioning, Engineering Graphics.
- 2.2. Novel Teaching & Learning Techniques adopted: WIT&WIL, blended learning
- 2.3. Involvement in curriculum updating / Design:
 - i.Member BoS
 - ii. Supporting students to learn by practice: Automotive Engines, Design and Fabrication of Prototypes for Various competitions organised by SAE.
- iii.Guiding B.Tech. Projects and M.Tech./Ph.D.: Design and Fabrication of Electric Microcar using Hub Motors.
- iv. Projects that can be pursued in various domains:

*Overall Research Objectives:

- Broad Objective: Thermal Behavior of Composites, Multi Phase Flows.
- Scope of work: Effect of Imperfections on the Properties of Composites, Characterisation of Multi Phase Flows.
- Methods: FEA, CFD.

3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: Mentoring of students, Net surfing for latest updates.
- 3.2. CCA/ECA Organized: SINTILLASHUNZ (A National Level Cultural Fest of VNR VJIET).
- 3.3. CCA/ECA participated: Chairman, ECA/CCA Committee, VNRNJIET.
- 3.4. Counseling and Mentoring Activity: Advisor/Mentor for Automobile Engineering students.
- 3.5. Committees involved in:

Department level:

- Department Academic Committee
- Department Development Committee
- Department Project Review Committee
- BOS(Mechanical Engineering)

Institute Level:

- Chairman ECA/CCA
- Member– Anti-ragging Committee
- Member Grievance Redressal Committee
- Member Disciplinary Committee
- Member-Institute Academic Committee

4. Conference / Workshop / Seminar / Guest Lectures :

4.1 Conducted:

- National Level Paper Contest (TECHNOFEST 2003), Conducted at V R S E C, Vijayawada on 18th Dec. 2003.
- One-day National Conference on "Recent Trends in Quality in Manufacturing and Service Organizations" in Mechanical Engineering Department, V R S E C, on 1st Nov. 1999.
- Two-day workshop on "Recent Trends in Foundry and Welding Technologies", in Mechanical Engineering Department, V R S E C, during 30-31 October 1998.
- Technological Advancements in Mechanical Engineering (TAME-2005), A National conference organized by SNIST, during 2-3 December 2005.
- Short Term Course on Computational Fluid Dynamics Organized by the Department of Mechanical Engineering, VNR VJIET during November 27th 29th, 2006.
- Three day National Conference on "Advances in Manufacturing & Industrial Engineering (NCOAIMAIE 2007) Organized by the Department of Mechanical Engineering, VNR VJIET, during 12-14 July 2007.
- Three day Workshop on "Alternative Fuels and Power Trains" Organized by the Department of Automobile Engineering, VNR VJIET, during 4-6 Dec 2014.
- Three day Workshop on "Recent Trends and Research Opportunities in Manufacturing Processes (RTROMP 16)" organized by the Department of Automobile Engineering, VNR VJIET, during 9-11 March 2016.

4.2 Attended:

- Attended ISTE Short term program on "New Trends in Refrigeration" held at during 16-30 June 1996.
- Attended ISTE Short term program on "Advanced Computational Methods in Thermal Engineering" held at NIT, Warangal, during 15-27 Jan 2004.
- Attended a National Seminar on "Restructuring of technical education system for better efficiency and effectiveness", conducted by ISTE Chapter, V.R. Siddhartha Engineering College, Vijayawada during 5-6 Dec., 1997.
- Attended a one-day workshop on "ISO 9000 QUALITY SYSTEMS", organized by Mechanical Engineering Department, V.R. Siddhartha Engineering College on 20th Feb, 1997.
- National Seminar on "Handling, Processing and Preservation of Fruits and Vegetables" conducted by Mechanical Engineering Department, V R Siddhartha Engineering College, January 1996.
- Short Course on FRP Composites organized by IIT Hyderabad during 10-11 July 2014

5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures:
- 5.2. Articles/Chapters published in Books:
- 5.3. Books published as single author or as editor:
- 5.4. Projects Guided:
 - a) UG: Guided thirty B.Tech Projects. b) PG:
- 5.5. Research Interests: Thermal behaviour of composites, Multi Phase Flows.
- 5.6. Ph.Dstudents:
 - a) Enrolled : one NDF scholar b) Submitted: c) Awarded:

5.7. Papers published in reviewed journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Effect of Submergence and Air flow Rate On The Performance	International Journal of	ISSN 0974 –231X	0.321	International

	of Air Lift Pump- An Experimental Investigation	Mechanical & Automobile Engineering.			
2	Consistency of electrical analogy approach in the prediction of through thickness thermal conductivity of fiber reinforced plastic (FRP) composites with orientation of the square unit cell	International Journal of Physical Sciences	ISSN: 1992 – 1950 Volume: 10(6)	0.54	International
3	Development of Range Extended - Solar Power Assisted Electric Vehicle	SAE, 2015- 26-0111, 2015	doi:10.4271/2015- 26-0111	SJR H Index:	International
4	Enhancement of performance and emission characteristics of SI engine using Multi ground spark plug using alcohol fuel blends	SAE Technical Paper	2019-28-0154	SJR H Index:	International
5	Design considerations and Analysis of Electric Microcar for cities	SAE Technical Paper	2019-28-0161	SJR H Index:	International
6	Development and Testing of Electric Microcar for Indian cities	SAE Technical Paper	2019-28-0008	SJR H Index: 40	International
7	Traverse thermal conductivity of hollow fiber composites.	International Journal of Engineering Technology Science and Research (IJETSR)	Vol 5, issue 5	2.120	International

5.8. Papers presented at National / International Conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Characterization of two phase flow in horizontal pipe	National conference on technological advancements in mechanical engineering	National	03-12- 2005
2	Design and experimental investigation of Air Lift Pump	51 st Congress of ISTAM (An International meet)	International	18-21 December 2006.
3	Micromechanical Prediction of Thermal Stresses at Fiber- Matrix Interface of Boron- Epoxy Composite	Team-Tech 2007	International	4 - 6 October 2007
4	Experimental Studies on Airlift Loop	The Indian Socity of Theoretical and Applied Mechanics	International	27-30 December 2018
5	Finite Element Models for Prediction of Transverse	International Conference on Mechanics of Composites (MECHCOMP2014)	International	8-12 June 2014

	Thermal Conductivity Based on			
	Electrical Analogy			
6	Comparative Study of Different Approaches in the Prediction of Transverse Thermal Conductivity	3 rd International Conference on Materials Processing and Characterisation (ICMPC 2014).	International	8-9 March 2014
7	Development Of Range Extended-Solar Power Assisted Electric Vehicle	SAE Conference	SAE Conference	14 Jan 2015
8	Consistency in Electrical Analogy Approach With Respect to Thermal Conductivity Mismatch in FRP Composites	4 th International Conference on Materials Processing and Characterisation (ICMPC 2015).	International	14-15 March 2015
9	Enhancement of Lift-Drag characteristics of NACA 0012	7th International Conference on Materials Processing and Characterisation (ICMPC 2015).	International	2017
10	Nanostructures as high absorption energy materials-A review	Advances in Sustainable Technologies (ICAST - 2020)	International	2020

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
5 10 0	Consultancy Projects:				
S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. Awards / Honors received:

7. Motto: Good placement to the students, Students to pursue higher studies in top ranked universities in the world, NBA accreditation to the department.