

DEPARTMENT OF AUTOMOBILE ENGINEERING

FACULTY PROFILE



Name : **Dr. R. VENKATACHALAM**

Present Designation : Professor & Head

Date of Birth : 29.05.1971

Date of Joining : 01.06.2006

Residential Address : 23, Muniappa Nagar 1st Street, Palliapalayam,
Namakkal-638006.

Contact Nos. : Mobile: 9894402958
Email : rvengiiitm@gmail.com

Gender : Male

Supervisor Recognition No. : 2120532

Date of joining the present Post : 01.07.2012

I. Particulars of Educational Qualification:

Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
Ph.D.	Mechanical Engineering	2012	Anna University Chennai	Anna University	Y	
M.Tech.	Industrial Tribology	2006	Indian Institute of Technology Madras	Indian Institute of Technology Madras	7.95	First Class
B.E.	Mechanical Engineering	1999	Government College of Engineering Salem	University of Madras	67.5	First Class

Title of Ph.D. Thesis : Experimental and Numerical Investigation on Vibration Responses of Shaft Disc System

Faculty in which Ph.D. was awarded : Mechanical Engineering

Academic Experience as on 03.07.2022:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
K.S.R. College of Engineering	Professor	01-07-2012	Till Date	10	1	03
K.S.R. College of Engineering	Associate Professor	01-07-2010	30-06-2012	2	-	-

K.S.R. College of Engineering	Assistant Professor	01-07-2008	30-06-2010	2	-	-
K.S.R. College of Engineering	Lecturer	01-06-2006	30-06-2008	2	1	-
K.S.Rangasamy College of Technology	Lecturer	03-06-1999	30-05-2006	6	11	27
K.S. Ranagasamy Institute of Technology	Lecturer	29-04-1989	02-06-1999	10	1	4
Total				33	2	4

Publications:

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	S.Jeyaprakasam M. Kathirselvam C.Velmurugan R.Venkatachalam	Experimental Study of Process Parameters on machining Performance in Electro-Discharge machining of 6061Al/Tic/Gr Composites	Surface Review and Letters	29(4)	22500 49-1- 22500 49-12	2022
2.	P. Marisami R. Venkatachalam	Towards optimal toe-clearance in synthesizing polycentric prosthetic knee mechanism	Computer Methods in Biomechanics and Biomedical Engineering	25(6)	656- 667	2021
3.	D. Jagadeesh, R.Venkatachalam , G.Nallakumarasamy	Experimental and numerical study of an overlay composite absorber plate material for a solar air heater	Materials Testing	63(7)	681- 686	2021
4.	P Senthilkumaran, R Venkatachalam K Venkatesh Raja	Vibration Analysis of a multi core sandwich composite beam with cutouts—A critical investigation	Materials Research Express	8 (7)	1-10, 07530 1	2021
5.	R.Venkatachalam G. Saravanan G.Nallakumarasamy	Experimental assessment on the impact of cutouts on a hollow shaft system	Materials Testing	62(11)	1143- 1146	2020
6.	R.Venkatachalam G. Saravanan G.Nallakumarasamy	Effects of cut-outs on the vibrational characteristics of a hollow shaft system	Materials Testing	61(7)	652 - 658	2019
7.	R.Venkatachalam C.Suresh S.Venkatajalapathy K.GobinathVelu P.Sathish Kumar	Experimental investigation on the effect of ceramic coating on the wear resistance of Al6061 substrate	Journal of Materials Research and Technology	8(6)	6125- 6133	2019
8.	S. Jeyaprakasam, R. Venkatachalam C. Velmurugan	Experimental Investigations on the Influence of Tic/Graphite Reinforcement in Wear Behavior of Al 6061hybrid Composites	Surface Review and Letters	26(4)	18501 73(1) – (11)	2019
9.	P. ManuneethiArasu, A. Karthikayan, R. Venkatachalam	Mechanical and thermal behavior of hybrid glass/jute fiber reinforced	Polimery	64	504- 508	2019

		composites with epoxy/polyester resin				
10.	P. Manuneethi Arasu, A. Karthikeyan, R. Venkatachalam , V. Krishnaraj	Investigation on impact properties for glass fiber, Jute fiber and hybrid glass/jute reinforced Composites manufactured by hand layup and vartm Process for automobile application	Journal of the Balkan Tribological Association	25(2)	402–412	2019
11.	G. Saravanan, R. Venkatachalam , G. Nallakumarasamy	Effects of cut-outs on the vibrational characteristics of a hollow shaft system	Materials Testing	61(7)	652-658	2019
12.	Jagadeesh D Venkatachalam R Nallakumarasamy G	Transient CFD Investigations on Thermal Performance of Solar Air Heater with Hollow Vertical Fins	Thermal Science International Scientific Journal	22(6A21)	2389-2399	2018
13.	Kanakarajan, P Sundaram, S. Kumaravel, A Rajasekar, P Venkatachalam. R	Prediction of Surface Roughness and Wheel Wear of Modern Ceramic Material(Al_2O_3) During Grinding using Multiple Regression Analysis Model	Indian Journal of Engineering and Material Sciences	24	182-186	2017
14.	P. Kanakarajan, S. Sundaram, A. Kumaravel, R. Rajasekar, R. Venkatachalam	Acoustic Emission Testing of the Machining Performance of Sic Grinding Wheel Shaped Al_2O_3 Ceramics	Materials Testing	58	908-912	2016
15.	D. Jagadeesh R. Venkatachalam G. Nallakumarasamy	Characterisation of Banana Fiber – A Review	Journal of Environmental Nano Technology	4	23-26	2015
16.	C. Suresh, R. Venkatachalam , P. Vivek, E. P. Shanmugam	Investigation of Wear Resistance of Ceramic Coated Cylinder and Piston of IC Engine	International Journal of Applied Engineering Research,	10	23905 - 23910	2015
17.	Venkatachalam, R. S. Balasivanandha Prabu	Vibration characteristics of orthotropic shaft-disk system with different constrained damping layers: experimental and numerical study.	The International Journal of Advanced Manufacturing Technology	65	601-610	2013
18.	Venkatachalam, R. S. Balasivanandha Prabu.	Vibration and damping analysis of orthotropic sandwich shaft-disc system using finite element method	International Journal of Mechanics and Materials in Design	8	287-296	2012
19.	Venkatachalam, R. S. Balasivanandha Prabu	An Experimental Investigation on the Vibration Responses of a	Advanced Materials Research	584	391-395	2012

		Mild Steel Sandwich Shaft Disc System				
20.	Venkatachalam, R. , S. Balasivanandha Prabu, K. Venkatesh Raja	“Finite element based investigation on vibrational performance of a sandwich system	Journal of Vibration and Control	18	1284-1290	2011
21.	Venkatachalam, R. , S. Balasivanandha Prabu, K. Venkatesh Raja	Effect of constrained layers on vibrational characteristics of a composite sandwich system—a finite element based critical investigation	International Journal of Mechanics and Materials in Design	7	291-298	2011

Publication Citations: Highest Impact Factor: Lowest Impact Factor:

National Level		International Level		Google Scholar Citations = 85		Patent	
Journals	Conferences	Journals	Conferences	h-index	i10-index	Applied	Granted
	4	21	4	6	2	05	02
Number of Web of Science Indexed Journals				19			
Number of Scopus Indexed Journals				19			
Number of SCI Indexed Journals				21			

Ph.D. Supervisor:

Scholars Completed: 04

Scholars Pursuing: 06

Scholars Applied Now: 02

Patent Details:

Patent Filed: 05

Patent Granted: 02

Details of Program Attended:

S.No.	Name of the Program	Organized by	Duration
1.	Faculty Development Program on Microsoft Azure AI Fundamentals	ICT Academy	13.06.2022 to 18.06.2022
2.	Five Days FDP on “Research Insights in Materials and Manufacturing	Velammal Engineering College, Chennai	13.12.2021 to 17.12.2021
3.	Faculty Development Program conducted in virtual mode by M/S Ashok Leyland Limited.	Ashok Leyland Limited, Chennai	25.10.2021 to 27.10.2021
4.	International Faculty Development Program on Trends in Automotive Technology	Wollo University Kombalcha Institute of Technology, Ethiopia	17.05.2021 to 22.05.2021
5.	Faculty Development Program on Product Design using Fusion 360	ICT Academy	19.04.2021 to 24.04.2021
6.	One week online Certificate Course on Digital Teaching Techniques	ICT Academy	29.06.2020 to 04.07.2020.
7.	One-week International Workshop on Machine Learning (ML) with Python Programming	Sona College of Technology, Salem	09.07.2020 to 16.07.2020
8.	One Week Faculty Development Program on “Challenges in Building Collaborations in Research and Innovation	Dr.M.G.R Educational and Research Institute	04.05.2020 to 09.05.2020
9.			

10.	12 Weeks NPTEL-AICTE FDP IC Engines and Gas Turbines	NPTEL	Jan – Apr 2019
11.	International Conference on Sustainable Materials	K.S. Rangasamy College of Technology, Tiruchengode.	19.03.2019 to 20.03.2019
12.	Faculty Development Programme at Brakes India Limited, Chennai.	Brakes India Limited, Chennai.	04.02.2019 to 06.02.2019
13.	One Week National Level Faculty Development Program on “Innovations in Materials and Manufacturing Processes	VEMU Institute of Technology, Chittoor, Andhra Pradesh.	08.10.2018 to 12.10.2018
14.	NAAC sponsored two day national seminar on Quality improvement through innovative and best practices in teaching learning process	KPR Institute of Engineering and Technology, Coimbatore.	10.02.2017 to 11.02.2017
15.	Two Day Workshop on Advances in Strong Materials & its Application in Mechanical Engineering	Anna University, Chennai	05.02.2010 to 06.02.2010
16.	Workshop on Green Buildings and Energy Conservation Building Code-Challenges and Opportunities	Institute for Road and Transport Technology, Erode.	11.09.2009
17.	A Workshop on Emerging Trends and Technologies using Solid Works	CADD Centre	09.09.2009
18.	Workshop on Nanomaterials Characterization and their Process Applications	National Institute of Technology, Trichy.	28.02.2008
19.	International Seminar on Information and Communication Technology in Education	National Institute of Technical Teachers Training and Research, Chennai.	26.12.2007
20.	Two Day Workshop on Design of Experiments for Engineers and Researchers	National Institute of Technology, Trichy.	19.12.2007 to 20.12.2007
21.	Short Term Course on Vibration and Noise for Practicing Engineers	Anna University, Chennai	28.09.2007 to 29.09.2007
22.	Two Day Workshop on Tribology	Government College of Engineering, Salem.	07.02.2007 to 08.02.2007
23.	Short Term Course on Finite Element Analysis	J J College of Engineering and Technology, Trichy.	06.10.2006 to 07.10.2006

Details of Program as Resource Person:

S.No.	Name of the Program	Organized by	Duration
1.	AICTE Sponsored Six Days STTP on Finite Element Method for Engineering Applications	Sri Sairam Engineering College, Chennai	05.10.2020 to 10.10.2020
2.	ATAL FDP on Design Thinking	Muthayammal Engineering College, Namakkal.	21.09.2020 to 25.09.2020
3.	National level two-day workshop on Material	Sona College of Technology, Salem	13.03.2020 to 14.03.2020

	Informatics and Soft Computing Applications using Machine Learning and FEA		
4.	SERB Sponsored National Symposium on Challenges and Opportunities in Future Automobile-Jury	Muthayammal Engineering College, Namakkal.	16.11.2019 to 17.11.2019
5.	International Conference on Sustainable Materials-Key Note Speaker	K.S.R. College of Engineering, Namakkal.	19.03.2019 to 20.03.2019
6.	CSIR and HRDG Sponsored National Level Workshop on Energy Generation from Municipal Solid Waste by Innovative Technologies	Kongunadu College of Engineering and Technology, Namakkal.	10.04.2017 to 11.04.2017

Courses Taught:

1. Fluid Mechanics and Machinery
2. Automotive Engines
3. Automotive Chassis
4. Vehicle Body Engineering
5. Automotive Fuels and Lubricants
6. Automotive Pollution and Control
7. Finite Element Analysis
8. Total Quality Management
9. Professional Ethics
10. Engineering Graphics

Extension Activities and Interaction with Outside World:

1. Chairman for Anna University Automobile Paper Valuation Board from 2015 onwards
2. Result Pass Board Member of Automobile Engineering, Anna University.
3. Auditor for Question Papers of M. Kumarasamy College of Engineering (Autonomous), Karur, from 2014 onwards.
4. Question Papers for the Universities and Autonomous Engineering Colleges are being set from the year 2010 onwards. The List is given Below.
 1. Anna University, Chennai.
 2. Karpagam University, Coimbatore.
 3. Noorul Islam University, Nagarkovil.
 4. M.Kumarasamy College of Engineering, Karur.
 5. Kumaraguru College of Technology, Coimbatore.
 6. Bannariamman Institute of Technology, Sathiyamangalam.
 7. Nandha Engineering College, Erode.
 8. Erode Sengunthar Engineering College, Erode.
 9. Mahendra Engineering College, Mallasamuthram.
 10. Pavai Engineering College, Namakkal.
 11. Muthayammal Engineering College, Rasipuram.
 12. Government College of Engineering, Salem.
 13. Government College of Technology, Coimbatore.
 14. Dr. Mahalingam College of Engineering and Technology, Pollachi.
 15. Hindustan Institute of Engineering and Technology, Coimbatore.

16. Periyar University, Salem.
 17. SNS College of Technology, Coimbatore.
5. Reviewer in the following International Journals
1. Archive of Mechanical Engineering
 2. Journal of Mechanical Science and Technology
 3. Microelectronics International
 4. Journal of the Brazilian Society of Mechanical Sciences and Engineering
 5. International Journal of Minerals, Metallurgy and Materials
 6. International Journal of Robust and Nonlinear Control
 7. International Journal of Advanced Manufacturing Technology
 8. Journal of Vibration and Control
 9. Nonlinear Dynamics
 10. Part C: Journal of Mechanical Engineering Science

Funds Received from:

- | | |
|---|-----------------------|
| 1. AICTE-PMKVY-TI 2017-2018 = Sanctioned: 12,45,250/- | Received: 7,47,150/- |
| 2. AICTE-PMKVY-TI 2018-2019 = Sanctioned: 62,38,063/- | Received: 18,71,420/- |

Consultancy Work:

1. Car Crash Analysis : Rs. 2,10,500
2. Truck Crash Test Analysis : Rs. 2,55,500

Institution Level Responsibilities:

1. Head of the Department of Automobile Engineering
2. Chairman/Board of Studies/Automobile Engineering
3. Result Pass Board Member
4. Convener Anti-Ragging Committee
5. Executive Committee Member of PALS-IITM
6. College ID card coordinator
7. College Transport coordinator
8. Member of Academic Council
9. Member of Governing Council

Awards: Best Faculty Award by Nature Science Foundation (NSF) 2020-2021

Professional Membership:

1. Life member in Institution of Engineers India (IEI) - A 530080-1
2. Life Member in Indian Society for Technical Education (ISTE) - LM 165312
3. Life Member in International Association of Engineers (IAENG) - 220408

Signature of Faculty



Dr. R. VENKATACHALAM