

Name: <b>S.RAVINDRAN</b>	
Designation:	Associate Professor
Qualification:	M.E, (Ph.D)
Area of Specialization:	Engineering Design
Experience:	Teaching- Engineering -19Years 7 Months Polytechnic college – 4 Years
	Industry: Nil
Number of Workshops/ Conferences/ FDP Attended:	Worshop- 20 FDP- 18 National/Int. Conference- 13
Publication:	<b>Scopus/WoS Journal&amp; Conferene Publication:</b> <ul style="list-style-type: none"> <li>• SCI Journal Publications: 02</li> <li>• WoS Journal Publications:01</li> <li>• Scopus Conference Publication: 12</li> </ul>
	<b>Book/Book Chapters:</b> <ul style="list-style-type: none"> <li>• Book Chapter: 01</li> </ul>
General:	<ul style="list-style-type: none"> <li>✓ NPTEL Domain Certification course completed.</li> <li>✓ 8 Modules - Online course completed in <b>NITTTR</b>.</li> <li>✓ 5 - Online courses completed in <b>UDEMY</b>.</li> <li>✓ 21 - Online courses completed in <b>COURSERA</b>.</li> </ul>
Staff Achievement	<ul style="list-style-type: none"> <li>✓ Received the <b>NPTEL DISCIPLINE STAR</b> Award from the IIT Madras during the Period of 2025.</li> <li>✓ Received the <b>BEST INNOVATIVE FACUTY Award</b> from National Scientific Research Forum during the Period of 2025.</li> <li>✓ Received the <b>BEST FACUTY Award</b> from the Tech Forum Research Foundation (TFRF) during the Period of 2024.</li> <li>✓ Received the <b>RISING STARS Award</b> from the</li> </ul>

	Maruthani Monthly Magazine at Thiruvananthapuram Kerala during the Period of 2022.
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**PROFESSIONAL EXPERIENCE:**

Sl. No	College/Organization	Designation	Period From To	Total period	Nature of work
1.	Sri Sai Ram Engineering College, Chennai.	Associate Professor	01.08.2022 to Till date	3 Years 6 Months	Teaching
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	1 Year 7 Months	Teaching
4.	SRM Polytechnic College, Chennai.	Lecturer	05.07.2002 to 30.06.2006	4 Years	Teaching

**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 Sairam Engineering College	A Method for Design and Investigation of Compliant Mechanism in Robotic Gripper	18/11/2022	Published	202241060607A

<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	An Assembly For Diesel Engine using Biodiesel and Nano Additives	26/05/2023	Published	202341026289A
<b>S. Ravindran,</b> 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
<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	Development of an Autonomous Beach Cleaning Robot	29/03/2024	Published	202441018156A
<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	Advanced Vacuum Shredder Machine for Efficient Waste Collection and Processing	20/12/2024	Published	202441098498A
<b>S. Ravindran,</b> 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
<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	Wireless Agricultural Cultivating Machine	22/05/2024	Granted (Design Patent)	417740-001
<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	Mini Corn Shelling Machine	29/07/2024	Granted (Design Patent)	425040-001
<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	IoT-Integrated Agricultural Drone for Distributed Micro-Climate and Air-Quality Sensing	28/11/2025	Published	202541105375 A

	with Real-Time Decision Support			
<b>S. Ravindran,</b> Department of Mechanical Engineering, Sri Sairam Engineering College	Innovative Root Vegetable Harvesting Machine For Sustainable Farming	30/9/2025	Granted (Design Patent)	475487-001

#### INTERNATIONAL CONFERENCES:

- S. Ravindran,** Presented a Paper Titled “ Development of weather monitoring drone for agriculture purpose”**5th International Conference on computing and communication Technologies(ICCCT'25)** held in Department of Information Technology, Sri Sai Ram Engineering College on 20-22, 16&17th April 2025.
- 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.
- 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.
- 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.
- 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**.
- S. Ravindran,** Dr. N. Mani, M. Kannan, S. Santhosh, R.Kamal Presented a Paper Titled “Wear Testing of Polypropylene Termina Chebula Fibers” , **3<sup>rd</sup> 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.
- 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 4<sup>th</sup> &5<sup>th</sup>**), 2018.

**8. 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 30<sup>th</sup> & 31<sup>st</sup>), 2017.

**9. 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

10. **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 Conferences:**

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 (AIMMMS’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.

#### **LIST OF PUBLICATIONS:**

##### **INTERNATIONAL JOURNAL PUBLICATIONS (SCI/SCOPUS):**

1. **S Ravindran**, G Anbuhezhiyan, Nabisab Mujawar Mubarak Titled “Exploring the Impact of Abrasive Water Jet Machining Parameters on Hole Quality Characteristics in Al2017A/hBN/ZrO2 Hybrid Composites”*Journal of Materials Research and Technology*, (2025).
2. **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)
3. 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)

4. **Ravindran S**, P Santhosh kumar, G Harish kumar, V Bhuvaneshwaran Titled “Development of Weather Monitoring Drone for Agriculture Purpose” IEEEEXPLORE (2025)
5. **S. Ravindran**, N. Mani Published Paper Titled “Green synthesis of ZrO<sub>2</sub> nanoparticles by Phyllanthus niruri extract and its tensile and high temperature wear behaviour of Al2017A/hBN composites” Biomass Conversion and Biorefinery (2023).
6. **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).
7. **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).
8. **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).
9. **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).
10. **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).
11. **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,
12. **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).
13. **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).
14. **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).
15. **S Ravindran**, N Mani, M King, R Vimalathithan “An Investigation on the Mechanical Properties of Nano-Al<sub>2</sub>O<sub>3</sub> and TiC Reinforced Aluminum Matrix Hybrid Composites”, Journal of Advanced Microscopy Research Volume 13, Number 1, March 2018, pp. 118-124(7).

16. 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).
17. 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).

#### **REVIEWER FOR INTERNATIONAL JOURNALS:**

1. Journal of Umm Al-Qura University for Engineering and Architecture - Springer Nature.
2. Journal of Inorganic and Organometallic Polymers and Materials- Springer Nature.

#### **VALUE ADDED COURSES COMPLETED:**

- DATA ANALYTICS, AI/ML & IOT completed at IIT kharagpur.
- Product Design NPTEL Domain Certification Completed.

#### **FACULTY DEVELOPEMNT PROGRAMS ATTENDED:**

1. Attended Faculty Development Program on “**Advancement in Materials, manufacturing Processes and Management Systems**”, Organized by Sri Sai Ram Engineering College, Chennai from 4<sup>th</sup> November to 16<sup>th</sup> November 2013.
2. Attended Faculty Development Programme on “**Computer Aided Design and Usage of Software**” Organized by Sri Sai Ram Engineering College, Chennai, from 4<sup>th</sup> August to 6<sup>th</sup> August, 2016.
3. Attended Faculty Development Training Programme on “**Automobile Engineering**” organized by Sri Sai Ram Engineering College, Chennai, from 29<sup>th</sup> November to 5<sup>th</sup> December 2017.
4. Attended a Short Term Training Program on “**Natural Fiber Composites - Recent Technology for Sustainability and Eco - Friendly Environment**”, (24<sup>th</sup> to 29<sup>th</sup>) 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 11<sup>th</sup> to 23<sup>rd</sup> 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 20<sup>th</sup> to May 6<sup>th</sup>, 2020.
7. Attended Online AICTE Recognized Faculty Development Program on **“Environment and Sustainable Development”**, (20<sup>th</sup> to 24<sup>th</sup>) 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”**, (18<sup>th</sup> to 22<sup>th</sup>) 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)”**, (25<sup>th</sup> to 29<sup>th</sup>) 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 1<sup>st</sup> to 14<sup>th</sup>, 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 2<sup>nd</sup> to 6<sup>th</sup>, 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.
14. Attended online Faculty Development Training Programme on **“Impact of Digital Pedagogy in Professional Development of Engineering Teachers”** Organized by Department of Mechanical Engineering, Sri Sai Ram Institute of Technology, Chennai 21.01.22 to 28.01.22.

15. Attended online Faculty Development Training Programme on "**Research Opportunities and Futures of Additive Manufacturing Engineering**" Organized by Department of Mechanical Engineering, Sri Manakula Vinayagar Engineering College, Puducherry 30.01.23 to 03.02.23.
16. Attended online Faculty Development Training Programme on "**Six Day Online International Faculty Development Program on Progress in Mechanical Engineering**" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Chennai 14.10.24 to 19.10.24.
17. Attended online Faculty Development Training Programme on "**Six Day Virtual Faculty Development Program on Innovations in Advanced Materials, Optimization and sustainable energy systems**" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Chennai. 15/12/25 to 20/12/25.
18. . Attended online Faculty Development Training Programme on "**One Week International Online Faculty Development Program on Green Technologies and Sustainable Development**" organized by the Department of Mechanical Engineering, Easwari Engineering College, Chennai 15/12/25 to 19/12/25.

#### **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 19<sup>th</sup> 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 11<sup>th</sup> & 12<sup>th</sup> 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 24<sup>th</sup> Feb 2012.
7. Attended one day Workshop on "**Art of Journal and Thesis Writing**", organized by Sri Sai Ram Engineering College, Chennai on 19<sup>th</sup> January 2012.

8. Attended Quality Management and Audit Training, Organized by Sri Sai Ram Engineering College, Chennai from 11<sup>th</sup> October to 12<sup>th</sup> October 2011.
9. Attended a DST sponsored National Seminar on “**Automotive Materials and Manufacturing**”, Organized by PSG College of Technology, Coimbatore from 20<sup>th</sup> July to 21<sup>st</sup> 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 23<sup>rd</sup> August to 24<sup>th</sup> 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 24<sup>th</sup> & 25<sup>th</sup> July 2014.
12. Attended one day Workshop on “**Green Composites**” Organized by Sri Sai Ram Institute of Technology, Chennai on 27<sup>th</sup> August 2014.
13. Attended one day Workshop on “**Role of Lean Manufacturing On Organization Competitiveness**”, Organized by Sri Sai Ram Engineering college Chennai on 28<sup>th</sup> August 2014.
14. Attended a one day workshop on “**Development, Manufacturing and Analysis of Advanced Composites**”, 19<sup>th</sup> December 2015, Department of Mechanical Engineering, SRM University, Chennai.
15. Attended a one day National Level workshop on “**Advances in Design of Experiments (DOE)**”, 21<sup>st</sup> 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)**”, 20<sup>th</sup> March 2019, AMET University, Chennai.
17. Attended a one day workshop on “**Magnetically Impelled Arc Butt (MIAB) Welding**”, 13<sup>th</sup> 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**”, 16<sup>th</sup> & 17<sup>th</sup> December 2019, St. Joseph's College of Engineering, Chennai.

19. Attended a one day Workshop on “**Introduction to DOE & Taguchi Method**”, 27<sup>th</sup> 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 05<sup>th</sup> June 2021.

**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)”.