Faculty Profile

Faculty Photo

Dr. Sridhar R is presently working as Associate Professor in Department of Mechanical Engineering, RV College of Engineering affiliated to Visveswaraya Technological University since 2004. He received his Ph.D. degree in Mechanical Engineering from Kuvempu University in 2013.

Dr. Sridhar is Head of 'RV-Mercedes Benz Centre for Automotive Mechatronics'. He has undergone intensive training on Automotive Mechatronics at Mercedes Benz Academy at Mercedes Benz India Ltd., Pune in the year 2017. He is also the Lead Faculty for the globally certified Post Graduation diploma in 'Advanced Diploma in Automotive Mechatronics (ADAM)' conducted at RVCE since 2018. The centre has been recognized as the best practicing institute in the country for the year 2022-23 leading to the establishment of State-Of-The-art Facility for EV Technology funded by MBR&D India. Additionally, He is having more than a decade experience in the field of polymer nanocomposites. His competency lies in the area of processing of Polymer nanocomposites and thin films for sensor applications.

He is constantly engaged in industrial consultancy, innovative projects leading to publications in the field of Industry 4.0, Automotive Mechatronics and advanced materials. He has published more than 30 research articles in peer reviewed journals such as Elseveir, Sage, Springer, Wiley publications to name a few. He is a lifetime member of International Society for Research and Development (ISRD), editor member of International Journal of Material Sciences and Engineering and reviewer of original articles for Sage publications. He has executed several research projects funded by UGC, AICTE and industrial consultancy. He is actively involved in innovation of technologies relevant to societal needs. His latest invention Aerial Work Platform (AWP) has been awarded Intellectual Property Rights in the year 2023 and three more inventions are published in public domainand curriculum development.

Personal Information

• Name: Sridhar R

• **Designation:** Associate Professor

• **Department:** Department of Mechanical Engineering

• **Email:** sridharr@rvce.edu.in

• **Phone:** [Office Phone]

Google Scholar / LinkedIn/ ORCID:

Google Scholar: https://scholar.google.com/citations?hl=en&user=vtvdtV4AAAAJ

ORCID: https://www.scopus.com/redirect.uri?url=https://orcid.org/0000-0003-2131-

2129&authorId=57189034887&origin=AuthorProfile&orcId=0000-0003-2131-

2129&category=orcidLink

LinkedIn: https://www.linkedin.com/in/dr-sridhar-r-28833a109/

Domain of Expertise

Research Focus

• **Primary Area:** Polymer Nanocomposites and Automotive Mechatronics

Academic Qualifications

- **Ph.D.**: Mechanical Engineering, Kuvempu University-Shioga, 2013 (Development & Dispersed Polymer Composites For
- Naval Applications,)
- M.Tech: Production Engineering & Systems Technology Kuvempu University, 2004
- **B.E.**: Mechanical Engineering, Malnad College of Engineering, Mysore University, 1999

Professional Experience

Organization	Designation	From	Till date
RV College of Engineering	Associate Professor	2013	Present
	Assistant Professor	11/09/2004	2013
Concorde Steels Pvt. Ltd.	Production Engineer	Aug 2001	Aug 2002
Hindustan Aeronautics Ltd.		1148 2001	1148 2002
Concorde Steels Pvt. Ltd.	Quality engineer	2000	2001

Publications & Patents

Journal Publications

No.	Title	Year	Publisher
1.	Appraising the microstructure and electrical conductivity characteristics of polyaniline-coated natural fiber composites	2024	Springer
2.	Development of Polyaniline-Coated Natural Fiber Composites for Enhanced Thermal Properties	2023	Springer
3.	Design and Analysis of Medium Utility Aircraft Landing Gear	2022	Electrochemical Society
4.	Electrospun PVDF/Cloisite-30B and PVDF/BaTio3/graphene nanofiber mats for development of nanogenerators	2022	Elsevier
5.	Design and synthesis of PVDF-cloisite-30B nanocomposite fibers for energy harvesting applications	2021	Elsevier
6.	Miscibility studies of plastic-mimetic polypeptide with hydroxypropylmethylcellulose blends and generation of non- woven fabrics	2019	Elsevier
7.	Antibacterial and Flame Retardant Properties of Ag- MgO/Nylon 6 Electrospun Nanofibers for Protective Applications	2018	Sage
8.	Development of Electrospinning System for Synthesis of Polyvinylpyrrolidone Thin Films for Sensor Applications	2018	Elsevier

9.	Dielectric and magnetoelectric properties of Li-Mg ferrite:	2017	
10	Barium titanate composites	2017	Do Consertonia
10.	Effect of screw configuration on the dispersion of nanofillers in thermoset polymers		De Gruyter's
11.	Development of polyvinyl acetate thin films by electrospinning for sensor applications	2017	Springer
12.	Combined influence of organo-modified Indian bentonite nanoclay and fire retardants on thermal and fire behavior of vinylester	2016	Sage
13.	Moisture Diffusion Through Hexadecyltrimethylammonium Bromide - Indian Bentonite/vinylester Nanocomposites in Artificial Seawater and Demineralized Water	2015	Vinyl & Additive Technology
14.	Effect of nanoclay addition on the erosion wear of glass/vinylester composites using Taguchi's Orthogonal Array Technique	2014	Elsevier
15.	Moisture Diffusion Through Nanoclay/Vinylester Processed Using Twin-Screw Extrusion	2014	Vinyl & Additive Technology
16.	Organomodification of Indian bentonite clay and its influence on fire behavior of nanoclay/vinylester Composites	2014	Sage
17.	Mechanical behavior of organo-modified Indian bentonite nanoclay fiber-reinforced plastic nanocomposites	2013	Springer
18.	Effect of Alkaline Environment on the Properties of Nanoclay/Vinylester/Glass Nanocomposites	2012	Materials Science & Research
19.	Parametric study of twin screw extrusion for dispersing MMT in vinylester using orthogonal array technique and grey relational analysis	2012	Elsevier
20.	The influence of montmorillonite on mechanical, thermal and fire retardation properties of vinylester/glass composites	2012	Sage
21.	Mechanical, thermal and fire retardation behaviours of nanoclay/vinylester nanocomposites	2011	Materials Science & Research
22.	Synthesis and characterization of organomodified Na-MMT using cation and anion Surfactants	2011	Springer
23.	Interface driven optimisation of springback in stretch bending of autobody panels	2009	Computational Materials Science and Surface Engineering

Professional Trainings/Seminars/workshops/conferences

No.	Nature of program	Organising	Place	Duration
		agency		
1.	FDP on FEA using ANSYS	Eleation	Online	Dec 2021-Feb 2022
2.	Expert talk on Achieving Operational Excellence by Digital Transformation of Supply Chain		RVCE	21-26 Jun 2021

		T		
3.	Delivered an expert talk on Automotive Mechatroics	Bangalore Chamber of Industry and Commerce (BCIC)		13 Nov 2021
4.	Delivered an expert talk on Advanced Fuel Supply Systems in Performance Vehicles	VKIT, Bangalore		4 Aug 2021
5.	Delivered an expert talk on Advances in Automotive Mechatronics	The Oxford College of Engg., Bangalore		8 Jul 2021
6.	Delivered an expert talk on Achieving Operational Excellence through Digital Transformation of Supply Chain	ATAL FDP	Virtual mode	24 Jul 2021
7.	FDP Mechanical Behaviour of Advanced Materials and Its Scope for Engineering Applications	Sri Venkateswara College of Engineering, Sri Perambadur		10-14 Jun 2020
8.	Organised webinar on Advances in Automotive Mechatronics	RV-MB Centre for Automotive Mechatronics		27-31 Jul 2020
9.	Webinar on H&P using Automation studio	Automation Studio		6 Oct 2020
10.	Training Fuel Cell Technologies for Hybrid and Electric Vehicles.	Maharaj Vijayaram Gajapathi Raj College of Engineering		17-22 Aug 2020
11.	Faculty training for Advanced Diploma in Automotive Mechatronics (ADAM)	Mercedes Benz Academy	MBIL, Pune	2 May – 30 Jul 2018
12.	TATA volunteering Week Program			2017-18
13.	Train the Trainer program	TATA Technologies		5–6 Aug 2017
14.	Advanced Research Pedagogy Development Programme	International Academy for Competency Enhancement		27–28 2017
15.	Training on Advanced Pedagogy		RVCE	28 Dec 2015 – 5 Jan 2016
16.	Workshop on Polymer and Polymer Nano- composites Processing	RVCE		27 Jun – 2 Jul 2016
17.	Conference on Smart Engg. Materials Conference on Large Area Flexible	-		20-22 Oct 2016 20-22 Dec
18.	Microelectronics			2016
19.	Conference on Advances in Manufacturing and Materials Engineering	NITK, Surathkal	NITK	27 – 29 Mar 2014
20.	Conference on Advances in Design, Manufacturing and Management	RVCE		30 May 2014
21.	Organized a workshop on SEM			8–10 Apr 2013
22.	FDP ob Training on Advanced Materials characterization and Analyses	TEQIP-RVCE	RVCE	29 Jul – 2 Aug 2013
23.	Conference on Advances in Design, Manufacturing and Management	RVCE		23 May 2013
24.	Participated in a FDP Program	Cognizant Technology Services	CTS	27-28 Jun 2012
25.	Conference on Nano science, Nano Engg., & Applications	Centre for Nano Science & Technology, Hyderabad	JNTU	27-28 Apr 2012

26.	Conference on Impact of Chemical Biology on Society	Kuvempu Univ.	Kuvem pu Univ.	26 – 27 Apr 2012
27.	Workshop on Management Practices for Business Excellence and Sustainability	IEM	RVCE	8-10 Aug 2012
28.	Workshop on Noise, Vibration & Acoustics	ME Dept	RVCE	13 – 14 Dec 2012
29.	Conference on Materials for the Future	Govt. Engg., College, Trichur	GEC, Trichur	23-25 Feb 2011
30.	Conference on Polymer Processing & Characterization	Macro Molecular Science & Engg., Kottayam	Kerala	15-17 Jan 2010
31.	Workshop on Intellectual Property rights	IEM, RVCE	RVCE	30-31 July 2010
32.	Workshop on Particle Characterization Techniques	Malvern Aimil	AIMIL	4 Nov 2009
33.	workshop on Particle characterization technique for nano & technical ceramics	Indian Ceremic Society		4 Nov 2009
34.	FDP on Management and Entrepreneurship	IEM, RVCE		29-31 July 2008
35.	Train the Trainers for English Lab Solutions Software	Globarena	RVCE	22- 25Jan 2007
36.	QIP Instructional Design and Delivery	National Institute of Technical Teachers Training & Research		31 July – 5 Aug 2006

Patents

No.	Application Number	Title	Year of publication	Status
1.	Patent No.436273	Tractor Mounted Aerial Work Platform for Arecanut Farming	2017	Granted
2.	202341007982	A Retrofit System for a Vehicle to Convert a Manual Transmission into an Automatic Transmission	2024	Published
3.	202241011A982A	Method and System to Develop motorized vehicle steer by air interface control using an embedded control system	2022	Published
4.	202341007982	Development of Passive Lower Extremity Exoskeleton Stair Climb Assist Device	2024	Published
5.	202341032708	Design and Implementation of Wi-Fi Enabled V2V Communication System	2024	Filed

R & D Grants

		Agency	(INR)		
1.	Thermal, Mechanical, and fire retardation studies of Nanoclay/Carbon Fiber/Vinylester Hybrid composites processed using Screw Extrusion	AICTE	5,50,000/-	2010-12	Completed
2.	Synthesis and characterization of organomodified Nanoclay / thermoset polymer nanocomposites	UGC	9,60,000/-	2012-14	Completed

Consultancy

No.	Title of the project	Sponsoring Agency	Amount (INR)	Period	status
3.	Electrospun Nano-fibres for functional polymer nanocomposites	TEQIP-RVCE	80,000/-	2014-16	Completed
4.	Reliability testing of Raspberry Pi	TE Connectivity	3,00,000/-	2017-18	Completed
5.	Implementation of Machine Learning of GD Machines	Toyota Industries Engine India Pvt. Ltd	1,56,000/-	2021-22	Completed
6.	Study of communication of control units in a FORD EcoSport Vehicle	Ford India, Chennai	11,53,133/-	2021-23	Completed
7.	Modelling of BMS in Hardware in Loop (HIL)	Mercedes- Benz R&D, India	65,00,000/-	2023-24	Ongoing

Training

NO	Academic Year	Number of admissions	Amount (INR)
1.	2018-19	19	19,00,000/-
2.	2019-20	21	26,25,000/-
3.	2020-21	21	26,25,000/-
4.	2022-23	21	26,25,000/-
5.	2023-24	19	23,75000/-
6.	2024-25	35	43,75,000/-
One c	rore sixty-five lakhs t	wenty five thousand only/-	1,65,25,000/-

Conduction of Conference / FDP / Workshop

1. Coordinator for the 8th IEEE CSITSS 7-9	-9 Nov 2024
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2.	AICTE, Funded ATAL 5 day FDP on 'Advances in Modelling,	11 – 16 Dec 2023
	Simulation & Testing of EV Technology'	
3.	6 Week virtual FDP in association with Decibels 'Up-Skilling	29 Apr - 13 May 2023
	in Automotive Technology'	
4.	5 day Virtual FDP in association with Mercedes-Benz India –	27 July – 31 July
	'Advances in Automotive Mechatronics'	2020

Expert talks delivered / External World Connect

	Title	Agency /Institute	Venue	Doto
		Agency/Institute		Date
1.	Delivered an expert talk on CRDI	The Oxford College	Oxford	10 Dec
		of Engg.,	College	2024
		Bangalore	_	
2.	5 th Generation Telematics in Passenger	Polytechnic	Mysore	March
	Cars	Institute		2024
3.	Adaptable Suspension systems	New-Horizon	Bangalore	June
		College		2023
4.	Advanced Fuel Supply Systems	KLE, Belgaum	Belgaum	August
				2022
5.	Achieving Operational Excellence by	ATAL FDP	RVCE	June
	Digital Transformation of Supply Chain			2021
6.	Delivered an expert talk on Automotive	Bangalore	Virtual	Nov 2021
	Mechatronics	Chamber of	mode	
		Industry and		
		Commerce (BCIC)		
7.	Delivered an expert talk on Advanced	VKIT, Bangalore	Virtual	4 Aug
	Fuel Supply Systems in Performance			2021
	Vehicles			
8.	Delivered an expert talk on Advances in	The Oxford College	Virtual	8 July
	Automotive Mechatronics	of Engg.,		2021
		Bangalore		

Professional Memberships

No.	Association Name	Status
1.	Indian Society for Technical Education	
2.	International Association of Engineers	Life Time
3.	International Society for Research & Development	

Research Supervision

• **Ph.D.** (awarded): 02

• **Ph.D.** (Pursuing):01

Professional Roles

• **Editor:** International Journal of Polymer Science & Engineering

Teaching

Core Courses:

- > Automotive Mechatronics
- > Automotive Engineering
- > CAD/CAM
- ➤ Manufacturing Process

Advanced/Lab Courses:Automotive Mechatronics