

SRI SAI RAM ENGINEERING COLLEGE

DEPARTMENT OF MECHANICAL ENGINEERING

PROFESSIONAL EXPERIENCE

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| Name: Dr.A.Manivannan |  |
| Designation: | Associate Professor |
| Qualification: | M.E., Ph.D. |
| Area of Specialization: | Engineering Design, Composites, 3D Modelling |
| Experience: | Teaching – 12 Years |
| | Industry: 1.7 Years |
| Number of Workshops/ Conferences/ FDP Attended: | Worshop- 07 |
| | FDP - 15 |
| | National / Int. Conference- 03 |
| Publication: | Journal: National - 01 International - 08 |
| | Conference: National: 02 International: 02 |
| General: | <ul style="list-style-type: none">✓ NPTEL Discipline STAR Acheived✓ NPTEL Mortivated Learner✓ NPTEL Believer Acheived✓ Online courses completed in COURSERA.✓ Published book chapter in Open Source |
| Staff Achievement | <ul style="list-style-type: none">✓ Recived Parker Pen from the Department as BEST Exam Cell Representative during 2015-16 academic year.✓ Book Chapter Published during the year 2020.✓ Best students counselor Award during 2021-22. |

| College/Organization | Designation | Period From - To | Total period | Nature of work |
|----------------------------------------|--------------------------------|----------------------|--------------|-------------------------------------------------------------------------------------------------|
| Sri Sai Ram Engineering College | Associate Professor | Mar' 23 to Till date | 3 Years | Teaching & Dept. Industrial Coordinator Dept. NPTEL Coordinator SAE SUPRA Faculty Advisor |
| Sri Sai Ram Engineering College | Assistant Professor | July' 22 to Feb' 23 | 0.7 Year | Teaching & Dept. Industrial Coordinator Dept. NPTEL Coordinator SAE SUPRA Faculty Advisor |
| M.Kumarasamy College of Engineering | Assistant Professor | June' 19 to June 22 | 3 Years | Teaching & R&D Coordinator |
| Selvam college of Technology | SRF (SERB – DST) | Sep' 16 to May' 19 | 2.9 Years | Research – Handled two Projects completely ARDB/01/2031808/M/1 YSS/2015/000823-SERB |
| Periyar Maniammai University | Assistant Professor | July' 14 to June' 16 | 2 Years | Teaching & Exam Cell Coordinator |
| SpectraA Technology Solutions Pvt. Ltd | Sr.Engineer Design & Detailing | Feb' 13 to Feb ' 14 | 1 year | Design, Detailing & cost estimation of Brewery in plants in EPC basis |

Published Patents:

| Applicant / Inventor | Title | Published Date | Filed/ Published/ Granted | Patent Number |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------|---------------------------|----------------|
| Applicant – A.Manivannan Department of Mechanical Engineering, Selvam College of Technology. | “Development of Aluminium Matrix Composites for Cooling Fins” | 02-11- 2016 | Published | 201641037412 A |
| Applicant – A.Manivannan Department of Mechanical Engineering, Selvam College of Technology. | Novel feeding method for ceramic reinforcement in Stir Casting | 15- 09- 2017 | Published | 201741032714 |
| Inventor – A.Manivannan Department of Mechanical Engineering, M.Kumarasamy College of Engineering. | Modified Stirrer Blade in Stir Casting | 21-12-2020 | Published | 2020041055528 |
| Applicant – A.Manivannan Department of Mechanical Engineering, Sri Sairam Engineering College. | An Automatic System for Pressure Cooker Whistle Counter | 16-08-2022 | Published | 202241046393 |
| Applicant – A.Manivannan Department of Mechanical Engineering, Sri Sairam Engineering College. | Eggshell-Derived catalyst pyrolysis process for converting waste plastics into fuel oil | 17-05-2024 | Published | 202441037159A |

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| Applicant – A.Manivannan Department of Mechanical Engineering, Sri Sairam Engineering College. | Solar Powered IOT enabled smoke and temperature detection system for Early Forest Fire Prevention | 31-10-2025 | Published | 202541093136A |
| Applicant – A.Manivannan Department of Mechanical Engineering, Sri Sairam Engineering College. | Design and Fabrication of Power Generator from Pulley Rowing Machine | 14-11-2025 | Published | 202541098202A |

Book Chapter

A book chapter published on the title “Significance of Boron Nitride Reinforced Composites & its Applications” for the book titled “Recent Advances in Boron-containing Materials” DOI: [10.5772/intechopen.81557](https://doi.org/10.5772/intechopen.81557)

PAPERS PUBLISHED IN THE NATIONAL CONFERENCES:

1. **A.Manivannan** presented a paper entitled “Steady State Thermal Analysis of Steam Generator Membrane Wall for Super Critical Boilers using ANSYS” at RAME 2011 conducted by K. S. Rangasamy College of Technology, Tiruchengode
2. **A.Manivannan** presented a paper entitled “Numerical Analysis of Steam Generator Membrane Wall for Super Critical Boilers” at ICETMIE-2015 conducted by ITM University, Gurgaon.

PAPERS PUBLISHED IN THE INTERNATIONAL CONFERENCES:

1. **A.Manivannan** presented a paper entitled “Fabrication of Aluminium Boron Nitride Composites using bottom tapping stir casting Machine at IMME’17 conducted by NITT
2. **A.Manivannan** presented a paper entitled “Production and Thermal Characterization of Advanced Aluminium Matrix Composites by two-step stir casting process” at AFTMME 2019 conducted by IIT Ropar,

INTERNATIONAL CONFERENCES ATTENDED:

1. Participated in IMME’ 17 conducted by NIT, Trichy.
2. Participated in AFTMME’ 19 conducted by IIT, Ropar.

PAPERS PUBLISHED IN THE INTERNATIONAL JOURNALS:

| S.No. | Title of the Paper | Authors | Name of the Journal | Year & Vol. No. /Issue No./ Status of Publication |
|-------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1. | Studies on Inconel 925 machinability using TiAlN-coated Tungsten Carbide Inserts Blended with Pongamia Pinnata Oil Lubrication | L. Emmanuel S.Seenivasan N. Vinoth A. Manivannan | Surface Review and Letters (SCI indexed – Q3) | 2026 & 03.02.2026 https://doi.org/10.1142/S0218625X26500320 |
| 2. | Quantitative and Qualitative Analysis of Advanced Aluminum Composites for Heat Transfer Properties | A. Manivannan , R. Sasikumar, T. Nithyanandam, C. Ganesan | Transactions of the Indian Institute of Metals (SCI indexed – Q2) | 2024 & 14.07.2024 https://doi.org/10.1007/s12666-024-03392-y |
| 3. | Computational Analysis of a Simplified Car with Vortex Generator on Sides using RANS Model | C. Dineshkumar, N. Kamesh, C.K. Arvinda Pandian, A. Manivannan , Y. Ibrahim A. Vivek Anande | International Journal of Vehicle Structures & Systems (SCOPUS Indexed) | ISSN: 0975-3060 (Print), 0975-3540 (Online) doi: 10.4273/ijvss.16.3.24 |
| 4. | Experimental Research on the Wear Properties of Friction Stir Welded Al–Li/Al–Mg Improved Heterogeneous Material Joints | C. Ganesan, A.Manivannan S.Seenivasan T. Keerthi Vasam | Transactions of the Indian Institute of Metals (SCI indexed – Q2) | 2024 & Vol. 77 issue .2 https://doi.org/10.1007/s12666-024-03278-z |
| 5. | Mechanical & Tribological Behaviour of Squeeze Casted Mg/SiC Composites for Defense Applications | P.Pandiyaraj, A.Manivannan C. K. Arvinda Pandian B. Vijaya Ramnath | Silicon (SCI indexed – Q2) | 2023 & Vol. 15 P.No. 7183-7189 |
| 6. | Effect & Thermal Investigation of | A.Manivannan R.Sasikumar C.Ramesh | High Technology Letters | 2020. Vol. 26, Issue No.8 P.No. 384-389 |

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| | Alumina & Graphite particles in AA6061 composites by two-step stir casting process | R.Kamalakannan | (SCOPUS Indexed) | |
| 3. | Exemplary Encapsulate Feeding in Stir Casting for Quality Composites | A.Manivannan R.Sasikumar. | Materials & Manufacturing Process – Taylor & Francis Publication (SCI indexed – Q1) | 2019. Vol.34. Issue No. 6 P.No.689 - 694 |
| 7. | Novel Combined Feeding Approach to Produce Quality Al6061 Composites for Heat Sinks | A.Manivannan R.Sasikumar. | High Temperature Materials and Processes – De Gruyter Publication (SCI indexed – Q3) | 2019. Vol.38 P.No. 647-650 |
| 8. | Fabrication and Characterization of Aluminium Boron Nitride Composite for Fins | R.Sasikumar. A.Manivannan | Materials Today Proceedings – Elsevier (SCOPUS Indexed) | 2018. Vol.5. P.No.8618-8624 |
| 9. | Thermal Investigation of AA 6061 Based Particulate Metal Matrix Composites | A.Manivannan R.Sasikumar. R.Joshuva Durai Singh | International Journal of Mechanical and Production Engineering (IJMPE) | 2017. Vol.5. Issue No. 12 |
| 10. | An investigation of heat affected zone in tailor welded AA 5052 and AA 6061 alloy blank materials | D.Jeyasimman A. Mohamed Ismail A.Manivannan | International Journal of Innovative Science, Engineering & Technology | 2015.Vol. 2 Issue No.8 |
| 11. | Numerical Analysis of Steam Generator Membrane Wall for Super | C.Sathiyarayanan A.Manivannan P.Pandiyaraj A.Mohammed Ismail | International Journal of Applied Engineering Research | 2015. Vol. 10 Issue.No.78 |

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|-----|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------|
| | Critical Boilers | | (SCOPUS Indexed) | |
| 12. | Optimization of Surface Roughness Parameters for EN 8 Steel by Tungsten Carbide Tool in Turning Operation | I.KarthicSubramaniyan D.Jeyasimman, J.Kesavan. A. Manivannan | International Journal of Engineering Research & Technology (SCOPUS Indexed) | 2015. Vol. 4, Issue 06 |

REVIEWER FOR INTERNATIONAL JOURNALS:

1. Part C: Journal of Mechanical Engineering Science – Sage Publishers.

SHORT TERM COURSE COMPLETED:



The image shows a 'MARKSHEET' for Dr. A. Manivannan, a faculty member at Anna University. The sheet is for NPTEL Swayam courses. It includes the NPTEL logo, the Swayam logo with the tagline 'FREE ONLINE EDUCATION', a QR code, and a portrait of the faculty member. The personal details are: Name: DR A MANIVANNAN, DOB: 18-12-1986. The marksheet table lists 20 courses completed between 2019 and 2025, with columns for Discipline, Year, Course Name, Assignment Marks (25%), Exam Marks (75%), Total Marks (100%), Status, and Performance.

| Discipline | Year | Course Name | Marks | | Total Marks (100%) | Status | Performance |
|------------|------|-------------------------------------------------------------------|------------------|------------|--------------------|--------|----------------|
| | | | Assignment (25%) | Exam (75%) | | | |
| ME | 2025 | Manufacturing Systems Technology I & II | 21.88 | 36.38 | 58 | Pass | - |
| ME | 2025 | Design Practice - II | 20.83 | 30 | 51 | Pass | - |
| ME | 2025 | Manufacturing Processes - Casting and Joining | 20.83 | 25.5 | 46 | - | - |
| ME | 2025 | Welding Application Technology | 21.92 | 30 | 52 | Pass | - |
| ME | 2025 | Product Design and Development | 16.67 | 43.01 | 60 | Pass | Elite |
| ME | 2025 | Product Design and Manufacturing | 23.13 | 51.51 | 75 | Pass | Elite + Silver |
| ME | 2024 | Automation in Manufacturing | 24.06 | 42 | 66 | Pass | Elite |
| ME | 2024 | Theory of Production Processes | 22.56 | 39 | 62 | Pass | Elite |
| ME | 2024 | Rapid Manufacturing | 23.41 | 48 | 71 | Pass | Elite |
| GE | 2024 | NBA Accreditation and Teaching and learning in Engineering (NATE) | 18.6 | 39 | 58 | Pass | - |
| MM | 2024 | Mechanical Behaviour of Materials (Part I) | 18.31 | 34.5 | 53 | Pass | - |
| MM | 2024 | Welding Processes | 17.81 | 18.75 | 37 | - | - |
| GE | 2024 | Teaching And Learning in Engineering (TALE) | 20 | 40.01 | 60 | Pass | Elite |
| ME | 2023 | Metal Additive Manufacturing | 20.94 | 43.5 | 64 | Pass | Elite |
| GE | 2023 | Accreditation And Outcome Based Learning | 18.13 | 42 | 60 | Pass | Elite |
| ME | 2023 | Product Engineering and Design Thinking | 22.5 | 34.5 | 57 | Pass | - |
| ME | 2019 | Manufacturing of Composites | 20.42 | 51 | 71 | Pass | Elite |

FDPs, Workshops, Seminars Attended – Notable

1. Three Days FDP on “Computational Design and Dynamics” during 27.01.2023 to 29.01.2023 conducted by Sree Sakthi Engineering College, Coimbatore.
2. Five Days FDP on “Product Design Engineering using Fusion 360” conducted by ICT Academy during 01.08.2022 to 05.08.2022 at Sri Sai Ram Engineering College, Chennai.
3. Two Days FDP on “3D Modelling & Printing” conducted by NITT, Trichy on 15.12.2022 & 16.12.2022
4. Attended IPR awareness Training Program conducted by NIPAM on 12.08.2022
5. 2 days (28th & 29th June 2019) all India workshop on “Application of CFD techniques in Heat Transfer and Energy Systems” at NIT, Trichy.
6. 7 Days MHRD sponsored workshop on “High Intense Hands-on-Training program in CFD using Siemens Application Software” held at Coimbatore Institute of Technology, Coimbatore.
7. Workshop attended on “Systematic Research & Paper Writing” in Kongu Engineering College, Perundurai, Erode.
8. 10 days GIAN course attended on “Multi-scale Modelling for Polymeric Nano Composites” conducted by IITM.
9. Two Weeks ISTE short Term Training Program attended on “Engineering Physics” conducted by IITB.
10. Two days National Conference on “Bio-Energy for sustainable Development” conducted by Periyar Maniammai University, Vallam Thanjavur.