

**SRI SAI RAM ENGINEERING COLLEGE
DEPARTMENT OF MECHANICAL ENGINEERING**



Name: **S.RAVINDRAN**

Designation : **Associate Professor**
Qualification : **M.E, (Ph.D)**
Area of Specialization : **Engineering Design**
Experience : **Teaching- 23 Years 2 Months**
Engineering -19Years 2 Months
Polytechnic college – 4 Years
Industry – NIL

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Sai Leo Nagar, West Tambaram
Chennai - 600044 Tamil Nadu.

Professional Experience:

Sl · N o	College/Organization	Designation	Period From To	Total period	Nature of work
1.	Sri Sai Ram Engineering College, Chennai.	Associate Professor	01.08.2022 to	3 Years 1 Month	Teachin g

			Till date		
2.	Sri Sai Ram Engineering College, Chennai.	Assistant Professor	13.02.2008 to 31.07.2022	14 Years 5 Months	Teaching
3.	GKM College Of Engineering & Technology, Chennai	Assistant Professor	07.07.2006 to 12.02.2008	1Year 7 Months	Teaching
4.	SRM Polytechnic College, Chennai.	Lecturer	05.07.2002 to 30.06.2006	4 Years	Teaching

List of Publications:

International Journal Publications (SCI/SCOPUS):

1. **S. Ravindran** , Santhakumaran Vetrivel, H. S. Kumar, Ramesh Velumayil, Kurmana Prema Kumar, Ankit V. Vijayan Titled “Enhancement of mechanical and flexural properties in AAA2024-rice husk ash aluminium matrix composites” AIP Conference Proceedings 3270, 020201 (2025)
2. J Srinivas, **Ravindran S**, Jenaris D.S, N Ramanan Titled “Development of Robot Arm Fingers with Polymer Soft Materials” Journal of Polymer and Composites, (2025)
3. **Ravindran S**, P Santhosh kumar, G Harish kumar, V Bhuvaneshwaran Titled “Development of Weather Monitoring Drone for Agriculture Purpose” IEEEEXPLORE (2025)
4. **S. Ravindran**, N. Mani Published Paper Titled “Green synthesis of ZrO₂ nanoparticles by Phyllanthus niruri extract and its tensile and high temperature wear behaviour of Al2017A/hBN composites” Biomass Conversion and Biorefinery (2023).
5. **S. Ravindran**, Shruti Sanjay Kulkarni, M. Gayathri, S. Umamageswari & B. Abirami Nivedhitha Published Paper Titled “Design, Analysis, and Fabrication of Battery- Operated Mobile Rice Thresher Machine” Springer lecture notes in Recent Advances in Mechanical Engineering. (2023).
6. **S. Ravindran**, **N. Mohanrajhu**, **A.D. Urade**, **Yatika Gori**, **R. Ranjit Kumar**, **T. Sathish** Published Paper Titled “Study of microstructural, chemical and microhardness characterization of stainless steels”, Materials Today: Proceedings (2023).
7. **S. Ravindran** , M.S. Mohana Priya, J.S. Navin, C. Dinesh, V. Narasimhan Published a Paper Titled “Study on microstructure and mechanical characteristics of Al7075 reinforced hybrid composites using squeeze casting techniques”, Materials Today: Proceedings (2023).
8. **S. Ravindran**, L. Reeta Carolin, V. Gopal, K. Ramesh, G. Ravi, S. Sathya, Published a Paper

Titled “Influence of nano-TiC content on the properties of Al2024 aluminium metal matrix composites”, Materials Today: Proceedings (2022).

9. **S. Ravindran**, Sudharson S K, Motheswar M, Ashlin Immanuel A, Dhanush G, Manoj Kumar S Published a Paper Titled “Experimental investigation of wake velocity in cylindrical tower using hot wire anemometer”, AIP Conference Proceedings 2393, 020209 (2022).
10. **S. Ravindran**, Balachandra Pattanaik , Ram Subbiah “Mechanical Strength and Fatigue Fracture Analysis on Al-Zn-Mg Alloy with the Influence of Creep Aging Process” Advances in Materials Science and Engineering, Hindawi, Volume 2021,
11. **S Ravindran**, N Mani, M Kannan, S Santhosh, R Kamal “Wear testing of polypropylene termina chebula fibres” IOP Conf. Series: Materials Science and Engineering 912 (2020).
12. **S Ravindran**, N Mani, S Balaji, M Abhijith, K Surendaran “Mechanical Behaviour of Aluminium Hybrid Metal Matrix Composites – A Review” Materials Today: Proceedings 16, 1020-1033(2019).
13. **Ravindran, S.**, Mani, N., Vignesha, D., Anjan Shrinivasan, V., Vignesh “Experimental and investigation of aluminium T6 nano-reinforced hybrid metal matrix composite” International Journal of Mechanical and Production Engineering Research and Development Volume 8, issue 8 pages, 226- 231(2018).
14. **S Ravindran**, N Mani, M King, R Vimalathithan “An Investigation on the Mechanical Properties of Nano-Al₂O₃ and TiC Reinforced Aluminum Matrix Hybrid Composites”, Journal of Advanced Microscopy Research Volume 13, Number 1, March 2018, pp. 118-124(7).
15. V Pandyaraj, **S Ravindran**, RS Kumar, “Investigation Of Pump Impeller Using CFD”, in the Indian Journal of Science and Technology- ISSN (Print): 0974-6846 (2016).
16. SR.K.Gajalakshmi, S.Kathiresan, **S.Ravindran** “Investigation of Microstructure And mechanical Properties of Silicon Nitride Reinforced AMMC Using Stir Casting Method”, in the *IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)* e- ISSN: 2278-1684, p-ISSN: 2320–334X (2014).

Patents Published / Granted:

Patent Applicant Name	Patent Title	Publication Date	Published/Granted	Patent / Design Registration Number
S. Ravindran , Department of Mechanical Engineering, Sri Sairam Engineering College	Design and Fabrication of Inboard Braking System in an Off-Road Vehicle	11/06/2021	Published	202141020489A
S. Ravindran , Department of Mechanical Engineering, Sri	A Method for Design and Investigation of Compliant	18/11/2022	Published	202241060607A

Sairam Engineering College	Mechanism in Robotic Gripper			
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering College	An Assembly For Diesel Engine using Biodiesel and Nano Additives	26/05/2023	Published	202341026289A
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering College	A Method of Thermal Barrier Coating on a Nickel Based Super Alloy	06/01/2023	Published	202141030189A
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering College	Development of an Autonomous Beach Cleaning Robot	29/03/2024	Published	202441018156A
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering College	Advanced Vacuum Shredder Machine for Efficient Waste Collection and Processing	20/12/2024	Published	202441098498A
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering College	Design and Fabrication of Automated Drain Cleaner With Gutter Shaft Drive Mechanism	13/10/2024	Published	202441077575A
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering College	Wireless Agricultural Cultivating Machine	22/05/2024	Granted (Design Patent)	417740-001
S. Ravindran, Department of Mechanical Engineering, Sri Sairam Engineering	Mini Corn Shelling Machine	29/07/2024	Granted (Design Patent)	425040-001

College				
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Awards of appreciation received:

1. Received the NPTEL DISCIPLINE STAR Award from the IIT Madras during the Period of 2025.
2. Received the BEST FACUTY Award from the Tech Forum Research Foundation (TFRF) during the Period of 2024.
3. Received the RISING STARS Award from the Maruthani Monthly Magazine at Thiruvananthapuram Kerala during the Period of 2022.

Membership in professional Societies:

1. Life member in “The Indian Society for Technical Education (ISTE)”.
2. Member in “Society of Automotive Engineers (SAE)”.
3. Member in “Indian Welding Society” (IWS).
4. Senior Member in “Institute of Electrical and Electronics Engineers (IEEE)”.

Conferences:

International

1. **S. Ravindran**, Presented a Paper Titled “Design and Development of Solar Crop Savior” **5th International Conference on Advances in Mechanical Engineering (ICAME 2024)** held in Department of Mechanical Engineering SRM Institute of Science And Technology on 20-22, March 2024.
2. **S. Ravindran**, Presented a Paper Titled “Study on Microstructure and Mechanical Characteristics of Al7075 Reinforced Composites Using Squeeze Casting Techniques ” **International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences (ICATCHCOME 2023)** held at KPR Institute of Engineering & Technology 09 - 10, February 2023.
3. **S. Ravindran**, Presented a Paper Titled entitled “Design, Analysis, and Fabrication of Battery-Operated Mobile Rice Thresher Machine” **1st International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics (STAAAR 2022)**, held in VIT Bhopal on December 16th-17th, 2022.
4. **S. Ravindran**, Sudharson S K, Motheswar M, Ashlin Immanuel A, Dhanush G, Manoj Kumar S Presented a Paper Titled “Experimental investigation of wake velocity in cylindrical tower using hot wire anemometer”, **International Conference on Emerging Approaches in Mechanical & Automobile Engineering (ICEAMAE’21)** conducted by Arasu Engineering College, Kumbakonam on **17.03.21 to 18.03.21**.
5. **S. Ravindran**, Dr. N. Mani, M. Kannan, S. Santhosh, R.Kamal Presented a Paper Titled “Wear Testing of Polypropylene Termina Chebula Fibers” , **3rd International Conference on Advances in Mechanical Engineering (ICAME 2020) & (ICRACM 2020)**, conducted by SRM Institute of Science and Technology, Kattankulathur. **(Feb 24 to 29), 2020**.

6. **S. Ravindran**, Dr. N. Mani, D. Vignesh, V. Anjan Shrinivasan, C. Vignesh Presented a Paper Titled “Experimental and Investigation of Aluminium T6 Nano-Reinforced Hybrid Metal Matrix Composite” **International Conference on Automobile, Marine and Mechanical Engineering (ICAMME 2018)**, conducted by Sri Venkateswara College of Engineering, Sriperumbudur, Chennai. . (May 4th & 5th), 2018.
7. **S. Ravindran**, Dr. N. Mani, S. Balaji , M. Abhijith , K.Surendaran Presented a Paper Titled “Mechanical Behaviour Of Aluminium Hybrid Metal Matrix Composites – A Reviews” , **Second International Conference on Advances in Materials, Manufacturing and Applied Sciences, ICAMMAS’17**, conducted by Sri Sai Ram Institute of College, Chennai. (March 30th & 31st), 2017.
8. **S.Ravindran**, V.Pandayaraj, R.Senthilkumar, Presented a Paper Titled “A Review on Thermo Hydrodynamic Analysis of a Journal Bearing Using CFD”, **International Conference on Mechanical, Materials and Manufacturing Systems, ICMMS’16**, conducted by Sri Sai Ram Engineering College, Chennai. 2016
9. **S.Ravindran**, AD Kumar “An Experimental Analysis Of Friction Stir Welding Using Aluminium Alloy A 6061-T6”, **International Conference on Recent Advances in Mechanical Engineering, INCRAME 2012**, conducted by M.G.R University Chennai.

National

1. **S.Ravindran**, AD Kumar, Presented a Paper Titled “Tool Profile and process Parameters of Friction Stir Welding in Aluminium alloy AA6061- T6”, in the **National Conference on Advancements In Mechanical, Mechatronics and Management Systems (AIMMS’12)**, conducted by Sri Sai Ram Engineering College, Chennai.
2. **S.Ravindran**, AD Kumar, Presented a Paper Titled “Evaluation of process parameters of friction stir welding using aluminium alloy’ in the **National Conference on Emerging Trends in Mechanical Engineering (NCE TIME-2012)**, Conducted by Sathyabama University, Chennai.
3. **S.Ravindran**, Vasanth Presented a Paper Titled “Wear Behaviour of Polypropylene Terminalia Chebula Fibres”, in the **National Conference on Emerging Trends In Design, Thermal, And Manufacturing (ETDM- 2013)**, Conducted by Saveetha Engineering College, chennai.

FDP’s Attended

1. Attended Faculty Development Program on “**Advancement in Materials, manufacturing Processes and Management Systems**”, Organized by Sri Sai Ram Engineering College, Chennai from 4th November to 16th November 2013.

2. Attended Faculty Development Programme on **“Computer Aided Design and Usage of Software”** Organized by Sri Sai Ram Engineering College, Chennai, from 4th August to 6th August, 2016.
3. Attended Faculty Development Training Programme on **“Automobile Engineering”** organized by Sri Sai Ram Engineering College, Chennai, from 29th November to 5th December 2017.
4. Attended a Short Term Training Program on **“Natural Fiber Composites - Recent Technology for Sustainability and Eco - Friendly Environment”**, (24th to 29th) June 2019, Department of Mechanical Engineering, Sri Sairam Engineering College, Chennai.
5. Attended AICTE Sponsored two weeks Faculty Development Programme on **“ Internet of Things and Advanced Technologies in Manufacturing ”** organized by Department of Mechanical Engineering, Panimalar Engineering College, Chennai from 11th to 23rd November, 2019.
6. Attended online two weeks Faculty Development Programme on **“Managing Online classes and Co- Creating MOOCS”** organized by Ramanujan College, University of Delhi, from Apr 20th to May 6th , 2020.
7. Attended Online AICTE Recognized Faculty Development Program on **“Environment and Sustainable Development”**, (20th to 24th) April 2020, Rural Development Department, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh.
8. Attended Online AICTE Recognized Faculty Development Program on **“Role of Teachers and Educational Institutes in Unnat Bharath Abhiyan”**, (18th to 22th) May 2020, Rural Development Department, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh.
9. Attended Online AICTE Recognized Faculty Development Program on **“Computer Integrated Manufacturing & CNC (CIM/CNC)”**, (25th to 29th) May 2020, Mechanical Engineering Department, National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh.
10. Attended Online AICTE Recognized STTP on **“3D Printing and Industry 4.0 for Indian industries”** Organized by Department of Mechanical Engineering, Kamaraj College of Engineering & Technology Madurai, From 14.06.21 to 19.06.21.

11. Attended online Faculty Development Training Programme on **“Advances in Composite Materials, Manufacturing Processes and Optimization Techniques”** Organized by AMET University, Chennai, from June 1st to 14th, 2021.
12. Attended online Faculty Development Training Programme on **“Recent Trends in Materials and Manufacturing”** Organized by Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore, from August 2nd to 6th, 2021.
13. Attended online Faculty Development Training Programme on **“Advanced Applications in Composite Materials”** Organized by Department of Mechanical Engineering, Vel Tech High Tech Dr. Sakunthala Engineering College, Chennai from 17.05.21 to 22.05.21.

Workshops attended:

1. Attended a workshop on **“Sustainable Materials: Challenges and Opportunities in Polymer Composites Engineering (SCOPE’2011)”** in ANNAMALAI UNIVERSITY held on March 2011.
2. Attended a workshop on **“Renewable Energy”** in Sri Sai Ram Engineering College held on 19th JULY 2012.
3. Attended Basic fire safety and emergency preparedness workshop program organized by Usha fire safety equipments (P) Ltd, held at SSEC, Chennai.
4. Attended Basic fire safety and emergency preparedness workshop program organized by Thilak Safety Associates, held at SSEC, Chennai.
5. Attended ISO 9001: 2008 Quality Management system and Audit training during 11th & 12th of October 2011 conducted by Creative Management Consultants, Chennai.
6. Attended one day Workshop on **“Renewable Energy”**, Organized by Sri Sai Ram Engineering College, Chennai on 24th Feb 2012.
7. Attended one day Workshop on **“Art of Journal and Thesis Writing”**, organized by Sri Sai Ram Engineering College, Chennai on 19th January 2012.
8. Attended Quality Management and Audit Training, Organized by Sri Sai Ram Engineering College, Chennai from 11th October to 12th October 2011.
9. Attended a DST sponsored National Seminar on **“Automotive Materials and Manufacturing”**, Organized by PSG College of Technology, Coimbatore from 20th July to 21st July 2012.
10. Attended a CSIR sponsored National Seminar on **“Mechanics, Processing and Characterization of High Performance Hybrid Composite Materials”**, Organized by

KPR Institute of Engineering and Technology , Coimbatore from 23rd August to 24th August 2013.

11. Attended a two day Workshop on **“Industry-Institution Interaction Event on Environment Management in Industrial Sectors-Status and Needs”**, Organized by Sri Sai Ram Engineering College, Chennai on 24th & 25th July 2014.
12. Attended one day Workshop on **“Green Composites”** Organized by Sri Sai Ram Institute of Technology, Chennai on 27th August 2014.
13. Attended one day Workshop on **“Role of Lean Manufacturing On Organization Competitiveness”**, Organized by Sri Sai Ram Engineering college Chennai on 28th August 2014.
14. Attended a one day workshop on **“Development, Manufacturing and Analysis of Advanced Composites”**, 19th December 2015, Department of Mechanical Engineering, SRM University, Chennai.
15. Attended a one day National Level workshop on **“Advances in Design of Experiments (DOE)”**, 21st October 2016, Department of Manufacturing, School of Mechanical Engineering, VIT University, Vellore.
16. Attended a one day National Seminar on **“3D printing of composite materials - A digital additive manufacturing - (PRICOM'2019)”**, 20th March 2019, AMET University, Chennai.
17. Attended a one day workshop on **“Magnetically Impelled Arc Butt (MIAB) Welding”**, 13th April 2019, Department of Metallurgical and Materials Engineering, IIT Madras.
18. Attended a Two days National Seminar on **“Role of Smart Materials in Aerospace and Engineering Applications”**, 16th & 17th December 2019, St. Joseph's College of Engineering, Chennai.
19. Attended a one day Workshop on **“Introduction to DOE & Taguchi Method”**, 27th May 2020, organized by Department of Mechanical Engineering, GRT Institute of Engineering & Technology, Tiruttani.
20. Attended online one day Workshop on **“COMPOSITE IN PRECISION ENGINEERING”** jointly

Organized by the Department of Mechanical Engineering, BIST, BIHER, Chennai and Department of Mechanical and Manufacturing, UKM, Malaysia on 05th June 2021.