


## SRI SAI RAM ENGINEERING COLLEGE

### DEPARTMENT OF MECHANICAL ENGINEERING

Name: Dr.A.Manivannan	
Designation:	Associate Professor
Qualification:	M.E., Ph.D.
Area of Specialization:	Engineering Design, Composites, 3D Modelling
Experience:	Teaching – 12.4 Years
	Industry: 1.7 Years
Number of Workshops/ Conferences/ FDP Attended:	Workshops - 05
	FDPs - 05
	National/Int. Conference- 03
Publication:	Journal:  National - Nil <b>International - 08</b>
	Conference:  National: 02 <b>International: 02</b>
General:	✓ 1 - NPTEL short term courseS completed. ✓ 2 - Online courses completed in COURSERA.
Staff Achievement	✓ 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.

### PROFESSIONAL EXPERIENCE:

College/Organization	Designation	Period From - To	Total period	Nature of work
Sri Sai Ram Engineering College	Associate Professor	July' 22 to till date	3.1 Years	Teaching
M.Kumarasamy College of Engineering	Assistant Professor	June' 19 to June 22	3 Years	Teaching
Selvam college of Technology	SRF (SERB – DST)	Sep' 16 to May' 19	2.9 Years	Research
Periyar Maniammai University	Assistant Professor	July' 14 to June' 16	2 Years	Teaching
SpectraA Technology Solutions Pvt. Ltd	Sr.Engineer	Feb' 13 to Feb ' 14	1 year	Design, Detailing and cost estimation of Brewery in plants in EPC basis

## PATENTS:

Applicant / Inventor	Title	Patent Adoption	Filed/ Published/ Granted	PatentNumber
<b>Applicant – A.Manivannan</b> Department of Mechanical Engineering, Selvam College of Technology.	“Development of Aluminium Matrix Composites for Cooling Fins”	02-11- 2016	Published	201641037412 A
<b>Applicant – A.Manivannan</b> Department of Mechanical Engineering, Selvam College of Technology.	Novel feeding method for ceramic reinforcement in Stir Casting	15- 09- 2017	Published	201741032714
<b>Inventor– A.Manivannan</b> Department of Mechanical Engineering, M.Kumarasamy College of Engineering.	Modified Stirrer Blade in Stir Casting	21-12-2020	Published	2020041055528
<b>Applicant – A.Manivannan</b> Department of Mechanical Engineering, Sri Sairam Engineering College.	An Automatic System for Pressure Cooker Whistle Counter	16-08-2022	Published	202241046393

## 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 atIMME’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.	<i>Quantitative and Qualitative Analysis of Advanced Aluminum Composites for Heat Transfer Properties</i>	<b>A. Manivannan,</b> R. Sasikumar, T. Nithyanandam, C. Ganesan	<i>Transactions of the Indian Institute of Metals</i> (SCI indexed – Q2)	2024 & 14.07.2024 <a href="https://doi.org/10.1007/s12666-024-03392-y">https://doi.org/10.1007/s12666-024-03392-y</a>
2.	Computational Analysis	C. Dineshkumar,	<i>International</i>	ISSN: 0975-3060 (Print),

	of a Simplified Car with Vortex Generator on Sides using RANS Model	N. Kamesh, C.K. Arvinda Pandian, <b>A. Manivannan</b> , Y. Ibrahim A. Vivek Anande	<i>Journal of Vehicle Structures &amp; Systems</i> (SCOPUS Indexed)	0975-3540 (Online) doi: 10.4273/ijvss.16.3.24
3.	Experimental Research on the Wear Properties of Friction Stir Welded Al–Li/Al–Mg Improved Heterogeneous Material Joints	C. Ganesan, <b>A.Manivannan</b> S.Seenivasan T. Keerthi Vasan	<i>Transactions of the Indian Institute of Metals</i> (SCI indexed – Q2)	2024 & Vol. 77 issue .2 <a href="https://doi.org/10.1007/s12666-024-03278-z">https://doi.org/10.1007/s12666-024-03278-z</a>
4.	<i>Mechanical &amp; Tribological Behaviour of Squeeze Casted Mg/SiC Composites for Defense Applications</i>	P.Pandiyaraj, <b>A.Manivannan</b> C. K. Arvinda Pandian B. Vijaya Ramnath	<i>Silicon</i> (SCI indexed – Q2)	2023 & Vol. 15 P.No. 7183-7189
5.	Effect & Thermal Investigation of Alumina & Graphite particles in AA6061 composites by two-step stir casting process	A.Manivannan R.Sasikumar C.Ramesh R.Kamalakaran	High Technology Letters (SCOPUS Indexed)	2020. Vol. 26, Issue No.8 P.No. 384-389
6.	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	2017. Vol.5. Issue No. 12

			Engineering (IJMPE)	
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 Critical Boilers	C.Sathiyarayan A.Manivannan P.Pandiyaraj A.Mohammed Ismail	International Journal of Applied Engineering Research (SCOPUS Indexed)	2015. Vol. 10 Issue.No.78
12.	Optimization of Surface Roughness Parameters for EN 8 Steel by Tungsten Carbide Tool in Turning Operation	I.KarthicSubramanian D.Jeyasimman, J.Kesavan. A. Manivannan	International Journal of Engineering Research & Technology (SCOPUS Indexed)	2015. Vol. 4, Issue 06

#### PEER REVIEWER FOR ACLAIMED INTERNATIONAL JOURNALS:

1. Part C: Journal of Mechanical Engineering Science
2. SAE Technical Papers
3. SAE International Journal of Vehicle Dynamics, Stability, and NVH
4. International Journal on Interactive Design and Manufacturing (IJIDeM)
5. Journal of Cleaner Production
6. Measurement
7. SAE International Journal of Sustainable Transportation, Energy, Environment, & Policy
8. SAE International Journal of Materials and Manufacturing
9. JOM
10. Journal of Thermal Analysis and Calorimetry (JTAC)

#### SHORT TERM COURSE COMPLETED:

- “**Manufacturing of Composites**” and secured 71% score (IIT, Kharagpur) with ELITE tag (Aug – Oct 19).
- “**Product Engineering & Design Thinking**” with 57% Score (IIT, Kharagpur) with successful completion (Feb – Apr 23).

- **“Metal Additive Manufacturing”** and secured 64% Score (IIT, Kanpur) with ELITE tag (Jul – Oct 23)
- **“Accreditation And Outcome Based Learning”** with 60% Score (IIT, Kharagpur) with ELITE tag (Aug – Oct 23).
- **“Teaching And Learning in Engineering (TALE)”** with 60% Score (IISc, Bangalore) with ELITE tag (Jan – Feb 24)

#### **FDPs, Workshops, Seminars Attended – Notable**

1. Three Days FDP on “Computational Design and Dynamics” during 27.01.2023 to 29.01.2023 conducted by SreeSakthi 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.