## Name : Dr. G.RAGHU BABU

## B.E., M.Tech., Ph.D, LMISTE, LMIWS, LMIIW, MIE

Designation: Professor

Department: Mechanical Engineering

Mail.I.D: raghubabu\_g@vnrvjiet.in

Experience (in years): Teaching: 21 Research: 6

1. Educational / Technical qualifications:

Others (If any, Specify):

I. E	1. Educational / Technical quantications.						
S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization				
1	B.E.	1999	Mechanical Engineering				
2	M.Tech	2001	Computer Integrated Manufacturing				
3	Ph.D	2011	Manufacturing Engineering				

- 2. Teaching and Learning:
- 2.1. Teaching Interests:

Additive manufacturing, Rapid prototyping, CAD/CAM, Robotics, Manufacturing Automation, Intelligent Manufacturing Systems, Advances in CNC Technologies, Computer Aided Manufacturing, Metallurgy & Material Science and Instrumentation & Control systems.

- 2.2. Novel Teaching & Learning Techniques adopted:
  - Wipro Mission 10X High Impact Teaching Skills
  - WIT & WILL
  - POGIL
- 2.3. Involvement in curriculum updating / Design:
  - Member Curriculum and Syllabus review committee
  - Member Choice Based Credit System (CBCS)
- 3. Co-curricular and Extra-Curricular Activities
- 3.1. Interests and Hobbies:
  - To promote work efficiency and good attitude towards smart working in Educational institutes. Book Reading and Swimming
- 3.2. CCA/ECA Organized:
  - Coordinator, Faculty Development Programme (FDP) on "MasterCAM and CIMCO DNC" from 15<sup>th</sup> May to 17th May, 2022. Venue: UG CAD Lab D-320, VNRVJIET.
  - Coordinator, Faculty Development Programme (FDP) on "MasterCAM and CIMCO DNC" from 01<sup>st</sup> April to 05<sup>th</sup> April, 2019. Venue: UG CAD Lab D-320, VNRVJIET.
  - Chief-Coordinator, National Workshop on "Geometric Modeling using CATIA V5 R18 A Practical Approach" for Academicians, industry personnel and B.Tech. Students, during September, 2008. Venue: CAD/CAM Laboratory, VNRVJIET.
- 3.3. CCA/ECA participated:
  - One week training programme "Mission 10X" at JNTU, Hyderabad, in 2008.
  - One Day Awareness Workshop on Outcome based Education and Accreditation by NBA at JNTU, Hyderabad, 14 September, 2015.
- 3.4. Counseling and Mentoring Activity:
  - Conducted Counseling sessions for B.Tech Mechanical Engineering Students
  - Conducted class review meetings with student representatives.
- 3.5. Committees involved in:
  - Department level:

Convener – BOS in Mechnaical Engineering



Member – Curriculum and Syllabus review committee Member – Department Development Committee

- Faculty Coordinator M.Tech (CAD/CAM)
- Institute Level: Faculty Coordinator- PG NBA Faculty Coordinator- Classrooms of Dept. of Mech. Engg.
- 4. Conference / Workshop / Seminar / Guest Lectures:
- 4.1 Conducted: 07
- 4.2 Attended: 30
- 5. Academic Contribution and Research & Consultancy:
- 5.1. Invited Lectures: 01
- 5.2. Research papers reviewed for National and International Journals: 26
- 5.3. Articles / Chapters published in Books: NIL
- 5.4. Books published as single author or as editor: 01
- 5.5. Projects Guided:

a) UG:35 b) PG: 20

5.6. Research Interests: Additive Manufacturing, Rapid Prototyping, CAD/CAM, CIM, Robotics, FMS and FSW.

5.7. Ph.D students:

a) Enrolled: NIL b) Submitted: NIL

c) Awarded: NIL

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	An experimental study on the effect of welding parameters on mechanical and microstructural properties of AA 6082- T6 friction stir welded butt joints	Manufacturing Technology & Research - an International Journal, Vol.4, No.3&4, 2008, pp.61-67.	2250-0553		International
2	Effect of Welding Parameters on Mechanical and Micro structural Properties of AA 6082-T6 Friction Stir Welded Butt Joints	International Journal of Manufacturing Science and Technology, 2(2), pp. 217- 227.	0973-5496		International
3	An Experimental study on the Effect of Welding Parameters on Mechanical and Micro structural Properties of AA 6082-T6 Friction Stir Welded Butt Joints	ARPN Journal of Engineering & Applied Sciences, 3(5), pp. 68-74.	1819-6608	0.86	International
4	Studies on friction stir	International	2005-4238		International

5	welded aluminium alloy – roughness and macro/microscopic perspective Microstructure, tool design and mechanical properties evolution of friction stir welded aluminium alloy	Journal of Advances in Science and Technology, Vol.4, No.1, 2012. i-manager's journal on future engineering and technology, Vol.5, No.2, pp.	0973-2632		National
6	Integration of cad/ cam softwares for manufacture of mechanical components	55-63. Jan 2010 International Journal for Research in Engineering Application & Management (IJREAM) Volume - 06, Issue - 03	2454-9150	6.466	International
7	Water splash pattern of formula 1 Intermediate tyre: a review on how tread depth affects hydroplaning	International journal of mechanical and production engineering Research and development (ijmperd) Vol - 10, issue - 3; edition: jun2020	Issn (online): 2249-8001; issn (print): 2249-6890	Impact factor(jcc) (2019): 8.8746	International
8	Prediction of Mechanical Properties of Steel using Data Science Techniques	International Journal of Recent Technology and Engineering (IJRTE)	ISSN: 2277-3878, Volume-8 Issue-3, September 2019		International
9	A review on additive manufacturing and topology optimization process for weight reduction studies in various industrial aplications	Materials today proceedings (Science Direct) in Elsevier Journal	July 2022	0.576	International

5.8. Papers presented at National / International Conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Microstructure and mechanical properties characterization of friction stir AA6082 aluminium alloy weldments	International Conference on Advanced Manufacturing and Automation, INCAMA- 2009, Kalasalingam University, Tamilnadu, India.	International	26-28, March 2009,
2	Experimental investigation of influence of process parameters on tensile strength of Friction stir welded 6082 aluminium alloy joints	3 <sup>rd</sup> International and 24 <sup>th</sup> All India Manufacturing Technology, Design and research Conference, AIMTDR-2010, Andhra University College of Engineering (A), Visakhapatnam, India.		13-15, December 2010,
3	Microstructure and mechanical properties characterization of friction stir AA6082 aluminium alloy weldments	National Conference on Sustainability and social comfort – strategizing design and manufacturing, VNRVJIET, Hyderabad, India.	National	19-20, January 2009,
4	Characterization of mechanical properties, tool design and study of microstructures of friction stir welded aluminium alloy	National Conference on Advances in Mechanical Engineering (AIM Engg- 2009), Manipal Institute of Technology, Manipal, Karnataka, India.	National	4-5, December, 2009,
5	Design and Development of a Pick and Place Robot in a Library	National Conference on Advancements and Innovations in Engineering, Technology & Management (AIETM- 2015), Joginpally B. R. Engineering College, Hyderabad, Telangana, India	National	4-5, Spetember, 2015
6	Experimental Investigation of Fused Deposition Modeling process for improvement of dimensional accuracy of ABS and PLA parts	14 <sup>th</sup> Global Congress on Manufacturing & Management, Brisbane, Australia.	International	5-7, December, 2018

7 Modified Perturb & Observe algorithm for improving conversion efficiency of Photovoltaic Module	International e-conference on "Challenges and opportunities in renewable energy, smart systems and E-mobility	International	30,31 <sup>st</sup> July 2020	r
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## 5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing /
					Completed
					<u> </u>
1	Development of a	SERB/DST	36	Rs. 23,51,570/-	Ongoing
	Tool to Predict		MONTHS		
	Mechanical				
	Properties of Steel				
	by exploring Data				
	Science				
	Techniques				

## 5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned	Ongoing /
				Amount	Completed
1	Development of 3D motion system for Automobile Driving Simulators		1 Year	40 Lakhs	Completed

6. Awards / Honors received:

**"The Best Paper Award"** is received for the paper" Characterization of mechanical properties, tool design and study of microstructures of friction stir welded aluminium alloy" in the National Conference on Advances in Mechanical Engineering (AIM Engg – 2009) on December 4<sup>th</sup> & 5<sup>th</sup>, 2009 at Manipal Institute of Technology, Manipal University, Manipal, Karnataka, India.

7. Motto: To become a successful Academician, Researcher and a Mentor.