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**7. Employment Profile**

Job Title	Employer	From	To
Associate Professor	NIT Trichy	<b>24-4-10</b>	<b>Till Date</b>
Assistant Professor	NIT Trichy	24-4-07	23-4-10
Lecturer	NIT Trichy	29-3-06	23-4-07
Assistant Professor	J.J. College of Engg. & Tech., Tiruchirappalli.	1-7-04	28-3-06
Lecturer	J.J. College of Engg. & Tech., Tiruchirappalli.	14-6-99	30-6-04
Lecturer	Jayam College of Engg. & Tech., Dharmapuri	15-7-98	13-1-99
Trainee	Bharat Heavy Plate & Vessels Ltd., Visakhapatnam.	5-3-97	4-3-98
Engineer	Kareem Enterprises, Engineering Contractors, Visakhapatnam.	4-6-94	31-7-95

**8. Academic Qualifications (From Highest Degree to High School):**

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	NIT TRICHY	2006	-	Production (Welding )
M.E.	REC, TRICHY	1996	First Class	Welding Engineering
B.E.	GCE, SALEM	1994	First Class	Mechanical
12 <sup>th</sup>	Bishop Heber Higher Sec School, Teppakulam, Trichy	1990	First Class	State Board
SSLC	Government Higher Secondary School, KN Patti, Namakkal	1988	First Class	State Board

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9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Associate Dean -2	Planning and Development	10-10-2012 to Till Date	10-10-2015
Nodal Officer - Academic	TEQIP (Phase-II)	25-1-10	11-01-2013
Team Member-CECASE	CECASE	12-10-2011	Till date
Monitoring Committee Member	Production Engineering	2013	2013
Co-ordination committee member (Human Resource & Facilitation)	Production Engineering	2013	2013
Subject Co ordinator	Production Engineering	2013	2013
Staff Advisor	Production Engineering	2013	
Program Committee Member,	NBA 2016 Visit at NITT	April 2016	April 2016
Department Administrative Council (DAC)	MME Department ,NIT Trichy	30-1-12 onwards	
Member	Production Engineering	18-3-08	2011
Application Scrutiny Committee Member for Asst. Prof /Lect.	NIT Trichy	24.7.2008	
Institute Day 2008, committee member	NIT Trichy	19.3.2008	
Course coordinator	Ist Year Engineering Practice	2008-09	
DPEC Chairman & Member	Production Engineering	2011 2010	2012 2011
Staff Advisor	Production Engineering	2006 2007	2007 2008

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10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Team Member	NBA Visit, New Delhi	2013	2013
Team Member	Anna University Visit	2015	2015
Ph.D. Viva Voice Examiner	Anna university and Andhra university	2010	2016
Expert Member for Recruitment of Scientist	DRDO (ADA), Bangalore	10-10-2012	11-10-2012

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2009	Young Technology Award	Indian welding society, Mumbai Chapter
2009	Best Teacher Award	NIT Trichy
2011	Raiser Innovation Award for friction welding	Klaus Raiser GMBH, Germany
2012	Best Cited Paper	Journal of Optics and Laser Technology (Elsevier)
2013	Best paper Award in National Conference	NIT Trichy
2015	Certificate of Reviewer Contribution	International journal of Precision Engineering and Manufacturing (Springer)

12. Fellowships : NIL

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work

(i) Curriculum Development:

Department committee member for curriculum Developments.

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(ii) Courses taught at Postgraduate and Undergraduate levels

<b>S. no</b>	<b>Name of the subjects</b>
1	Welding Technology
2	Casting and Welding Technology
3	Engineering Graphics
4	Metrology and Quality Assurance
5.	Casting Technology
6.	Advanced Welding Process
7.	NDT

(iii) Projects guided at Postgraduate level

<b>Sl. No.</b>	<b>Student Name &amp; year</b>	<b>Specialization</b>	<b>Title of the thesis</b>
1.	Afsal Husain TM December 2012	M T	Prediction and optimization of friction welding parameters for UNS 32760 super duplex stainless joints
2.	Tanksale Abhijit Anandrao December 2012	M T	Experimental investigation on friction welding of UNS 32760 super duplex stainless joints
3.	Jiju V Elias May 2012	M T	Modeling and simulation of Flux cored arc welding process using Sysweld.
4.	Simon C Mathew May 2012	M T	Three dimensional modeling and simulation of Flux cored arc welding on 316 L(N) austenitic stainless steel
5.	Benjamin Joseph May 2012	M T	Simulation and thermal analysis of electron beam welding of 316 L(N) austenitic stainless steel
6.	Jiju V Elias December 2011	M T	Parameter optimization using evolutionary algorithms in flux cored arc welding of 316 L(N) austenitic stainless steel
7.	Simon C Mathew December 2011	M T	Experimental investigation on flux cored arc welding of austenitic stainless steel
8.	Benjamin Joseph December 2011	M T	Weld metal characterization of 316L(N) austenitic stainless steel by Electron Beam Welding
9.	A. P. Abilash May 2011	M T	Artificial neural network simulation and optimization of friction welding of 904 L super austenitic stainless steel
10.	Sammer Srivastava May 2011	M T	Corrosion studies on friction welding of 904 L super austenitic stainless steel
11.	Mahendra kumar	M T	Parametric optimization of friction welding of

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	mishra May 2011		super austenitic stainless steel
12.	A. P. Abilash December 2010	M T	Finite element simulation of laser welding of 904 L super austenitic stainless steel
13.	Sammer Srivastava December 2010	M T	Hard cracking testing of different stainless steel
14.	Mahendra kumar Mishra December 2010	M T	Effect of shielding gases on laser - GMAW - Hybrid welding of super austenitic stainless steel
15.	Ajesh Sudhakaran, May 2010.	M T	Effect of shielding gases on gas metal arc welding of super austenitic stainless steel
16.	Ajesh Sudhakaran, December 2010.	M T	Mechanical and metallurgical characterization of gas metal arc welding of SA 516 Grade 70 steel
17.	P.M.Ajith May 2009	M T	Optimization the process parameters of 904 L super austenitic stainless steel by GMAW process
18.	P.M.Ajith December 2008	M T	Gas metal arc welding of super austenitic stainless steel
19.	R.Soundararajan May 2008	M T	Three dimensional simulations of temperature distribution and weld bead geometry in TIG welding of duplex stainless steel sheet
20.	R.Soundararajan December 2007	M T	Characterization of multi pass weld joint in duplex stainless steel (2205)
21.	George Mathew July 2009	I E	Risk reduction of portfolio by intrinsic value analysis in Indian stock market
22.	George Mathew December 2008	I E	Multi criteria decision analysis for ranking MIDCAP and small cap stocks in emerging markets-An Indian perspective
23.	A.Sateesh kumar December 2009	I E	Optimization of friction welding parameters using grey relational analysis and desirability function analysis.
24.	A.Sateesh kumar May 2010	I E	Optimization of laser welding parameters using grey relational analysis and fuzzy logic.
25.	V.Ramana murthy palli, May 2007	M T	Prediction of tool wear and surface roughness in turning
26.	Amol Ramrao Bhaware, December 2007	M T	Experimental investigation of effect of helium shielding gas on GTA welding of duplex stainless steel
27.	B.Chandramoha	I E	Parameters optimization of CO <sub>2</sub> laser welding

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	n May 2007		of medium carbon steel plate using Taguchi algorithm
28.	B.Chandramohan January 2007	I E	Optimization of parameters on casting rejections (cracks/hardness) using Taguchi techniques

(iv) Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Hybrid laser–GMAW welding, laser beam welding and gas metal arc welding of AISI 904L Super Austenitic Stainless Steel,	DST, NEWDELHI	2007	2010	Completed
Experimental Investigation And Metallurgical Analysis of Friction Welded Duplex Stainless Steel Joints	CSIR, NEWDELHI	2012	2015	Completed
Study on effect of cryo rolling precipitation hardenable AA 2219 aluminium alloy of friction stir welds	DRDL, HYDERABAD	2013	2015	Completed
Experimental studies and Numerical simulations on micro joining of shape memory alloys (NITINOL)	MHRD- SCSP-TSP-NEWDELHI	2014	2017	Ongoing

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A comparative study on the weldability of high strength aluminium-magnesium alloy (AA 5083)	SERB-DST New Delhi	2016	2020	Ongoing
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15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
G.R. Jinu	Fatigue Analysis in Boiler Components	Supervisor	2009
M.Y.Abdul Jaleel	Laser Welding of AISI 904 L Super Austenitic Stainless steel and Evaluation of Processed Joints	Supervisor	2011
D.Katherasan	Experimental Investigation on Flux cored Arc Welding of AISI 316 L (N) Austenitic Stainless Steel	Supervisor	2013
P.M.Ajith	Experimental Investigations on Friction welding of UNS S 3 2205 Duplex stainless steel joints	Supervisor	2015
M. Mohammed Asif	Mechanical and Metallurgical investigations on friction welding of UNS S3 1803 Duplex Stainless Steel and Effects of Post weld heat treatment on the processed joints	Supervisor	2016
S.Arunkumar	Experimental and Comparative Investigations on A-TIG, Laser, and TIG welding Process of Incoloy 800 HT	Supervisor	2016



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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

### **Workshops Attended:**

1. Energy Efficiency & Conservation, Dec.9-10, 1999, Anna University, Chennai.
2. Arc Welding of Stainless Steel, Sep.15, 2000, CIT, Coimbatore.
3. Virtual Reality Modeling Language in Cyber Space, July27, 2002, JJCET, Tiruchirappalli.
4. Thermal & Manufacturing Aspects of Composites, May 26-31, 2003, Annamalai University, Chidambaram.
5. Recent Trends in Welding Process-GMAW, Sep.24, 2005, CIT, Coimbatore.
6. MEMS and smart structures, December 11-116,2006, Institute for smart structures and systems.
7. Non-Destructive evaluation, October 12-13,2007, Department of Physics, NIT, Trichy.
8. Non-Destructive evaluation of corrosion, May 10&11, 2008, Indian society for Non-Destructive testing, Kalpakkam chapter, Chennai.
9. Environmentally cleaner welding process , April 17&18, 2009, Annamalai University, Chidambaram.
10. Finite element method and applications in engineering using ANSYS, November 26&27, 2007, Department of Mechanical engineering, NIT, Trichy.
11. Two week ISTE Workshop on "Thermodynamics in Mechanical Engineering", June 14-24, 2011, IIT Bombay.
12. Two week ISTE Workshop on "Computational fluid dynamics", June 12-22, 2012, IIT Bombay.
13. Outcome based accreditation process and parameters, 16 October 2012, CARE group of Institutions, Tiruchirappalli.

### **Short-Term Courses/Seminars/ Training Programme Attended:**

1. Cryogenic Technology for Metal Treatment, May 28-June 9, 2001, AICTE-ISTE, PSG College of Technology, Coimbatore.
2. Innovation and Entrepreneurship, Aug.6-17, 2001, TREC-STEP, Tiruchirappalli
3. EDM Awareness Programme, April24-26, 2002, Bannari Amman Institute of Tech., Sathiyamangalam
4. Fracture Mechanics-Theory & Practice, Nov.25-29, 2002, IISc, Bangalore.
5. Laser Assisted Micro Fabrication for MEMS, Micro optics & Nano Application, Feb. 24-28, 2003, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad
6. Dimensional Engineering & Tolerance Analysis, May12-23, 2003, REC, Tiruchirappalli.
7. Finite Element Analysis of Weldments, Aug.18, 2003, CIT, Coimbatore.

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8. Introduction and Applications of Non Traditional Optimization Techniques in Operations Management, Nov.23-Dec.PSG College of Technology, Coimbatore
9. Reaching the Unreached: A Challenge to Technical Education, Dec. 27-30, 2003, Kumaraguru College of Technology, Coimbatore.
10. Emerging Trends in CAD/CAM, Dec. 1-14, 2004, National Institute of Technology, Tiruchiappalli.
11. Net working Programme under TEQIP at Department of Mechanical Engineering, NIT, Warangal from 19-23, June 2006.
12. MEMS and Smart Structures, 11-16, December 2006 at IISc, Bangalore, conducted by IISc Bangalore.
13. Short term course under QIP on “Recent Advances in Logistics and Supply Chain Management” organized by the Department of Production Engineering, NITT, from 12-16 March 2007.
14. Application of Design of experiments, October 4-6, 2007, College of Engineering, Chennai- SAEINDIA .
15. Metallurgy and materials: Today and tomorrow, February 11-15, 2008, Department of Metallurgical and materials engineering, NIT, Trichy.
16. Recent advances in industrial engineering, April 07-11, 2008, Department of Production Engineering, NIT, Trichy.
17. Fuzzy logic: Theory and engineering practices, June 16-28, 2008, Department of Mathematics & Production Engineering, NIT, Trichy.
18. Advanced joining process for sheet metals, September 19-21, 2008, IIT Bombay.
19. Recent advances in modeling and simulation of joining of materials, 29<sup>th</sup> December 2008 – 10<sup>th</sup> January, Department of Mechanical Engineering, NIT, Trichy.
20. Recent advances in materials and processing technologies, June 1-12, 2009, Department of Metallurgical and Materials Engineering, NIT, Trichy.
21. Composite materials: processing challenges and opportunities, July 13-24, 2009, Department of Production Engineering, NIT, Trichy.
22. Quantitative research techniques for engineers and researchers, 21<sup>st</sup> December 2009 – 2<sup>nd</sup> January 2010, Department of Mechanical Engineering, NIT, Trichy.
23. Teaching Learning Methodologies, August 20-22, Teaching Learning centre, IIT Madras.
24. 3rd Summer School in Tribology, June 20-23, Tribology Society of India, liPM, Gurgaon.

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17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Agency/ Organization	Short title or Area	Value in Lakhs	Coordinator / Co- Coordinator	Period
TEQIP (G)	Welding Course	0.60	Coordinator	4-5 July,06
AICTE (G)	Recent trends in Advanced Welding Processes	1.16	Coordinator	18- 30,June07
TEQIP (G)	Finite Element Analysis of welding	0.45	Coordinator	24&25-01- 08
TEQIP –TDP (G)	Radiant Energy welding processes	0.21	Coordinator	15-03-2008
MHRD-AICTE (G)	Advances in Materials Processing	2.00	Coordinator	30-6-2008 to 12-7-2008.
AICTE-QIP (G)	Weldability of advanced materials & Newer Joining Techniques	0.95	Coordinator	29-6-2009 to 3-7-2009
Self Supported (CECASE)	Two day Short term course on Corrosion Control and Surface Engineering	----	Coordinator	October 18-19, 2012
Self Supported (CECASE)	Three – One Day Colloquium on Corrosion Control and Surface Engineering : Current R&D and Industrial Scenario	----	Co convener	December 10-12, 2012
Self Supported (CECASE)	National Conference on Corrosion, Surface Engineering and Tribology (CST-2013)	----	Convener	April 22-23, 2013
Self Supported	Short term course on "Recent trends in fluid power control system and Mechatronics	0.35	Coordinator	03 to 07 June-2013
TEQIP-II	Workshop on Recent developments of welding processes in Manufacturing Industries	0.75	Coordinator	27-29 June 2013
TEQIP-II	Workshop on Advances Material Processing in Past, Present and Future	1.21	Coordinator	30-06-2016 to 03-07- 2016

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### 18. Invited Talks delivered

1. One day workshop on "Latest trends in Material Technologies, held at Mailam Engineering College, Mailam, Villupuram-604304 on 14-03-2008.
2. A short term course on "Recent trends in advanced manufacturing" held at NITT ON 18-03-2008.
3. Recent trends in Advanced welding Technology, held at Kings college of Engineering, Pudukkottai-613 303 on 20-06-2008.
4. Emerging concepts in Mechanical Engineering, held at SIT, Trichy on 10-03-2010.
5. Friction welding of Dissimilar metals & Machining of GFRP composites, held at St. Joseph's college of Engineering, Chennai-600 119 on 12-10-2010.
6. One day workshop on laser beam welding & processing, held at SSN college of Engineering, Kalavakkam, Chennai on 14-10-2011.
7. Advanced Manufacturing Techniques in Engineering, held at Ultra college of Engineering & Technology for Women, Madurai-625 104 on 16-09-2011.
8. MESA'10 organized by N.P.R. college of Engineering & Technology, Natham on 31-08-2012.
9. International conference on Recent Advances in mechanical Engineering, held at Dr.M.G.R Educational and Research Institute University, Chennai on 19-04-2012.
10. ACMIE held at Shivani Engineering College, Trichy-620009 on 27-09-2012.
11. Modelling and simulation for Engineering Applications, held at A C College of Engineering and Technology, Karikudi on 10-12-2012.
12. CSIR Sponsored two day national level workshop on "Recent advances in welding of dissimilar materials" on 20-04-2013.
13. Guest lecture on Recent Trends in welding, jeyam College of Engineering and Technology, Dharamapuri, 20-08-2016

### 19. Membership of Learned Societies

1. Life Member (LM37442)–Indian society for technical Education.
2. Life Member (L00104) – Indian welding Society.
3. Life Member (SLM3017) –Indian Institute for Production Engineers.
4. Life Member (M139571-2) – Institution of Engineers.
5. Life Member (FLM-SFA-0472) - Society for Failure Analysis.

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### 20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	11-12-2007 to 10-01-2008	Training Programme at Bodycote Singapore Pte. Ltd, Singapore
Turkey	June 2009	International conference on welding Technologies,09, Organized by Welding Technology Society, Gazi University, Ankara
Chong Ming Island, China	22-26 May, 2011	International Conference on Heterogeneous Material Mechanics, organized by Shanghai University
Dubai	29-01-2012 to 31- 01-2012	International Conference on Manufacturing System Engineering
Phuket, Thailand		International Conference

### 21. Publications

#### (A) Refereed Research Journals:

1. **P. Sathiya**, S. Aravindan and A. Noorul Haq, "Some experimental investigations on friction welded stainless steel joints", Materials and Design, Vol. 29, pp 1099-1109, 2008.- **SCI Journal**.
2. **P.Sathiya**, S.Aravindan and A.Noorul Haq "Optimization of friction welding parameters using evolutionary computational techniques", Journal of Material Processing Technology, Vol.209, pp 2576-2584, 2008.-**SCI Journal**.
3. **P.Sathiya**, S.Aravindan and A.Noorul Haq "Effect of friction welding parameters on mechanical and metallurgical properties of ferritic stainless steel", International Journal of Advanced Manufacturing Technology, Vol. 31, No. 11-12, pp 1076-1082, 2007. -**SCI Journal**.
4. **P.Sathiya**, S.Aravindan and A.Noorul Haq "Mechanical and metallurgical properties of friction welded AISI 304 austenitic stainless steel", International Journal of Advanced Manufacturing Technology, Vol. 26, pp 505-511, 2005.-**SCI Journal**.
5. **P.Sathiya**, S.Aravindan and A.Noorul Haq "Optimization for friction welding parameters with multiple performance characteristics", International Journal of Mechanics and Materials in Design, Vol. 3, No.4 pp 309-318, 2006.-**SCI Journal**.
6. **P.Sathiya** and Abdul Jaleel. M.Y, "Measurement of the bead profile and microstructural characterization of a CO<sub>2</sub> laser welded AISI 904 L super austenitic stainless steel," International Journal of Optics & Laser Technology, **42(6)**, pp 960-968, 2010.-**SCI Journal**.
7. **P.Sathiya**, Abdul Jaleel. M.Y., Katherasan. D and Shanmugarajan.B. "Optimization of laser butt welding parameters with multiple Performance

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- characteristics”, *International Journal of Optics & Laser Technology* – 43 (2011) 660–673. -**SCI Journal**.
8. **P.Sathiya**, and Abdul Jaleel. M.Y. “Influence of shielding gas mixtures on bead profile and Microstructural Characteristics of Super Austenitic Stainless Steel weldment by Laser Welding”, *International Journal of Advanced Manufacturing Technology*, 54 (2011), 525-535.-**SCI Journal**.
  9. **P.Sathiya**, K.Panneerselvam and R.Soundararajan, “Optimal design for laser beam butt welding process parameter using artificial neural networks and genetic algorithm for super austenitic stainless steel” *International Journal of Optics & Laser Technology*, 44 (2012) 1905-1914.-**SCI Journal**.
  10. **P.Sathiya**, Mahendra Kumar Mishra and B.Shanmugarajan, “Effect of shielding gases on microstructure and mechanical properties of super austenitic stainless steel by hybrid welding” *International Journal of Materials and Design*, 33 (2012) 203–212.-**SCI Journal**.
  11. **P.Sathiya**, K.Panneerselvam and M.Y.Abdul Jaleel, “Optimization of laser welding process parameters for super austenitic stainless steel using artificial neural networks and genetic algorithm” *International journal of Materials and Design*, 36 (2012) 490–498. -**SCI Journal**.
  12. **P.Sathiya**, S.Aravindan, R.Soundararajan & A.Noorul Haq, “Effect Of Shielding Gases on Mechanical And Metallurgical Properties Of Duplex Stainless Steel Welds”, *Journal of Material Science*, Vol.44, pp 114-121, 2009.-**SCI Journal**.
  13. **P.Sathiya**, Abdul Jaleel. M.Y and Katherasan. D., “Optimizing the weld pool geometry in laser welding of AISI 904 L super austenitic stainless steel using multi-input/multi-output grey relational analysis,”, *International Journal of Multidiscipline Modeling in Materials and Structures*, 2011, vol.7, issue 1, 5-23.
  14. **P.Sathiya**, Abdul Jaleel. M.Y., Katherasan. D and Shanmugarajan.B. “Optimization of laser butt welding parameters based on the orthogonal array with fuzzy logic and desirability approach”, *International Journal of structural and multidisciplinary optimization* (2011) 44:499–515.-**SCI Journal**.
  15. **P.Sathiya**, Abdul Jaleel. M.Y. and Katherasan. D. “Optimization of Welding Parameters for Laser Bead-on-plate welding using Taguchi method”, *International Journal Production Engineering Research & Development*, Vol.4 No.5, pp 465-476, 2010.
  16. **P.Sathiya**, and Abdul Jaleel. M.Y., “Grey-Based Taguchi Method for optimization of bead geometry in Laser Bead-on-Plate Welding”. *International Journal of Advanced production Engineering and Management*, 5 (2010) 4, 225-234.
  17. **P.Sathiya**, S.Aravindan, R.Jeyapaul, P.M. Ajith, and A.Noorul Haq, “Optimizing the weld bead characteristics of super austenitic stainless steel (904L) through grey-based Taguchi method”, *International Journal Multidiscipline modeling in materials and structures*, Vol.6 No.2, pp 206-213, 2010.

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18. **P.Sathiya**, Abdul Jaleel M.Y, and B.Shanmugarajan “Analysis of Metallurgical and mechanical properties of laser welded super austenitic stainless steel”. *International Journal of Engineering, Design and Technology*, 2011,Vol. 10, Issue1.
19. **P.Sathiya**, N.Siva Shanmugam and T.Ramesh “Temperature distribution modeling of Friction Stir Spot Welding of AA 6061-T6 using Finite Element Technique”, *International Journal of Multidiscipline Modeling in Materials and Structures*, Vol. 4 (1), pp 1-14, 2008.
20. **P.Sathiya**, S.Aravindan and A.Noorul Haq “Tensile Properties And Microstructural Studies Of Similar AISI 304 Austenitic And AISI 430 Ferritic Stainless Steels Joined By Friction Welding”, *International Journal of Multidiscipline Modeling in Materials and Structures*, Vol. 4, No. 2, pp 141-154, 2008.
21. **P.Sathiya**, Ajesh Sudhakaran and R.Soundararajan, “Mechanical and Metallurgical investigation on Gas Metal Arc Welding of Super Austenitic Stainless Steel”, *International Journal of Mechanical and Materials Engineering*, Vol.7, 2012, 107-112.
22. **P. Sathiya**, P. M. Ajith and R. Soundararajan, Genetic algorithm based optimization of the process parameters for gas metal arc welding of AISI 904 L stainless steel, *Journal of Mechanical Science and Technology* 27 (8) (2013) 1~9.-**SCI Journal**.
23. **P.Sathiya**, S.Aravindan and A.Noorul Haq “Optimization of friction joining parameters in processing of similar ferritic stainless steel joints by evolutionary computational techniques”, *International Journal of Manufacturing Science & Technology*, Vol. 9 No. 2, pp 89-100, 2007.
24. G.R.Jinu, **P.Sathiya**, G.Ravichandran and A.Rathinam, “Investigation of the fatigue Behaviour of butt welded joints treated by ultrasonic peening process and compared with fatigue life assessment standards”, *International Journal of Advanced Manufacturing Technology*, **Vol. 40, pp 74-83, 2009.-SCI Journal**.
25. Katherasan, D., **P. Sathiya** and A.Raja (2013) Shielding Gas Effects on Flux Cored Arc Welding of AISI 316L(N) Austenitic Stainless Steel Joints. *International journal of Materials and Design*, 45, 43–51.-**SCI Journal**.
26. **P.Sathiya**, S.Aravindan, P.M. Ajith, B.Arivazhagan and A. Noorul Haq , “Microstructural characteristics on bead on plate welding of AISI 904 L super austenitic stainless steel using Gas metal arc welding process”, *International Journal of Engineering Science, and Technology*, Vol. 2, No. 6, 2010, pp. 189-199.
27. G.R.Jinu, **P.Sathiya**, G.Ravichandran and A.Rathinam, “Comparision of thermal behavior of ASTM A 213 grade T-23 tubes under free expansion and constrained condition”, *International Journal of Material Science*, Vol.4 No.3, pp 349-364, 2009.

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28. G.R.Jinu, **P.Sathiya**, G.Ravichandran and A.Rathinam, "Failure analysis of ASTM A 213 grade T-22 weld tube subjected to short-term overheating", International Journal of Materials science, Vol.4 No.3, pp 365-380, 2009.
29. G.R.Jinu, **P.Sathiya**, G.Ravichandran and A.Rathinam, "Comparision of thermal fatigue behavior of ASTM A 213 grade T-92 base and weld tubes", Journal of Mechanical Science and Technology, Vol.24 No.5, pp 1067-1076, 2010.-**SCI Journal**.
30. G.R.Jinu, **P.Sathiya**, G.Ravichandran and A.Rathinam, "Experimental investigation of thermal fatigue behaviour of header tube to stub welded joint in power plants", International Journal of Materials research, Vol. 101, No.9, pp 1180-1186, 2010.-**SCI Journal**.
31. Katherasan, D., Jiju V Elias, **P. Sathiya** and A. Noorul Haq, Simulation and parameter Optimization of Flux Cored Arc Welding Using Artificial Neural Network and Particle Swarm Optimization Algorithm, International Journal of Intelligent Manufacturing (Springer). February 2014, Volume 25, [Issue 1](#), pp 67-76.-**SCI Journal**.
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