

BIO DATA



Name : Dr.R.Prabhakaran
Designation : Assistant Professor (Grade – II)
Department : Department of Mechanical Engineering
Address for Communication : Ramco Institute of Technology
North Venganallur Village,
Rajapalayam – 626 117,
Virudhunagar District,
Tamil Nadu.
Email : prabhakaran@ritrjpm.ac.in ,
rpakaran33iit@gmail.com
Mobile Number : 8754830300
Google Scholar link :

<https://scholar.google.com/citations?user=QOW3zycAAAAJ&hl=en>

1. Educational Qualification

Degree	Branch / Specialization	Institute/University	Year of Passing
Ph.D.	Mechanical Engineering/ Additive Manufacturing	PSR Engineering College, Sivakasi/Anna University	2026
PG Certification	3D Printing and Additive Manufacturing	Indian Institute of Information Technology, Tiruchirappalli	2024
M.E.	Mechanical Engineering/ CAD	Sri Ramanujar Engineering College, Chennai/ Anna University	2016
B.E.	Mechanical Engineering	St. Joseph College of Engineering, Chennai/ Anna University	2014
Diploma	Mechanical Engineering	P.A.C.Ramasamy Raja Polytechnic College, Rajapalayam	2011
SSLC	-	Sri Rao Bahadur A.K.D.Dharmaraja Boys' Higher Secondary School, Rajapalayam	2008

2. Professional/ Industry Experience

: (in chronological order)

S.No	Designation	Institution/ Organization	Period	
-	-	-	-	-

3. Research Interest: Additive Manufacturing

4 Publications

4.1 JOURNAL PUBLICATIONS

1. Dr.GodwinBarnabas S, Dr.ArunVasanthaGeethan K, Prabakaran R, Praveen Austin X, Rajesh A. SabeelAhamed P, Sadiq Abdul JabbarManji M (2019), "Construction Materials From The Waste Plastic", SURAJ PUNJ JOURNAL FOR MULTIDISCIPLINARY RESEARCH, Vol 9 Issue 3. pp.512-517, DOI : 16.10089.SPJMR.2018.V9I3.16.3299.
2. V. Chakkravarthy, M. Lakshmanan, P. Manojkumar, R. Prabhakaran, Crystallographic orientation and wear characteristics of TiN, SiC, Nb embedded Al7075 composite,Materials Letters,Volume 306,2022,130936, ISSN 0167-577X,https://doi.org/10.1016/j.matlet.2021.130936. IF – 2.7
3. Prabhakaran R, Pitchipoo P, Rajakarunakaran S, Venkatesh R. Experimental investigation and optimization of process parameters on digital light processing (DLP) 3D printing process based on Taguchi-grey relational analysis. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2024;238(4):1884-1893. doi:10.1177/09544089241236267. IF – 2.4
4. Kuttan, A.A., Khansole, A.B., Harsha, A.S. Prabhakaran, R. et al. Assessing Additive Manufacturing Techniques for Polymer and Metal Matrix Composites in Aerospace Applications. Trans Indian Inst Met 78, 202 (2025). https://doi.org/10.1007/s12666-025-03671-2, IF – 1.6
5. Prabhakaran R, Jerold John Britto J, Venkatesh R, Transforming Waste Polyethylene Terephthalate Bottles into Sustainable 3D Printer Filament, Volume 48, Issue 02, Pages 234, Publisher - INDIAN SOCIETY FOR TECHNICAL EDUCATION. IF – 1.1
6. Prabhakaran R, Pitchipoo P, Rajakarunakaran S and Jerold John Britto J, Mechanical and dynamic characterization of additively manufactured carbon - reinforced polyethylene terephthalate glycol (PETG) composites, 2025, Mater. Res. Express, 12 055304, IF – 2.2
7. Ramachandran Prabhakaran, John Britto John J, Ramamoorthi V, Jegadeesan JSR. Optimisation of process parameters for 3D-printed ABS/10% carbon fibre composite: Morphology and mechanical property analysis. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2025;239(18):7463-7480. doi:10.1177/09544062251347168, IF – 1.9
8. John JJB, Ramachandran Prabhakaran, Ramamoorthi V, Paulraj S. Experimental investigation of mechanical and thermal properties of polycarbonate (PC) and carbon-fiber reinforced ABS (CFR-ABS) composites fabricated by fused filament fabrication

Updated as on **_05-06-2026**

(FFF). Journal of Elastomers & Plastics. 2026;58(3):671-697. doi:10.1177/00952443261424271

9. Prabhakaran Ramachandran, Pitchipoo Pandian, Venkatesh Ramamoorthi, Jerold John Britto John, Influence of Process Parameters on the Mechanical Properties of Carbon Fibre Reinforced PETG, Mechanics of Advanced Composite Structures, Volume 13, Issue 1 - Serial Number 27, April 2026, Pages 171-184, IF – 1.7

4.2 CONFERENCE PUBLICATIONS

1. J. Jerold John Britto, R. Venkatesh, R. Prabhakaran, K. Amudhan, Design optimization of biomedical stent under the influence of the radial pressure using FEM, Materials Today: Proceedings, Volume 39, Part 4, 2021, Pages 1332-1336, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.04.567>. IF – 1.8
2. Ramachandran, Prabhakaran; Pandian, Pitchipoo; Antony, Jerold John Britto John Peter. Investigation and Optimization of Thermoplastic Material by Fused Deposition Modeling, International Journal of Vehicle Structures & Systems; Chennai Vol. 15, Iss. 4, (2023): 559-561. DOI:10.4273/ijvss.15.4.20. IF – 1.1
3. R. Venkatesh, J. Jerold John Britto, K. Amudhan, V. Anbumalar, R. Prabhakaran, R. Thiyanesh Sakthi, Experimental investigation of mechanical properties on CF reinforced PLA, ABS and Nylon composite part, Materials Today: Proceedings, Volume 76, Part 4, 2023, Pages 647-653, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.12.091>. IF – 1.8

4.3 Book/Book chapter publications

1. Jerold John Britto, J., Vasanthanathan, A., Rajakarunakaran, S., Prabhakaran, R. (2020). Numerical Simulation Study on Failure Prediction of FRP Laminate Composite Using COMSOL Multiphysics®. In: Sivasubramanian, V., Pugazhendhi, A., Moorthy, I. (eds) Sustainable Development in Energy and Environment. Springer Proceedings in Energy. Springer, Singapore. https://doi.org/10.1007/978-981-15-4638-9_4, IF - 4.2
2. Venkatesh, R., Kathiravan, S., Prabhakaran, R., Ramar, M., Jerold John Britto, J., Rajakarunakaran, S. (2023). Experimental Investigation on Machinability of Additive Manufactured PLA and PETG Polymers Under Dry Turning Process. In: Rajkumar, K., Jayamani, E., Ramkumar, P. (eds) Recent Advances in Materials Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-3895-5_45
3. Venkatesh, R., Prabhakaran, R., Jerold John Britto, J., Amudhan, K., Karan Kumar, G. (2023). Evaluation of Hardness, Surface Roughness, and Impact Strength of Additive Manufactured Ultraviolet Resin-Based Polymer. In: Rajkumar, K., Jayamani, E., Ramkumar, P. (eds) Recent Advances in Materials Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-3895-5_21
4. Prabhakaran, R., Jerold John Britto, J., Venkatesh, R., Mukesh, G., Mohamedabrar, I. (2023). Experimental Investigation and Identifying the Suitable Process Parameters for Additively Manufactured PETG Material by Fused Deposition Modeling. In: Rajkumar, K., Jayamani, E., Ramkumar, P. (eds) Recent Advances in Materials

5 Funded Projects

S.No.	Title of the project	Funding Agency	Duration	Amount	Status
1	Portable Squeezer for Lemon Juice Extraction	UBA SEG	6 Month	1,00,000/-	Completed

6 Ph.D. guidance

Sl.No	Scholar name	University	Topic	Status
-	-	-	-	-

7 Short term Courses / Seminars /FDP/Workshop/Conference Attended:

Sl.No	Title of the event	Organized by	Date	
			From	To
1.	Inplant Training	Gowri House Metal Works, Rajapalayam	20.10.09	20.11.09
2.	Inplant Training	Raja Motors, Rajapalayam	26.04.10	26.05.10
3.	Inplant Training	Sri Balaji Polymers, Rajapalayam	25.10.10	25.11.10
4.	Inplant Training	Sri Balaji Polymers, Rajapalayam	20.04.11	20.05.11
5.	Faculty Development Program on “A hands on Training: Engineering Simulation using ABAQUS”	RIT, Rajapalayam	15.06.17	17.06.17
6.	Faculty Development Program on “Human Values and Professional Ethics”	RIT, Rajapalayam	30.10.17	12.11.17
7.	Workshop on Non Destructive Testing	RIT, Rajapalayam	15.03.18	16.03.18
8.	A to Z of 3D Printing Workshop	CSI , Chennai	07.04.18	---
9.	Faculty Development Program on “Product Design Engineer using Fusion 360”	KCET, Virudhunagar	26.04.18	28.04.18
10.	Level II course on Non Destructive Testing	RIT, Rajapalayam	10.05.18	26.05.18

Updated as on 05-06-2026

11.	Industrial Visit	Ramco Cements, RR Nagar , Virudhunagar	11.06.18	13.06.18
12.	Art of Counseling	RIT, Rajapalayam	19.06.18	21.06.18
13.	Workshop on Writing Research Papers, Citation Analysis, Plagiarism, Getting Patent & Copyright	RIT, Rajapalayam	29.06.18	30.06.18
14.	Industrial Visit	Srinivas Elastomers India Pvt Ltd, Hosur” and “Elkayem Auto Ancillaries Pvt Ltd, Hosur”	12.07.18	13.07.18
15.	Faculty Development Program on Product Design Engineer using Fusion 360®	RIT, Rajapalayam	27.08.18	31.08.18
16.	Faculty NX CAD Training	RIT, Rajapalayam	08.11.18	18.11.18
17.	Faculty Development Program on “ME6603 FINITE ELEMENT ANALYSIS”	GCE, Thanjavur	10.12.18	21.12.18
18.	One Day National Conference on Challenges and Opportunities for Mechanical Engineers (COME-2019)	KCET, Trichy	16.03.19	---
19.	Industrial Visit	Ramco Mills Limited, Rajapalayam	25.04.19	27.04.19
20.	Faculty Development Program on “ME8593 Design of Machine Elements”	PSNACET, Dindigul	13.05.19	18.05.19
21.	Real time modeling, Simulation and verification, Validation of Engineering Problems using CAE	RIT, Rajapalayam	10.06.19	14.06.19
22.	Eleation’s ANSYS Level-1 course (Training on ANSYS Workbench)	Eleation - Element Simulation Academy	01.05.19	30.06.19
23.	Industrial Visit	Monarck Engineers, Kochi	20.07.19	21.07.19

24.	International Conference on Advances in Materials Processing and Characterization (ICAMPC-2019)	BIT, Sathyamangalam	10.09.19	11.09.19
25.	ATAL Academy Programme on 'Virtual Reality in Education'	Department of Humanities and Social Sciences, NIT Warangal.	09.11.19	13.11.19
26.	Faculty Development Program on "Team Building"	RIT, Rajapalayam	18.11.19	20.11.19
27.	ATAL Academy Programme on '3D Printing & Design	M E S College of Engineering, Kuttippuram, Kerala.	02.12.19	06.12.19
28.	2nd International Conference on Recent Trends in Metallurgy, Material Science and Manufacturing (IMME19-2019)	National Institute of Technology, Tiruchirappalli	27.12.19	28.12.19
29.	How to Publish a High-Quality Technical Journal Paper	IEEE	22.04.20	-
30.	Automotive Design Sculpting	RIT, Rajapalayam	13.05.20	-
31.	Bharat IV/VI Stage Norms, Design Considerations and Roadmap to Ev	RIT, Rajapalayam	16.05.20	-
32.	Future Topics in Mechanical Engineering	RIT, Rajapalayam	18.05.20	22-05-20
33.	Future Advancements and Applications of Internet of Things	Sandip Institute of Engineering and Management	12.06.20	14-06-20
34.	Python Training Programme	RIT, Rajapalayam	16.06.20	-
35.	Internet of Things (IOT) & It's Applications in Industry	Ramrao Adik Institute of Technology, Navi Mumbai and B&R Automation Pvt.Ltd. Pune	8-12,2020	-
36.	Emerging Research Areas in Engineering	SRM Institute of Science and Technology	5-06-20	09-06-20

37.	Finite Element Analysis” (12 Day Online Live Webinar Series)	RIT, Rajapalayam	22.06.20	07.07.20
38.	A One Week Online Faculty Development Program on “RECENT DEVELOPMENTS IN MECHANICAL ENGINEERING (RDME-2020)”	KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL - 506015, Telangana	07-07-20	11-07-20.
39.	Short-Term Training Program on “Software Tools used in Finite Element Analysis”	Kalasalingam Academy of Research and Education	27.07.20	01.08.20
40.	Five day AICTE Training And Learning (ATAL) Academy Online FDP on “3D Printing & Design”	Mar Athanasius College of Engineering	16.11.20	20.11.20
41.	A Short term Course on “ Finite Element Analysis” (12 Day Online Live Webinar Series)	RIT, Rajapalayam	22.06.20	07.07.20
42.	Five day Online FDP on “Research Insights in Materials and Manufacturing (RIMM 21)”	Velammal Engineering College, Chennai-66	13.12.21	17.12.21
43.	Metal Additive Manufacturing	Dr.B.R.Ambedkar National Institute of Technology, Jalandhar	12-12-22	17-12-22
44.	Research Paper Writing	Iucee Foundation	01.05.24	31.07.24
45.	Machine Learning and its prospects in Manufacturing & Industry 4.0	ATAL	10.02.25	15.02.25
46.	3D Printed Composites: Materials, Technologies, and Applications	ATAL	01.06.25	01.11.25

8. Short term Courses / Seminars /FDP/Workshop/Conference organized:

Sl.No	Title of the event	Organized by	Date	
			From	To
1.	Modeling Contest	RIT, Rajapalayam	29.07.17	---

Updated as on 05-06-2026

2.	Workshop on Non Destructive Testing	RIT, Rajapalayam	15.03.18	16.03.18
3.	Level II course on Non Destructive Testing	RIT, Rajapalayam	10.05.18	26.05.18
4.	Faculty Development Program on Product Design Engineer using Fusion 360®	RIT, Rajapalayam	27.08.18	31.08.18
5.	TechYuga 2018 Design Dominator Event	RIT, Rajapalayam	31.08.18	---
6.	Faculty NX CAD Training	RIT, Rajapalayam	08.11.18	18.11.18
7.	NX CAD Students Training Programme	RIT, Rajapalayam	24.01.2019	13.02.19
8.	Modeling Contest	RIT, Rajapalayam	07.02.19	---
9.	Five Day Mechanical CAD Modeling Software Training Programme (for Polytechnic Students) on a Hands-on Training: Engineering Drawing using Siemens NX CAD 12®	RIT, Rajapalayam	08.04.19	12.04.19
10.	Real time modeling, Simulation and verification, Validation of Engineering Problems using CAE	RIT, Rajapalayam	10.06.19	14.06.19
11.	Value Added Course on Smart Materials	RIT, Rajapalayam	06-07-19	20.10.19
12.	Students Training Programme on Fusion 360®	RIT, Rajapalayam	09.07.19	---
13.	NX CAD Students Training Programme	RIT, Rajapalayam	16.08.2019	21.09.2019
14.	Techyuga – CAD Modelketa	RIT, Rajapalayam	31.08.19	---
15.	Modeling & Animation Competition	RIT, Rajapalayam	14.09.19	---
16.	Orientation Programme on Geometric Dimensioning and Tolerancing	RIT, Rajapalayam	16.09.2019	---
17.	Seminar on Electric Vehicle- the Future	RIT, Rajapalayam	07.02.2020	---
18.	Industry Expectations from Students	RIT, Rajapalayam	15-05-2020	---
19.	Industrial Impact of CAD/CAM	RIT, Rajapalayam	14-05-2020	---
20.	Product Analysis Using Ansys	RIT, Rajapalayam	23-05-2020	---
21.	Industry 4.0 3D Printing	RIT, Rajapalayam	26-05-2020	---
22.	Bharat IV/VI Stage Norms, Design Considerations and Roadmap to EV	RIT, Rajapalayam	16-05-2020	---

23.	3D Printing for Medical Applications	RIT, Rajapalayam	20-05-2020	---
24.	Automotive Digital Sculpting	RIT, Rajapalayam	13-05-2020	---
25.	Student Interaction Programme on “Companion Learning Space” and placement orientation Programme	Harita Techserv Ltd, Coimbatore at RIT, Rajapalayam	26.07.2019	---
26.	Students Training Programme on Fusion 360®	RIT, Rajapalayam	09.07.19	---
27.	NX CAD Students Training Programme	RIT, Rajapalayam	16.08.2019	20.09.2019
28.	Two Day Workshop on Design Optimization of Electric Bike	RIT, Rajapalayam	06,07-2-2020	-
29.	Geometric Dimensioning and Tolerancing	RIT, Rajapalayam	16.09.19	-
30.	Modeling and Animation Competition	SAE INDIA COLLEGIATE CLUB	14.09.19	-
31.	A Short term Course on “Finite Element Analysis” (12 Day Online Live Webinar Series)	RIT, Rajapalayam	22.06.20	07.07.20
32.	MEVAC1907 Python for Mechanical Engineering Systems	RIT, Rajapalayam	06.08.22	30.10.22
33.	SolidworksCAD Design Associate Training	RIT, Rajapalayam	18.02.25	21.02.25
34.	MECH SPRITZ 25	RIT, Rajapalayam	27.03.25	27.03.25

9. Online Courses

sno	Course title	University	Date
1.	Calculus 1A Differentiation	MIT	Completed on September 13, 2017
2.	Calculus 1B Integration	MIT	Completed on Mar ,07,2018
3.	A Hands-on Introduction to Engineering Simulations	Cornell University	Completed on Dec ,12,2017
4.	Mechanics: Momentum and Energy	MIT	Completed on Dec ,19,2018
5.	Theory and Practices of Non Destructive Testing - Online	NPTEL	Completed on Apr ,29,2018
6.	Calculus 1C : Coordinate Systems & Infinite Series	MIT	Completed on May ,11, 2019
7.	Introduction to Differential Equations	MIT	Completed on December ,24, 2019
8.	Mechanics of Materials I: Fundamentals of Stress &	Georgia Institute of Technology	Completed on June, 09, 2020

Updated as on _05-06-2026

	Strain and Axial Loading		
9.	Materials Science: 10 Things Every Engineer Should Know	University of California, Davis	Completed on June 27, 2020
10.	Vector Calculus for Engineers	The Hong Kong University of Science and Technology	Completed on June 28, 2020
11.	Operations Research: an Active Learning Approach	THE HONG KONG POLYTECHNIC UNIVERSITY	Completed on 31.08.20
12.	Transfer Functions and the Laplace Transform	MITx	Completed on 01.09.20
13.	Introduction to Programming with MATLAB	VANDERBILT UNIVERSITY	Completed on 22.12.2021
14.	Differential Equations: 2x2 Systems	Massachusetts Institute of Technology	Completed on 23.11.2021
15.	Differential Equations : Fourier Series and Partial Differential Equations	Massachusetts Institute of Technology	Completed on 29.05.23
16.	Differential Equations for Engineers	The Hong Kong University of Science and Technology	Completed on June 3, 2024
17.	Mechanical Vibrations Fundamentals	Udemy Platform	Completed on May 2, 0025

10. Patents filed/awarded

Sl. No	Title of the Invention	Date of Filing	Status	Date of Publications
1.	A Fine Kora Grass Splitting Machine - 202541098560	13.10.2025	Published in Gazette	05.12.2025
2.	Intelligent IoT-Enabled Lightning Arrester System for Real-Time Monitoring and Protection. 202541071380	28.07.2025	Published in Gazette	01.08.2025
3.	Integrated Vehicle Lifting System - 202541041176	29.04.2025	Published in Gazette	23.05.2025
4.	Tomato Sorting and Modular Packaging Device Using Artificial Intelligence - 202541006503	27.01.2025	Published in Gazette	14.02.2025
5.	Coconut Shell Burning Chamber - 202441020949	20.03.2024	Published in Gazette	29.03.2024
6.	Tree Climbing Equipment - 202341084695	12.12.2023	Published in Gazette	15.12.2023

Updated as on _05-06-2026

7.	Innovative Hot Set Insert Press: Enhancing 3D Printed Object Assembly and Integrity - 202341083028	06.12.2023	Published in Gazette	05.01.2024
8.	IOT Enabled Customized Testing Machine For 3D Printed Polymer Based Threaded Fasteners - 202341066436	04.10.2023	Published in Gazette	20.10.2023
9.	Vehicular Energy Turbine System - 202241066663	21.11.2022	Granted	09.05.2024
10.	Automated Multi- Purpose Agricultural Machine - 202241060313	21.10.2022	Granted	05.06.2024
11.	Mechanically Operated Slider for Flipping the Electrical Switch - 202241000328	04.01.2022	Granted	26.06.2024
12.	Manually Operated Geared Stretcher for Effortless Shift of Wounded or Injured Patients to Bed - 201941040301	04.10.2019	Granted	21.11.2023
COPYRIGHTS				
1.	R-Programming Course Material L-154685/2024	27.07.2024	Granted	27.09.2024
MONOGRAMS				
1.	Monograph : Design of Machine Elements-Design Procedure-Part-01 26249/2024- CO/L	21.08.2024	Applied	Pending for Hearing

11. Membership in Professional societies

1. Life Member of The Indian Society for Technical Education – Membership number – LM 121472, Year – 2018

2. Society of Automotive Engineers India Member – Membership No -7180410275
3. Imperial Society Of Innovative Engineers (ISIE)

12. Awards, Recognition & Achievements

1. Bicycle and E-Bike Faculty Co-ordinator.
2. Mr.R.Prabhakaran, AP/Mech acted as a Programme Advisory Committee Member to update the N-Scheme syllabus for I Year Engineering in the Department of Mechanical Engineering, P.A.C. Ramasamy Raja Polytechnic College, Rajapalayam-626117 on 18 March., 2021.
3. Received Best Paper Award Titled of “Experimental Investigation on Machinability of Additive Manufactured PLA and PETG Polymers under Dry Turning Process” through online during our International Conference on Energy and Materials Technologies (ICEMT-2021) Organized by the department of Mechanical Engineering, SSN College of Engineering, Chennai during Aug 20-21.

Any others

- Class Advisor for IV year
- RIT Hartia Centre of Excellence Co-Incharge.
- NBA 6th Criteria Coordinator
- NBA 3rd Criteria Coordinator
- NAAC 6th Criteria Coordinator
- Programme Assessment and Quality Improvement Cell (PAQIC) Member: Mech
- Faculty Club coordinator : Mech
- Time table coordinator
- Text Book Coordinator
- Admission Coordinator
- Contesst Coordinator
- ICTACT Coordinator
- Eleation Coordinator
- ISIE – RIT SRA Department Faculty Coordinator
- NSS Programme Officer