

SRI SAI RAM ENGINEERING COLLEGE

DEPARTMENT OF MECHANICAL AND AUTOMATION ENGINEERING

Name: Dr. G. Ravi	
Designation:	Assistant Professor
Qualification:	B.E., M.E., Ph.D.
Area of Specialization:	Welding Technology, Metal Additive Manufacturing
Experience:	Teaching- 13 years
	Industry - NIL
No. of workshop / Conferences / FDP attended:	13/13/08
No. of workshop / Conferences / FDP organized:	01
Funded Projects	03
Publication:	Journal: National: NIL International: 04
	Conferences: National: NIL International: 01
Patent Details	02
Contact Details	Email : ravi.mu@sairam.edu.in Phone : 88074 44688; 81443 45469
Research Guidance	No of PhD Scholars Registered : NIL No of Scholars completed : NIL Joint Supervisor : NIL DC Member : NIL

ACADEMIC BACKGROUND:

Course	Institution	Year of Passing	Board/ university	% of Marks
Ph.D.* Welding Technology	PSG College of Technology, Coimbatore	2022	Anna University	Highly Recommended
M.E. Production Engineering	Regional Centre of Anna University, Coimbatore	2012	Anna University	8.15
B.E. Mechanical Engineering	Annamalai University, Chidambaram	2010	Annamalai University	7.55
Higher Secondary	Sri Vidya Mandir MHSS	2006	Matric	61%
SSLC	Kurinji Matric HSS	2004	Matric	66%

* Title of Ph.D. Thesis: **GAS SHIELDED ARC WELDING OF NICKEL-BASED SUPERALLOYS**

PROFESSIONAL EXPERIENCE:

Sl. No	College/Organization	Designation	Period From To	Total period	Nature of work
1	Sri Sai Ram Engineering College	Assistant Professor	From June 2022 to Till date	3 Years 8 Month	Teaching
2	PSG College of Technology	Senior Research Fellow	2019-2021	2 years 8 months	Research
3	Coimbatore Institute of Technology	Research Associate	2015-2017	2 years 6 months	Research
4	Sree Sakthi Engineering College	Assistant Professor	2012 – 2015	3 years	Teaching
5	Regional Centre of Anna University, Coimbatore	Pro-Term Lecture	Jan 2011 to June 2012	1 year 6 months	Teaching

PROFESSIONAL INVOLVEMENT:

Membership in professional bodies	<ol style="list-style-type: none"> 1. IEEE 2. IEI 3. IWS
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SPONSORED PROJECTS:

1. I have worked as Research Associate (RA) in M/s. Cameron, A Schlumberger International Company sponsored research project titled "**Weldability studies on Nickel based superalloy**"

Inconel 718” at Coimbatore Institute of Technology, Coimbatore. The works were performed at different welding processes such as: GTAW, GMAW and PGMAW process.

2. I have worked as Research Associate (RA) in M/s. Cameron, A Schlumberger International Company sponsored research project titled “**Wire and arc additive manufacturing (WAAM) of Nickel based Superalloys of Inconel 718 and Inconel 625**” at Coimbatore Institute of Technology, Coimbatore.
3. I have worked as Senior Research Fellow (SRF) in ISRO-RESPOND project titled “**Investigation on thermally assisted friction stir welding of Nickel based super alloy for gas ducts in Cryogenic and Semi Cryogenic Engines**” at PSG College of Technology, Coimbatore.

REVIEWER:

1. 3D printing and Additive Manufacturing (**Mary Ann Liebert, Inc., Publishers**)
2. Materials Science and Technology (**Taylor and Francis**)
3. Surface and Coatings Technology (**Elsevier**)
4. Engineering Research Express (**IOP Science**)

PUBLICATION DETAILS:

1. **Ravi G**, Murugan N and Arulmani R, ‘Optimization of Spin Arc GMAW process and welding of Inconel 718 alloy’, **Results in Materials**, 2025, pp. 100850, <https://doi.org/10.1016/j.rinma.2025.100850>.
2. Moorthi V, **Ravi G**, Jose Ananth Vino V, Kumaravel P, Nallappan R and Nagendiran B, ‘Alternative Fuel Potential of Acetylene: Environmental Investigations of Working Characteristics in SI Engine’, **International Journal of Environmental Sciences**, 2025, ISSN: 2229-7359, Vol. 11 No. 22s, <https://www.theaspd.com/ijes.php>.
3. Sudhagar S, Vimal Kannan V, Prem Kumar R, **Ravi G**, Rao Cheepurupalli N and Ram subbiah, ‘Mathematical modelling and optimization of stir cast Al7075/Sic/ZrO2 composites’, **Interactions**, 2024, 245:122 <https://doi.org/10.1007/s10751-024-01963-5>.
4. **Ravi G**, Murugan N and Arulmani R. ‘Microstructure and mechanical properties of an Inconel-625 slab component fabricated by wire arc additive manufacturing’. *Materials Science and Technology*, 2020; 36:16, pp. 1785-1795. <https://doi.org/10.1080/02670836.2020.1836737>. (2.5 Impact Factor)
5. **Ravi G**, Murugan N, Arulmani R and Gopal Magadi, ‘Effect of aging heat treatment on the microstructure of gas tungsten arc-welded Inconel superalloy 718’ *Structural Integrity*

Assessment, Lecture Notes in Mechanical Engineering, 2020, https://doi.org/10.1007/978-981-13-8767-8_11. (Book Chapter)

6. Pradeep S, Arul N and **Ravi G**, 'A review on Production and Characterization of Carbide Ductile Iron' International Journal of Scientific Research and Review, Volume 7, Issue 3, 2018, ISSN 2279-543X.
7. Selvarasu A, Kanthavel K, Krishnaraj R, Karpagarajan S, **Ravi G** and Ramesh R 'Conceptual Frame work of Centrifugal Pumps Towards Industrial Revolution' International Journal of Scientific & Engineering Research, Volume 3, Issue 2, February -2012, ISSN 2229-5518.

PAPERS PRESENTED IN THE INTERNATIONAL/ NATIONAL CONFERENCES:

1. Participated and Presented a paper entitled **"Enhancing Highway Median Irrigation with AI and IOT Technologies"** in the International Conference on Advancement in Mechanical, Mechatronics and Automobile Engineering on 27th and 28th Nov-2025, organized by School of Mechanical Engineering in associated with ASME at Bharath Institute of Higher Education and Research.
2. Participated and Presented a paper entitled **"Influence of post-weld heat treatment of GTA welded Nickel-based superalloy Inconel 718"** in the 30th International Conference on Processing of Advanced Materials and Fabrication of Products during 11-13th Dec 2024 at IIT Hyderabad, India.
3. Participated and presented a paper entitled **"Experimental Investigation of PWHT on gas tungsten arc welded nickel based superalloy Inconel 718"** in the 30th International Conference on Processing of Advanced Materials and Fabrication of Products during 11-13th Dec 2024 at IIT Hyderabad, India.
4. Presented the paper **"Effect of aging heat treatment on the microstructure of the GTA welded Inconel superalloy 718"** in the Second International Conference on Structural Integrity (ICONS2018) organized by Society for Failure Analysis (SFA) Chennai chapter along with IGCAR, IITM, InSIS and IISc during 14th - 17th Dec 2018.
5. Presented the paper **"Microstructure and Mechanical Properties of Wire Arc Additive Manufacture of Inconel 625 alloy component by Robotic MIG Welding"** in the International Conference on Advanced Materials and Manufacturing Processes for Strategic sector (ICAMPS 2018) organized by Indian Institute of Metals (IIM), ISRO-VSSC, Trivandrum during 25th Oct to 27th Oct 2018.

6. Presented the paper **“Wire Arc Additive Manufacturing of Prototype Nickel-Based Superalloy 625 Components by Robotic MIG Welding”** in the Indo-Japan Bilateral Symposium on the Futuristic Materials and Manufacturing (IJBFSFMM2018)- Towards the Age of Material Informatics organized by Dept. of Mechanical Engineering, IIT Madras during 16-17 July 2018.
7. Participated and presented the paper **“Effect of Aging heat treatment on Ni-based superalloy 718 by GMA welding”** in the National Conference on Technologies for Green Mobility 2018 organized by Dept. of Automobile Engineering, Bannari Amman Institute of Technology, Sathyamangalam in Association with SAE INDIA SS, Erode during 16th March and 17th March 2018.
8. Participated and presented the paper in the **“International Symposium on Green Manufacturing and Applications (ISGMA 2017)”** held at HICO Gyeongju, South Korea during 27th June 2017 to 1st July 2017.
9. Participated and presented the paper in a National Conference on Advanced in Mechanical Engineering organized by Dept. of Mechanical Engineering, Christian College of Engineering and Technology, Palani during 5th April 2014.
10. Participated and presented the paper in a National Conference held at Arignar Anna Institute of Science and Technology, Chennai during 29th March 2013.
11. Participated and presented the paper in a National Conference held at Sengunthar Engineering College, Tiruchengode during 8th March 2012.

NATIONAL/ INTERNATIONAL CONFERENCES ATTENDED:

1. Participated in International Virtual Conference on “Innovations in Advanced Materials Processing and Manufacturing (IAMPM-2020)” organized by Centre for Innovative Manufacturing Research (CIMR), VIT Vellore on 24th June, 2020.
2. Participated in the “International Conference on Nanomaterial’s for Frontier Applications” (ICNFA-2015) organized by Dept. of Physics, Coimbatore Institute of Technology, and Coimbatore during 2nd December – 4th December 2015.

MEDALS/AWARDS RECEIVED : NIL

EVENTS ORGANIZED:

1. Organized Two days IEEE_IES Bootcamp workshop on “AI-DEEP Learning” on 05.02.2026 & 06.02.2026 at Sri Sairam Engineering College.

2. **Organized** a one day workshop on “AUTOMATION AND AI/ML IN TODAY’S INDUSTRIAL DESIGN PHASES” on 24.10.2025 by Department of Mechanical and Automation Engineering at Sri Sairam Engineering College.
3. **Organized** Guest Lecture and Hands on Training Program on “ADVANCEMENTS IN WELDING TECHNOLOGY” on 06.03.2024 by Department of Mechanical and Automation Engineering at Sri Sairam Engineering College.
4. **Organized** Guest Lecture Talk on “Geometric Dimensioning and Tolerance (GD&T)” on 24.10.2024 for IEEE-IMS Members 2024 by Department of Mechanical and Automation Engineering at Sri Sairam Engineering College.

SHORT TERM / CERTIFICATE COURSE ATTENDED:

1. Attended two-day national open workshop on “Getting Aligned to the Publishing Process- Author Workshop and Scopus + Science Direct” Elsevier Researcher Academy, during 25th and 28th September 2020.
2. Participated in the TEQIP-III sponsored a short-term course on “Advances in welding and materials processing” organized by the Department of Mechanical engineering, PSG College of Technology, and Coimbatore during 18th -20th December 2017.
3. Attended the AICTE sponsored QIP- short term course on “Advanced material science and engineering” organized by the Department of Mechanical engineering, Coimbatore Institute of Technology, Coimbatore – 14, during 15th - 28th May 2017.
4. Attended one-week short term course on “Recent Advances in Material Research” sponsored by AICTE, organized by the Department of Mechanical Engineering, Coimbatore Institute of Technology, Coimbatore during 3rd April - 9th April 2017 under QIP.
5. Attended the TEQIP-II sponsored one-week faculty development programme on “Advanced metal joining technology” organized by the Department of Mechanical engineering, Coimbatore Institute of Technology, Coimbatore during 21st -27th October 2016.
6. Attended the TEQIP-II sponsored one-week faculty development programme on “Additive manufacturing and its applications” organized by the Department of Mechanical engineering, Coimbatore Institute of Technology, Coimbatore during 12th -17th September 2016.
7. Participated in the Short-Term Course on “A New Dimension in Manufacturing – Additive Manufacturing” organized by the Department of Mechanical engineering, Coimbatore Institute of Technology, Coimbatore during 1st - 7th February 2016 under the sponsorship of QIP, AICTE, Government of India.

FACULTY/STAFF DEVELOPMENT /TRAINING PROGRAM/ WORKSHOPS ATTENDED:

1. Participated in the online workshop on “Advanced Training on Intellectual Property” conducted on 28th & 29th October 2021 by the Technology Transfer and Intellectual Property Services (TIPS) @ SCTIMST-TIMed, organized by PSG Institute of Technology and Applied Research, Coimbatore.
2. Attended the one-day workshop sponsored by COE-Welding Engineering and Technology, PSG Tech and IWS, Coimbatore on “Robotic Welding and Its Applications” conducted by Department of Robotic and Automation Engineering at PSG College of Technology, Coimbatore on 7th OCT 2017.
3. Attended the AICTE-RPS sponsored one-day workshop on “Thermal Imaging Technologies in Research, Operation and Maintenance” at Coimbatore Institute of Technology, Coimbatore in association with FLIR & Vamara Techware on 18th February 2017.
4. Attended Three Days Hands-on Training programme on “ABB Robotic Welding” organized by ABB, Peenay Industries, Bangalore during 16th Jan – 18th Jan 2017.
5. Participated one-day National Corrosion Awareness Day (CAD 2016) Organized by CSIR-Central Electrochemical Research Institute, Karaikudi, Kalasalingam University, held on 8th April 2016.

DEPARTMENT LEVEL ACTIVITIES:

- Department Talent Enabler
- Department Industrial Visit / Implant Training
- NPTEL Coordinator

NON-DESTRUCTIVE TESTING (NDT):

1. Liquid Penetrant Testing (PT)
2. Radiographic Testing (RT)

LABORATORY SKILLS:

1. Welding of GTA, GMA, PGTA, PGMA, Friction Stir Welding and Friction Surfacing.
2. Hands-on training on “ABB Robot Welding” at ABB, Peenay Industries, Bangalore.
3. Material Characterization and Testing.
4. Hands on training on Optical Microscopy and Scanning Electron Microscopy.
5. Qualitative and Quantitative Analysis.