BIO DATA

Name : **Dr.P.SURESHKUMAR**

Designation : Professor and Head

Department : Mechanical Engineering

Address for Communication : Ramco Institute of Technology

Rajapalayam – 626117, Tamilnadu, India

Email : sureshkumarp@ritrjpm.ac.in

Mobile no. : 9585636217, 6374629128

Google Scholar link: https://scholar.google.co.in/citations?hl=en&user=T12YbPkAAAAJ

Achievement: GATE Qualified, Indo Universal Collaboration of Engineering Education (IUCEE) Certified International Engineering Educator, Anna University Recognized Research Supervisor

1. Educational Qualification

Degree	Branch/Specialization	Institute/University	Year of Passing	Percentage /CGPA/Class
B.E.	Mechanical Engineering	Madurai Kamaraj University	2002	72.45 / First
M.Tech.	Metallurgical and Materials Engineering	IIT Madras, Chennai	2007	8.24/First
Ph.D.	Mechanical Engineering	Anna University, Chennai	2019	-

2. Professional/ Industry Experience

S.No.	Designation	Institute/Organization	Period	
			From	To
1.	Professor	Ramco Institute of Technology, Rajapalayam, Tamilnadu.	01.11.2024	Till date
2.	Associate Professor	Ramco Institute of Technology, Rajapalayam, Tamilnadu.	1.1.2020	31.10.2024
3.	Assistant Professor (Sr.Gr)	Ramco Institute of Technology, Rajapalayam, Tamilnadu.	01.06.2013	31.12.2019
4.	Assistant Professor	Bannari Amman Institute of Technology, Sathyamanagalam	18.05.2009	28.05.2013
5.	Lecturer	Caarmel Engineering College, Kerala	31.12.2007	25.07.2008

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3. **Research Interest:** Mathematical Modelling on Material Processing, Severe Plastic Deformation Process, Composite Materials, High Entropy Alloy, Materials and Design

4. **Publication**

4.1. Journal Publications

1. Sureshkumar P, Gururaj. C, Ashok Kumar.M, 2025, "Formation of Deformation Twin and Sub Grain for Strengthening of CP-Ti through RCSR with Multiple Number of Passes", Malaysian Journal of Chemistry, Vol.27, 3.
2. Borek, W, Linek, T, Tanski, T, Sureshkumar, P. "Influence of the Applied WC/C and CrN + WC/C Coatings on the Surface Protection of X2CrNi18-9 Cavitation Generators" Coatings 2025, Vol.15, 87. https://doi.org/10.3390/coatings15010087. (IF: 2.8), (SCIE Indexed).
3. Ashok Kumar M, Kumaresan Govindasamy, Sureshkumar P, Subramaniyan Chinnasamy, "Thermo-kinetic behavior of closed-loop heat pump dryer with different drying chambers for holy basil leaves drying application: an experiment approach", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2024, Vol.26, 1. https://doi.org/10.1080/15567036.2024.2383853, IF(2.2), (SCIE Indexed).
4. S.M. Muthu, M. Arivarasu, K. Jithesh, M. Vignesh, V. Dhinakaran, P. Suresh Kumar, "Hot Corrosion Studies on HVOF Coated Alloy A-286 in Molten Salt Environment" Arch. Metall. Mater., 2024, Vol.69, 2. https://doi.org/0.24425/amm.2024.149790. IF(0.7), (SCIE Indexed)
5. P. Sureshkumar, L. Ganesan, C. UmaRani, B. Stalin, C. Sasikumar, S Thanga Kasi Rajan , W. Borek, "Effect of strain rate on fractography texture descriptor of AA6063/(Si_3N_4)x/($Cu(NO_3)_2$)y (x=12%, y = 2–6%) composite after multiple ECAP passes: second order statistical texture analysis conjunction with regression analysis" Journal of Materials Research and Technology, 23, March–April 2023, https://doi.org/10.1016/j.jmrt.2023.01.176. IF(6.6), (SCIE Indexed).
6. M. Vetrivel Sezhian, G. Chakravarthi, K.Giridharan, Balasubramaniam Stalin, B. Yokesh Kumar, P. Sureshkumar, J. Vairamuthu, and Ramaswamy Krishnaraj, "Investigation of Friction Stir-Welded B_4C Particles-Reinforced Copper Joint: Mechanical, Fatigue, and Metallurgical Properties", Advances in Materials Science and Engineering, Vol. 2022, Article ID 1667041, https://doi.org/10.1155/2022/1667041 (IF: 2.098), (SCIE indexed).
7. P Sureshkumar, C Sasikumar, S Thanga Kasi Rajan, T Jagadeesha, Natrayan L, M Ravichandran, Dhinakaran Veeman and Wojciech Borek, "Evaluation of mechanical and wear properties of AA6063/(Si_3N_4)6%–12% /(CuN_2O_6)2%–4% composite via PM route and optimization through robust design technique", Materials Research Express, Vol. 9, Number 7, https://doi.org/10.1088/2053- 1591/ac7d41, (IF:2.025), (SCIE indexed).
8. P Sureshkumar, T Jagadeesha, L Natrayan, M Ravichandran, Dhinakaran Veeman, SM Muthu, "Electrochemical corrosion and tribological behaviour of AA6063/Si_3N_4/Cu $(NO_3)_2$ composite processed using single-pass $ECAP_A$ route with 120° die angle", Journal of Materials Research and Technology, Vol.16, 2022, PP: 715- 733, https://doi.org/10.1016/j.jmrt.2021.12.020, (IF: 6.267) (SCIE indexed).

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9. Sambandam Padmanabhan, K. Giridharan , Balasubramaniam Stalin,V. Elango, J. Vairamuthu, P. Sureshkumar, Leta Tesfaye Jule, and Ramaswamy Krishnaraj, "Sustainability and Environmental Impact of Ethanol and Oxyhydrogen Addition on Nanocoated Gasoline Engine", Bioinorganic Chemistry and Applications, Vol. 2022, Article ID 1936415**.**, https://doi.org/10.1155/2022/1936415, (IF: 4.274) (SCIE indexed).
10. K. Giridharan, P. Sevvel, B. Stalin, M. Ravichandran, P. Sureshkumar, "Microstructural Analysis and Mechanical Behaviour of Copper CDA 101/AISI- SAE 1010 Dissimilar Metal Welds Processed by Friction Stir Welding", Materials Research, Vol.25, 2022, , DOI: https://doi.org/10.1590/1980-5373-MR-2021-0430, (IF:1.524) (SCIE indexed).
11. L.Natrayan, M. Ravichandran, Dhinakaran Veeman, P.Sureshkumar, T.Jagadeesha, Wubishet Degife Mammo "Influence of Nanographite on Dry Sliding Wear Behaviour of Novel Encapsulated Squeeze Cast Al-Cu-Mg Metal Matrix Composite Using Artificial Neural Network" Journal of Nanomaterials, 2021, Article ID 4043196, https://doi.org/10.1155/2021/4043196, (IF: 3.791) (SCIE indexed).
12. Dhinakaran Veeman , M. Swapna Sai, P. Sureshkumar , T. Jagadeesha, L. Natrayan , M. Ravichandran , and Wubishet Degife Mammo (2021), " Additive Manufacturing of Biopolymers for Tissue Engineering and Regenerative Medicine: An Overview, Potential Applications, Advancements, and Trends" International Journal of Polymer Science, Vol. 2021, 1-20, Article ID: 4907027, https://doi.org/10.1155/2021/4907027, (IF:2793) (SCIE indexed).
13. Dhinakaran Veeman, M.Varsha Shree, P. Sureshkumar, T. Jagadeesha, L. Natrayan , M. Ravichandran and Prabhu Paramasivam (2021),"Sustainable Development of Carbon Nanocomposites: Synthesis and Classification for Environmental Remediation", Journal of Nanomaterials, Vol. 2021, Article ID: 5840645, https://doi.org/10.1155/2021/5840645, (IF: 3.791) (SCIE indexed).
14. L. Natrayan, M. Ravichandran, Dhinakaran Veeman, P. Sureshkumar, T. Jagadeesha, R.Suryanarayan and Wubishet Degife Mammo (2021), "Enhancement of Mechanical Properties on novel friction stir welded Al-Mg-Zn alloy joints reinforced with nano SiC particles", Journal of Nanomaterials, Vol. 2021, Article ID: 2555525, https://doi.org/10.1155/2021/2555525, (IF: 3.791) (SCIE indexed).
15. H Mohammed Safiur Rahman P Sureshkumar, C Gururaj, M Harrish, R Kaushik Shrinivas, "Microstructure Studies on Natural State of Argentum by Repetitive Corrugation and Straightening", Journal of Green Engineering, Vol.10, No.08, PP: 5516-5529, (Scopus Indexed).
16. Sureshkumar P, Uvaraja V C (2018), "Effect of ceramic and metallic reinforcement on mechanical, corrosion, and tribological behavior of aluminum composite by adopting design of experiment through Taguchi technique", Journal of Tribology, Vol.140, No.5 pp.052301-12. https://doi.org/10.1115/1.4039527. (IF: 1.879) (SCIE indexed).
17. Sureshkumar P, Uvaraja V C, Rajakarunakaran S (2019), "Addition of metallic reinforcement enhanced deformation and properties of ceramic reinforced composite by adapting ECAP with increment number of passes", Material Research Express,Vol.6, No.5 pp.086502-1-15., https://doi.org/10.1088/2053-1591/ab1b82 , (IF: 2.025) (SCIE indexed).
18. Sureshkumar P, Uvaraja V C, Rajakarunakaran S (2019), "Influence of Number of Passes,

Processing Route and Age Hardening on Microstructure, Mechanical and Tribological Properties of ECAPed Aluminium Alloy adapted Design of Experiment through Taguchi Technique", Journal of the Balkan Tribological Association, Vol.25, No.2 pp.260-279. (WoS indexed).

19. Thiyaneshwaran N, Sureshkumar P (2013), "Microstructure, mechanical and wear properties of aluminum 5083 alloy processed by equal channel angular extrusion" Vol.2, pp.17-24. (Scopus Indexed).

4.2. Notable Conference Publications

1. P.Sureshkumar, M.Ashok Kumar, "Formation of Deformation Twin and Sub Grain for Strengthening of CP-Ti through RCSR with Multiple Number of Passes" International Conference on Sustainable Materials and Technologies, ICSMT 2025, Vol.27, Issue No.3.
2. P.Sureshkumar, 2025, "Influence of Rare Elements on the Microstructure, Mechanical and Corrosion Properties of Magnesium Matrix" International Conference on Advancement in Science, Engineering & Management (ICSEM)- 2025, Vidya Vihar Institute of Technology, Bihar.
3. P.Sureahkumar, 2020, ""Corrosion behaviour of copper based composite materials", International Smart Engineering Technologies, Ramco Institute of Technology, Rajapalayam.
4. P.Sureshkumar, T.Selvasundar , S.Rajakarunakaran (2019), "Enhance shear strain distribution and properties of AA6063 by pneumatic operated ECAP with back pressure: Experiment" International Conference on Materials and Manufacturing Methods (3M – 2019), NIT,Tiruchirapalli.
5. P.Sureshkumar and V.C.Uvaraja, (2017) "Enhancing Room Temperature, Mechanical & Tribological properties of hybrid aluminum metal matrix composites by powder metallurgy method" National Conference on Innovations in Engineering, Science & Technology (NCIEST-2017), Ramco Institute of Technology, Rajapalayam.
6. I.Abdulla Shah, M.Abianv Kumar, M.Balaganesan and P.Sureshkumar, (2017) "Investigation of mechanical and tribological properties on a aluminum metal matrix" National Conference on Innovations in Engineering science& Technology (NCIEST-2017), Ramco Institute of Technology, Rajapalayam.
7. P Sureshkumar, N Thiyaneswaren (2015), "Study on Microstructure, Mechanical Properties Enhancement of Aluminum 5083 Alloy processed by ECAE", National Conference an Innovations in Engineering, Sciences & Technology (NCIEST-2015) , Ramco Institute of Technology, Rajapalayam.
8. P.Sureshkumar, C.Kalilasanathan (2007), "Non-linear Analysis of heat transfer in silica fiber insulation tiles", International Conference on Advanced Design and Manufacturing, Sethu Institute of technology, Tamilnadu.

5. Funded Projects

S.No.	Title of the project	Funding Agency	Duration	Amount	Status
1.	Imposing severe plastic deformation on CP-Ti for producing ultrafine	IE(I)	9 months	30000	Completed

	grain through repetitive corrugation and straightening technique for Biomedical applications.				
2.	Design and separation of groundnut pod separator	RuTAG - IIT Madras	12 months	1.03	Completed

6. Patents

S.No.	Title	Application No.	Status	Date of Granted/Published
1.	Screwdriver with Force Conversion Mechanism	202041050851	Granted, Patent Number : 532547	10/04/2024
2.	Portable Semi-automatic Heat Resistant Bike Seat Cover	202141018772	Granted, Patent Number : 537023	07/05/2024
3.	Non Newtonian fluid bottle filling machine	202341064374	Application referred u/s 12 for examination.	05/05/2026
4.	Device To Prevent & NBSP; Banana Tree From Toppling	202441093644	Application Awaiting Examination	05/05/2026

7. Membership in Professional societies: ISTE, SAE

8. Reviewer for Notable Journal: Tribology in Industry, Material Research Express, JOM, Ceramic International.

9. Notable Short term Courses / Seminars /FDP/Workshop/Conference Attended:

S.No.	Title of the event	Organized by	Date	
			From	To
1.	8th International Conference on Transformation in Engineering Division	Indo Universal Collaboration for Engineering Education	3 days	
2.	Integrating the CDIO principles through Effective Teaching-Learning Activities	RIT	29.02.2024	-
3.	Machine learning Applications in Manufacturing	NIT Warangal	15.07.2024	20.07.2024
4.	Strategies to Enhance Industry Academia Linkages	Rasiklal M.Dhariwal Sinhgad School of Engineering, Pune	23.09.2024	27.09.2024
5.	IIV India Registered Valuers Foundation	IIV-RVF	03.11.2023	08.11.2023
6.	Magnetorhelogical Fluids (MRF): Characterization,	IIT Madras & NIT Karnataka	08.09.2022	12.09.2022

	Modeling and Application			
7.	NAAC Accreditation system with Effective DVV Process	G H Raisoni College of Engineering, Nagpur	13.05.2022	14.02.2022
8.	Automation of Assessment and Evaluation	United International University	05.02.2022	-
9.	Metacognitive Thinking for Successful Problem Solving Outcomes	United International University	28.05.2022	-
10.	Damage Tolerance: A New Design Strategy	Veermata Jijabai Technological Institute, Mumbai	05.07.2021	09.07.2021
11.	IUCEE Certified International Engineering Educator	IIEECP	6 months	
12.	Online Course on "Examination Reforms"	AICTE	29.04.2020	02.05.2020
13.	Python Programming	RIT	05.06.2020	16.06.2020
14.	Manufacturing Process Simulation - A Step	MSC Software & Hexagon	14.04.2020	18.04.2020
15.	The Future of making	ICT Academy Skycampus: Digital Knowledge Series 1 ICT Academy	14.04.2020	18.04.2020
16.	NI-LabVIEW-CLAD Exam Training	Ramco Institute of Technology – National Instruments	15.06.2016	19.06.2016
17.	Training Program on "CATIA"	Ramco Institute of Technology-Hartia Techserv	04.05.2016	13.05.2016
18.	Faculty Training on NI-Labview software and Hardware	Ramco Institute of Technology – National Instruments	15.06.2015	19.05.2015
19.	Advances in Industrial Tribology (AINT15)	National Engineering College, Kovilpatti.	11.02.2015	12.02.2015

10. Notable Online Course Completed

S.No.	Title of Course	Offered by	Course Starts	Course Ends
1.	Mechanics of Machining	NPTEL-IIT Guwahati	01.01.2025	30.03.2025
2.	Machining Science	NPTEL-IIT Kanpur	01.01.2025	28.02.2025
3.	Python Basics for Data Science	IBM	11.07.2024	23.07.2024
4.	Manufacturing Process Technology I & II	NPTEL-IIT Kanpur	01.01.2024	30.04.2024
5.	Advanced Machining Processes	NPTEL-IIT Kanpur	01.01.2024	30.04.2024
6.	Introduction to Machine Learning	NPTEL-IIT Madras	01.07.2024	30.09.2024
7.	Principles of Metal Forming Technology	NPTEL-IIT Roorkee	01.07.2024	30.09.2024

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8.	Python for Data Science	NPTEL-IIT Madras	01.07.2024	31.08.2024
9.	Manufacturing Processes - Casting and Joining	NPTEL-IIT Kanpur	01.07.2024	31.08.2024
10.	Artificial Intelligence and Machine Learning in Materials Engineering	NPTEL-IIT Kanpur	01.07.2024	30.10.2024
11.	Advances in Welding and Joining Technologies	NPTEL-IIT Guwahati	01.08.2024	30.10.2024
12.	Calculus Applied!	Harvard University, USA	09.11.2022	17.08.2023
13.	LaTeX for Students, Engineers, and Scientists	IIT Bombay	24.06.2020	15.01.2021
14.	Operations Research: an Active Learning Approach	The Hong Kong Polytechnic University	06.07.2020	02.10.2020
15.	Differential Equations: 2x2 Systems	Massachusetts Institute of Technology, USA	15.10.2021	24.11.2021
16.	Transfer Functions and the Laplace Transform	Massachusetts Institute of Technology, USA	24.06.2020	31.08.2020
17.	Mechanics: Momentum and Energy	Massachusetts Institute of Technology, USA	31.11.2018	18.01.2019
18.	Calculus 1B: Integration	Massachusetts Institute of Technology, USA	15.11.2018	08.03.2019
19.	Calculus 1C: Coordinate Systems & Infinite Series	Massachusetts Institute of Technology, USA	06.03.2019	12.05.2019
20.	Introduction to Differential Equations	Massachusetts Institute of Technology, USA	28.08.2019	26.12.2019
21.	Mechanics: Momentum and Energy	Massachusetts Institute of Technology, USA	31.11.2018	18.01.2019

11. Administrative Position

College Level

S.No.	Position held	Period	Activities carried out
1.	RIT-ISTE Student Chapter Faculty Secretary	June 2019 onwards	• Coordinated 46 events in collaboration with various professional societies. • Applied ISTE student Chapter Award.
2.	Hostel Superintendent	02 years	• Monitoring the function of Hostel process. • Arranging maintenance of Hostel as reported by students' inmates through their feedback. • Giving permission to go home as authorized by Class Adviser/HOD/Principal. • Monitoring the students during study hours. • Verifying the student attendance. • To monitor the assistant warden activities.
3.	Member of PAQIC for CSE	21.11.2019	• Suggestion given for the improvement

	Department	– 22.11.2022	of quality in teaching learning • Collaborative research proposal were submitted to DST
4.	NAAC criteria 4 Incharge	Since 2018	Prepared the infrastructure facilities and Budget details for AQAR 2018- 19 & 2019-20
5.	RIT-Admission Coordinator	2019 onwards	Webinar conducted for school students College facilities disseminated to public Admission coordination during first year admission
6.	ISO Lead Auditor	2020	Prepare audit schedule and verify the audit process Prepared the audit report
7.	Faculty Club Secretary	2019 onwards	Conducted various Activities such as Tree plantation, temple visit etc.,
8.	DAC Member – Civil	2019 onwards	Attended DAC Meeting and given valuable suggestion to lead quality improvement.
9.	ISO Internal Auditor	2017 onwards	Audit carried out and consolidated report has submitted to lead auditor
10.	Research Scholar Progress Monitoring Committee	2019 onwards	Two Meeting was conducted and suggestion given for the improvement. Minute of meeting has been prepared and submitted to Research Coordinator.
11.	Industry Institute Interaction Cell Coordinator	2022 onwards	42 MoUs are signed with reputed industries, 2 Center of Excellence created, 5 Industry supported lab established.

Department Level

S.No.	Position held	Period	Activities carried out
1.	RIT-SAE BAJA Faculty Advisor	2017 onwards	Preparing the students for BAJA Competition which is organized by SAE India
2.	Department Advisory Committee Member	2019 onwards	Giving Suggestion for preparation of Department NBA document
3.	NBA Coordinator	2019 -2020	Preparation of prequalifier report, SAR and coordination accreditation process
4.	Class Committee Chairperson	2017 onwards	Conducted the meeting and student grievance rectified immediately, Minutes has been submitted to Head of Institution
5.	PA&QIC Member	2017 Onwards	Giving Suggestion for preparation of Department document

Awards: Best Class Advisor Award, Best Pass percentage performer, Best Teacher Award, Research Collaboration with Silesian Institute of Technology, Poland, NPTEL STAR, Board of Institute Industry Interaction Member for Gowrihouse Metal works LLP, Rajapalayam.

References:

Dr. Raghu V Prakash
Professor
Department of Mechanical Engineering
Indian Institute of Technology (IIT) Madras
Chennai – 600036
Ph: +91 44 2257 4694
E-Mail: raghuprakash@iitm.ac.in

Dr K Sivakumar
Dean - Planning & Development and Student Affairs
Bannari Amman Institute of Technology
Sathyamangalam - 638 401, Tamilnadu, India
Ph: 9486649777

Yours Truly
Dr.P.Sureshkumar

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