

**St.Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

Staff Name	:	Dr.Sathish Rengarajan
Faculty ID	:	TME22
Designation	:	Associate Professor
Qualification	:	M.E, Ph.D
E- Mail ID	:	sathishr@stjosephs.ac.in, sai27r123@gmail.com
Total Experience (Years)	:	13 Years
Teaching Experience (Years)	:	13 Years
Area of specialization	:	Welding, Surface coating, Composite materials
Anna university Supervisor code	:	3120013
No. Ph.D Scholars	:	4
No. of citation/H index		107/7
Research Gate score	:	10.43
Subjects handled in UG	:	Manufacturing Technology-I Manufacturing Technology-II Engineering Materials and Metallurgy Computer Integrated Manufacturing Robotics Process Planning and Cost Estimation Strength of Materials Engineering Graphics

**St.Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

		Robots Design and Programming
Department Responsibilities Held	:	Research Co-coordinator, Strength of Materials Lab In-charge
Journals published	:	<p>1. Tensile and Wear Behaviour of Friction Stir Welded AA5052 and AA6101-T6 Aluminium Alloys: Effect of Welding Parameters, G. Kasirajan<sup>1</sup>, <b>Sathish Rengarajan</b>, R.Ashok kumar, G.R.Raghav, V.S Rao, K.J. Nagarajan, Metallurgical Research Technology 2020 (<i>In press</i>)(<i>Web of Science</i>)</p> <p>2. Parametric Optimization of Wire cut EDM using Grey Relational Analysis, N.E.Arunkumar, <b>R. Sathish</b>, Ganesh M, (2020) Gedrag &amp; Organisatie Review-ISSN:0921-5077(<i>Web of Science, Scopus/UGC</i>)</p> <p>3. Experimental Studies on Thermal Spray Ceramic Coating (Al/Ti) On Mild Steel Substrate Rameeza, Sathish Rengarajan, V.S Rao (2020) Gedrag &amp; Organisatie Review - ISSN:0921-5077. (<i>Web of Science, Scopus/UGC</i>)</p> <p>4. Characterization and corrosion effects of Friction surfaced IS-2062 E250 CU with AA6063, R Vasanth, K Mohan, <b>Sathish Rengarajan</b>, R Jayaprakash, R. Ashok Kumar, Journal Materials Research Express ,Volume6, Issue 12(2019)</p> <p>5. Effect of hybrid reinforcement at stirred zone of dissimilar aluminium alloys during friction stir welding, R. Ashok kumar, G.R. Raghav, K.J. Nagarajan, <b>Sathish Rengarajan</b>, P. Suganthi and V. Vignesh, Metall. Res. Technol. Vol.116, 631 (2019)<a href="https://doi.org/10.1051/metal/2019062">https://doi.org/10.1051/metal/2019062</a>.</p>

**St.Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

6.A Comprehensive Study of Aluminium Based Metal Matrix Composite Reinforced with Hybrid Nano particles R. Venkatesh, Vaddi Seshagiri Rao,, and Sathish Rengarajan, Metallofiz. Noveishie Tekhnol.2019, vol. 41, No. 4, pp. 481–500. (Scopus indexed)

7. Synthesis, characterization and machinability studies on thin hybrid composites with SiC nano particles, SM Mullaikodi, K Shanmugasundaram, VS Rao, **Sathish Rengarajan**, Materials Research Express, 2019,(Web of Science/SCI indexed, 1.449 impact factor)

8. Friction surfacing of AISI 316 over mild steel: A characterization study (2018) RGS Nixon, BS Mohanty, **R. Sathish** Defence Technology, 306-312 Volume 14, Issue 4, August 2018, doi.org/10.1016/j.dt.2018.03.003. ,(Web of Science/SCI indexed, 1.261 impact factor)

9. Characterization of a Friction Surfaced Stainless Steel Coating on Medium Carbon Steel, Rathinam George Sahaya Nixon, **Rengarajan Sathish**, Bhulok Sundar Mohanty, Transactions of FAMENA, Volume 42, Issue 4, Pages 53-62. doi.org/10.21278/TOF.42405, (Web of Science/SCI indexed, 0.797 impact factor)

10.Mechanical and Metallurgical Properties of Dissimilar Friction Welded Aluminum Alloys Under Sub-Zero Temperature **R. Sathish**, VS Rao,(2016), Journal of the Chinese society of mechanical Eng37 (5), 449-456. ,(Web of Science/SCI indexed, 0.297 impact factor)

11. Mechanical and Metallurgical Characterization of Dissimilar Weld Joints Using Continuous Direct Drive Friction Welding V.S.RAO(2016) **Sathish Rengarajan**, Engineering Transactions

**St. Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

64 (2), 2016241–252. (Scopus indexed)

12. Tensile Strength and Hardness Correlations with Microscopy in Friction welded Aluminium to Copper **R Sathish**, VS Rao, D Ananthapadmanaban, B Ravi,(20165), Journal of The Institution of Engineers (India): Series C 97 (1), 121-126. (Scopus Indexed)

13. Characteristics of AA7075-T6 And AA6061-T6 Friction Welded Joints, **Sathish Rengarajan**, Vaddi Seshagiri Rao, (2015),Transactions of the Canadian Society for Mechanical Engineering Volume 39, Issue 4 Pages 845-854. doi.org/10.1139/tcsme-2015-0067,0.219 ,(Web of Science/SCI indexed, 0.219 impact factor)

14. Thermal And Structural Analysis Of Friction-Welded Dissimilar Materials, P.Venkateshwaran **R.Sathish**, Vaddi Seshagiri Rao, N. Sundar Raman, (2015)International Journal of Applied Engineering Research. Volume10 Issue Number 2 (2015), Pages 2211-2219.(Scopus indexed)

15. Optimization and non-destructive test analysis of SS316L weldments using GTAW, (2014) Balaji Chandrakanth, S V Abinash Kumar, S Ashwin Kumar, **R Sathish**, Materials Research Volume 17 Issue 1 Pages 190-195. (Web of Science/SCI indexed, 0.346impact factor )

16. Corrosion Studies on Friction Welded Dissimilar Aluminum Alloys of AA7075-T6 and AA6061-T6, **R Sathish**, V Seshagiri Rao, International Journal Electrochemical Science, Volume 9, Pages 4104-4113.(Web of Science/SCI indexed, 0.346 impact factor)

17. Evaluation of mechanical properties of SS316L weldments using Tungsten Inert gas welding, C Balaji, SV Abinash Kumar, S Ashwin Kumar, **R Sathish**, (2012), International Journal of Engineering Science and Technology, Volume,4 Issue 5, Pages

**St.Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

2053-2059.

18. Weldability and process parameter optimization of dissimilar pipe joints using GTAW, **R Sathish**, B Naveen, P Nijanthan, K Arun Vasantha Geethan, Vaddi Seshagiri Rao (2012) International Journal of Engineering research and applications Volume 2 Issue 3 Pages 2525-2530.

19. Optimization and Mechanical Properties Evaluation of Friction welded 8620 Low Alloy Steels, D.Vijayan, **R.Sathish**, D.Ananthpadmanaban, Prasanth A.P. Indian Welding Society Journal Special Issue Page15-22, March 2012.

20. Experimental Observations on Friction Weldability of Copper with Steel, Camilo Fernando, D. Ananthapadmanaban and **R. Sathish**, (2011) International Journal of Applied Engineering Research ISSN 0973-4562 Volume 6, Number 20 (2011) pp. 2349-2355.

International Conference Attended

- :
1. Experimental Observations on Friction Weldability of Copper with Steel R. Sathish, Investigation of Mechanical Properties on dissimilar weldments using solid state and Fusion welding Techniques. International conference & Exhibition on Pressure Vessels and Piping, "OPE" 2013-Chennai. Organized by IGCAR, IIM, Welding Technology Institute.
  2. R.Sathish, Friction weldability of 7075 Aluminum alloy, Recent Advances in Space Technology Services and Climate Change (RSTSCC), 2010, IEEE, ISRO conference.
  3. R.Sathish, "Optimal Blood Inventory Management Using

**St.Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

		Combined Analytical Hierarchy Process and Goal Programming Approach". International Conference on Operational Research for Urban and Rural Development, Thiagarajar College of Engineering, Madurai, December 15-17, 2010
National Conference Attended	:	<p>1.Dr.Sathish Rengarajan, attended National Conference on Research Exploitations in Mechanical Engineering, in the title of Experimental Investigation on ceramic powder coating on mild steel using Plasma spray Technique, organized by Bharath Niketan Engineering College,13th March 2019,Theni</p> <p>2. Corrosion studies on Aluminum alloy piston material by weight loss method in acid medium and its UV studies on the solutions, Nanthakumar, Naveen Ram R.Sathish, and National Conference on Emerging trends in in science and Technology on March 16<sup>th</sup> 2018.</p> <p>3.Investigation and Simulation of Friction welded AA7075 Alloy by using Finite Element Analysis", National Conference on Recent Trends in Manufacturing Technology (RTMT 2011) Anna University, Chennai.</p>
NPTEL Courses Attended	:	Advances in welding and Joining Techniques Fundamentals of Welding Science and Technoloy
No. of UG Projects Guided	:	15
No. of PG Projects Guided	:	03
Awards or Achievements	:	<p><b>Reviewer</b></p> <p>1. International journal of material Engineering and performance-Springer Publication.</p>

**St.Joseph's College of Engineering – Chennai 600119**  
**Department of Mechanical Engineering**  
**Faculty Information Sheet**

		2. Journal of King Saud University-Elsevier publisher.
--	--	--