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### 9. Academic/Administrative Responsibilities within the University

Sl. No.	Details
1.	Acting as course coordinator for a newly proposed M.Tech. course Engineering Design
2.	Looking after the allocation of M.Tech./Ph.D Scholar for various laboratories assistantship and Test/Examinations for Mechanical Engineering Department.
3.	Staff Advisor for Third Dimension Aero Modeling Club, NITT
4.	Lab in-charge of CAD and Simulation & Automobile Laboratory
5.	Acted as a Faculty Advisor for B. Tech Mechanical Engineering (Batch 2008-12)
6.	Acted as a PAC chairman for M. Tech Industrial Safety Engineering (Batch 2010 – 2012)
7.	Acted as PG Admission Committee Member in the Year 2009 for M.Tech. Industrial Safety Engineering and Thermal Power Engineering at NIT, Tiruchirappalli
8.	Acted as UG Admission Committee Member in the Year 2009 for B.Tech. Mechanical Engineering at NIT, Tiruchirappalli
9.	Accompanied M.Tech. Final year Industrial Safety Students to IOCL, Valavanthakottai – Fire Mark Drill
10.	Accompanied M.Tech. First Year Industrial Safety Students to Boiler Plant, BHEL, Trichy – Field Visit
11.	Accompanied M.Tech. First Year Industrial Safety Students to BPCL, Trichy – Field Visit
12.	Accompanied B.Tech. First Year Mechanical Engineering Students to visit the central facilities in NIT Trichy.
13.	Member in works committee of <b>convocation 2009, 2010, 2011 and 2012 NITT</b>
14.	Doctoral Committee member for Ph.D research scholars registered at NIT, Trichy, Anna University and VIT university.
15.	<b>Member in institutional committees</b> <ul style="list-style-type: none"> <li>• Institute Canteen Monitoring Committee – Member</li> <li>• Canteen Stock Register Verification</li> </ul>
16.	Accompanied B.Tech. Students for participation in SAE BAJA 2013, Indore

### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
DC Member	VIT, University		
DC Member	Anna University		

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

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12. Fellowships

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

13. Details of Academic Work

(i) Curriculum Development

**In-charge for curriculum development in the proposed M.Tech., Course on Engineering Design.**

(ii) Courses taught at Postgraduate and Undergraduate levels

- |   |                                 |
|---|---------------------------------|
| a. Strength of Materials  | - II yr. B.Tech. Mechanical     |
| b. Finite Element Method  | - III yr. B.Tech. Mechanical    |
| c. Finite Element Analysis in heat transfer analysis – II yr. M.Tech. TPE |                                 |
| d. Safety in Engineering Industry   | - I yr. M. Tech. ISE            |
| e. Engineering Graphics   | - I yr. B. Tech.                |
| f. Basic Mechanical Engineering   | - I yr. B. Tech.                |
| g. Machine Drawing  | - II yr. B.Tech. Mechanical     |
| h. Comprehensive Viva – Voce  | - Final Year B.Tech. Mechanical |
| i. Welding Technology   | - I yr. M.Tech. CTM             |
| j. Nondestructive Evaluation  | - I yr. M.Tech. CTM             |

(iii) Projects guided at Postgraduate level

SL.NO	TITLE	NAME OF THE STUDENT	YEAR	DEGREE
1.	Coupled Foot Shoe Analysis for Landing Impact in Occupational Shoes	AJAY KUMAR NB	MAY 2012	M.TECH (ISE)
2.	Seat cushion and soft tissue material modeling and a finite element investigation of pressure distribution between human buttock thigh and seat cushion	ANOOP VELLACHERI	MAY 2012	M.TECH (ISE)
3.	Analysis of muscle force of thumb and finger with commonly used hand tools	AMIT KUMAR SHUKLA	MAY 2012	M.TECH (ISE)
4.	Studies on industrial floor safety under variable sole and floor materials under spillage conditions	RAJU NIMMALA	MAY 2012	M.TECH (ISE)
5.	Friction measurement between sole material with grooves and floor material under contamination conditions	HEINS LAWRENCE	MAY 2011	M.TECH (ISE)
6.	Prediction of seat pressure distribution on human buttock-thigh using finite element simulation	ANIL ALAPPAT	MAY 2011	M.TECH (ISE)
7.	Discomfort study on displacement of the finger while operating computer keyboard	HARI PATTATH	MAY 2011	M.TECH (ISE)

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8.	Risk assessment in seamless steel tube process using fuzzy and grey techniques	DILEEP. A.V	MAY 2011	M.TECH (ISE)
9.	Stress analysis of the human foot and ankle for insole design: finite element approach	PRAKASH.D	MAY 2011	M.TECH (ISE)
10.	Experimental study of convective heat transfer from air-fin coolers with water spray	M.VENUGOPAL	MAY 2011	M.TECH (TPE)
11.	Numerical investigation of heat transfer in dimple interrupted fin configuration	A.RANADEER	MAY 2011	M.TECH (TPE)
12.	Hazard identification risk assessment and risk control in cement industry with application of M.C.D.M. method	ANIL ALAPPAT	DEC 2010	M.TECH (ISE)
13.	Effect of groove and temperature on measured coefficient of friction of foot wear pads	HEINS LAWRENCE	DEC 2010	M.TECH (ISE)
14.	Risk assessment with FMEA in LPG bullet and LPG fired continuous discharge furnace using fuzzy logic integrated grey method	HARI PATTATH	DEC 2010	M.TECH (ISE)
15.	Experimental study and simulation of enhanced heat transfer in novel structure under forced convection	A.RANADEER	DEC 2010	M.TECH (TPE)
16.	Study of discomfort in knee during motorcycle riding and numerical simulation	PRAKASH.D	DEC 2010	M.TECH (ISE)
17.	A study and analysis of safety barrier under Indian road condition	SACHIN Y YADHAV	MAY 2010	M.TECH (ISE)
18.	Friction measurement on five commonly used floors in industries under wet and sand covered conditions	N.RAJA	MAY 2010	M.TECH (ISE)
19.	Assessment of surface slipperiness on commercial floor materials at dry condition	S.MOHANRAJ	MAY 2010	M.TECH (ISE)
20.	Evaluation of working posture and workplace design in computer and mouse operators	JAISE J	MAY 2010	M.TECH (ISE)
21.	Probabilistic studies on projectile effects of an explosion of the pressure vessels to minimize the domino effects	NELSON DAVIES PALLIPURAM	MAY 2010	M.TECH (ISE)
22.	Decision making in risk assessment of producer gas plant& furnaces: an integrated approach with AHP/PROMETHEE & AHP/WEIGHT sum model	GEORGEKUTTY S.MANGALATHU	MAY 2010	M.TECH (ISE)

(iv) Other contribution(s)

a. Established **CAD & Simulation laboratory** along with Dr. T. Ramesh

b. Established **Advanced Welding and Strength of Materials Laboratories**

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The said laboratories are equipped with the facilities to conduct basic and advanced research works in the area of Welding of thin sheets, Mechanical characterization of metals, composites and ceramics.

### 14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Design of Bipod, Quadrapod and Retort Repairing Stand	ATS CHEM Equipments Pvt. Ltd., Namakkal (Subcontractor of The Kerala Minerals and Metals Limited, Kerala)	2009 1 Month		Completed
Support System for CFBC FBHE Coils and Back Pass Surfaces on CFBC boilers	BHEL, Trichy	September 2009 – May 2011 (2 years)		Completed
Distribution of Load Transfer Pattern and Stress Distribution with Large openings in the furnace walls of CFBC boilers		2010 - 2011 (1 year)		Completed
Study of Operational issues of drag link feeder in existing CFBC boilers and issuing guidelines for improvement		2010 – 2011 (1 year)		Completed
Failure analysis of High pressure feed water heaters of TPS I Expansion		2012 (2 Months)		Completed
Stress analysis of the existing pipe loop including test section, design and suggest improved long lasting pipe joint options for Supercritical Boiler Test Facility		2012 (6 Months)		Completed
Experimental Investigations and Finite Element Simulation of Laser welding of Titanium sheets for Airframe structures		DST Fast track	2013 – 2015	
Design, Analysis and Development of Metallic Liners for	RESPOND	2016		Waiting for approval

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Spherical Gas Bottle for Aerospace Application			
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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
A. Karpagaraj	Experimental Investigations on Effects of Process Parameters on Weld Quality of Automated GTAW in thin Titanium Sheets	Supervisor	Thesis Submitted – Nov 2016
V. Dhinakaran	Heat source modeling and Some Investigations on Plasma arc welding of thin Ti-6Al-4V sheets	Supervisor	Synopsis submitted

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

Sl. No.	Title	Organization/Place	Duration
1.	Two weeks ISTE work shop on “Computational Fluid Dynamics”	Indian Institute of Technology, Bombay and Department of Mechanical Engineering NIT, Trichy	12.06.2012 to 22.06.2012
2.	Two days National Workshop on “Supercritical Technology for Power Sector”	Management and Technology Division, Hyderabad	03.02.2012 to 04.02.2012
2.	Two weeks ISTE work shop on “Heat Transfer”	Indian Institute of Technology, Bombay and Department of Mechanical Engineering NIT, Trichy	29.11.2011 to 10.12.2011
3.	Two weeks ISTE work shop on “Thermodynamics in Mechanical Engineering”	Indian Institute of Technology, Bombay and Department of Mechanical Engineering NIT, Trichy	14.06.2011 to 24.06.2011
4.	AICTE-MHRD sponsored Staff Development Programme on “Quantitative Research Techniques for Engineers and Researchers”	Department of Mechanical Engineering NIT, Trichy	21.12.2009 to 02.01.2010
5.	One-day workshop on “Welding Power Sources Evaluation &	IWS and NIT, Trichy	18.01.2010

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	Process control”		
6.	AICTE-MHRD sponsored faculty development programme on “Composite Materials: Processing Challenges and Opportunities”	Department of Production Engineering NIT, Trichy	13.07.2009 to 24.07.2009
7.	AICTE-MHRD sponsored faculty development programme on “Applied Mechanical Measurement”	Department of Mechanical Engineering, NIT, Tiruchy.	29.06.2009 to 11.07.2009
8.	AICTE-MHRD sponsored faculty development programme on “Recent Advances in Modeling and Simulation of Joining of Materials”	Department of Mechanical Engineering, NIT, Tiruchy.	29.12.2008 to 10.01.2009
9.	AICTE-MHRD sponsored summer school on “Advances in Materials Processing”	Department of Production Engineering NIT, Trichy	30.06.2008 to 12.07.2008
10.	Faculty development programme on ANSYS	ACTIVE – ANSYS Certified Training in Value Engineering NIT, Tiruchy.	04.07.2007 to 13.07.2007
11.	Two day workshop on “Finite Element Analysis of Welding Processes”	Department of Production Engineering NIT, Trichy	24.01.2008 to 25.01.2008
12.	Five day course on “Introduction to ABAQUS”	Dassault Systems, Delhi	21.04.2008 to 25.04.2008
13.	Workshop on “Laser Materials Processing”	NIT, Trichy	09.01.2007 to 10.01.2007
14.	Training on “LATEX”	NIT, Trichy	27.09.2006 to 28.09.2006
15.	Workshop on “Finite Element Methods for Engineers”	Department of Civil Engineering, NIT, Trichy	01.02.2007 to 02.02.2007
16.	Workshop on “Finite Element Method and Applications in Engineering using ANSYS”	Department of Mechanical Engineering, NIT, Tiruchy.	26.11.2007 to 27.11.2007
17.	X-Ray Diffraction Analysis (XRD) & Intellectual Property Rights (IPR)	Department of Physics, NIT, Tiruchy.	15.03.2008

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

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
FDP on Applications of	National	06.06.2013	coordinator	NIT, Trichy

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Finite Element Methods in Academic and Industrial Research		to 08.06.2013		
Faculty Development Programs on ANSYS	National	6-8, June 2014	coordinator	NIT, Trichy
Faculty Development Programs on Engineering Graphics	National	19-22, June 2014	coordinator	NIT, Trichy
International Conference on Advances in Design & Manufacturing (ICAD&M'14)	International	December 5 – 7, 2014	Organizing Secretary	NIT, Trichy
Research Scopes in Micro Engineering	National	28-30, April 2016	coordinator	NIT, Trichy
Research Trends in Mechanical Engineering	National	29.08.2016 – 03.09.2016	coordinator	NIT, Trichy

### 18. Invited Talks delivered

- *Advances in Finite element methods* in One day workshop on Finite Element Method, PGP College of Engineering and Technology, Namakkal.
- *Finite Element Analysis of Human Buttock-Thigh Interaction model* in One day workshop on Advances in Finite Element Analysis, J.P. College of Engineering, Tenkasi.
- *Numerical Simulation of Laser welding process* in SDP on Joining Techniques for Micro and Nano Material Fabrication, PSNA College of Engineering & Technology, Dindigul.
- *Non-Linear Finite Element Modeling of Anatomically Detailed 3D Foot Model* in DST Sponsored National Level Seminar on ADVANCES IN FINITE ELEMENT ANALYSIS, Sethu Institute of Technology, Madurai.
- *Finite Element Simulation of Laser Keyhole Welding in thin Austenitic Stainless Steel Sheet* in One day workshop on Laser beam welding & processing, SSN College of Engineering, Chennai.
- *Hands on training using ANSYS* in the AICTE-MHRD sponsored Staff Development Programme on “Quantitative Research Techniques for Engineers and Researchers”, NIT, Trichy.
- *FEM applications in various welding Process* in the AICTE-MHRD sponsored Staff Development Programme on “Quantitative Research Techniques for Engineers and Researchers” NIT, Trichy.
- *FEM – Applications* in the AICTE-QIP sponsored short term course on Weldability of Advanced Materials & Newer Joining Techniques, NIT, Trichy.

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- *Introduction to Two-Dimensional Field equations* in the AICTE-MHRD sponsored Faculty Development Programme on “Finite Element Analysis and Applications”, Sethu Institute of Technology, Madurai.
- *Simulation of Laser welding Process* in the AICTE-MHRD sponsored Faculty Development Programme on “Recent Advances in Modeling and Simulation of Joining of Materials”, NIT, Trichy.
- *Temperature distribution modeling for laser welding process* in the AICTE-MHRD sponsored summer school on “Advances in Materials Processing”, NIT, Trichy.
- *Finite Element Analysis of Laser welding process* in a two day workshop on Finite Element Analysis of Welding Processes, NIT, Trichy.
- *Simulation of Welding Process using ANSYS* in the Workshop on “Finite Element Method and Applications in Engineering using ANSYS”, NIT, Trichy.

### 19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Life Member	Indian Welding Society (IWS)	
Life Member	Indian Society For Technical Education (ISTE)	
Member	Society of Automotive Engineers (SAEINDIA)	

### 20. Academic Foreign Visits

- Bratislava, Slovak Republic
- Paris, France
- Bangkok, Thailand
- Singapore

### 21. Publications

#### (A) Refereed Research Journals:

1. A. Karpagaraj, N. Siva Shanmugam and K. Sankaranarayananasamy, *Studies on mechanical behavior and microstructural analysis of tailor welded blanks of Ti-6Al-4V titanium alloy sheet*, Journal of Materials Research, Vol. 34 Issue 11, 2016, pp. 2186-2196 **Impact Factor – 1.579**
2. Nalajam Pavan Kumar, S Arungalai Vendan and N Siva Shanmugam, *Investigations on the parametric effects of cold metal transfer process on the microstructural aspects in AA6061*, Journal of Alloys and Compounds, Vol. 658, 2016, pp. 255-264 **Impact Factor – 3.014**
3. K. Devendranath Ramkumar, Debidutta Mishra, B. Ganesh Raj, M.K. Vignesh, G. Thiruvengatam, S.P. Sudharshan, N. Arivazhagan, N. Sivashanmugam and Arul Maximus Rabel, *Effect of optimal weld parameters in the microstructure and mechanical properties of autogeneous gas tungsten arc weldments of super-duplex*

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- stainless steel UNS S32750*, Materials & Design (1980-2015), Vol. 66, Part A, 2015, pp. 356-365 **Impact Factor – 3.997**
4. K Devendranath Ramkumar, Jelli Lakshmi Narasimha Varma, Gangineni Chaitanya, S Logesh, Madhav Krishnan, N Arivazhagan and N Siva Shanmugam, *Experimental investigations on the SiO<sub>2</sub> flux-assisted GTA welding of super-austenitic stainless steels*, The International Journal of Advanced Manufacturing Technology, DOI: 10.1007/s00170-015-7876-6 **Impact Factor – 1.568**
  5. V Dhinakaran, N Siva Shanmugam and K Sankaranarayananasamy, *Some studies on temperature field during plasma arc welding of thin titanium alloy sheets using parabolic Gaussian heat source model*, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, doi: 10.1177/0954406215623574 **Impact Factor – 0.734**
  6. A. Karpagaraj, N. Siva Shanmugam and K. Sankaranarayananasamy, *Some studies on mechanical properties and microstructural characterization of automated TIG welding of thin commercially pure titanium sheets*, Materials Science and Engineering: A, Vol. 640, 2015, pp. 180-189 **Impact Factor – 2.567**
  7. K, Devendranath Ramkumar, Jagat Sai, Sridhar Gundla, Santhosh Reddy, P. Prabakaran, N, Arivazhagan and N. Siva Shanmugam, *Influence of filler metals in the control of deleterious phases during the multi-pass welding of Inconel 718 plates*, Acta Metallurgica Sinica (English Letters), Volume 28, Issue 2, 2015, pp. 196-207 **Impact Factor – 0.426**
  8. Vijaikrishnan V, Ramakrishnan M and N. Siva Shanmugam, *Steady state analysis of regular hollow pyramidal radiating fin with triangular cross-section*, Thermal Science, Volume 19, Issue 1, 2015, Pages: 59-68 **Impact Factor: 0.962**
  9. N. Siva Shanmugam, G. Buvanashakaran and K. Sankaranarayananasamy, *Experimental Investigation and Finite Element Simulation of laser lap welding of SS304 sheets*, International Journal of Mechanics, Issue 2, Volume 7, 2013, Pages: 120-127.
  10. N. Siva Shanmugam, G. Buvanashakaran and K. Sankaranarayananasamy, *Some studies on weld bead geometries for laser spot welding process using finite element analysis*, Materials & Design, Volume 34, February 2012, Pages 412-426. **Impact Factor: 3.997**
  11. Jaganathan Maniraj, Velappan Selladurai, Nallathambhi Sivashanmugam, Subbiah Arungalai Vendan, Jacob Mathew, *Experimental Investigation on Effect of Tool Crater Wear and Surface Roughness in TiN Coated WC Tool While Machining Martensitic Stainless Steel*, High Temperature Materials and Processes, Volume: 30, Issue: 3, 2011, Pages: 257-265. **Impact Factor: 0.377**
  12. Jaganathan Maniraj, Velappan Selladurai, Nallathambhi Sivashanmugam, Subbiah Arungalai Vendan, Mayilswamy, *Hard Finish Turning Parameters Optimization for Machining of High Temperature Stainless Steel*, High Temperature Materials and Processes, DOI: 10.1515/htmp-2011-0142, June 2012. **Impact Factor: 0.377**
  13. N. Siva Shanmugam, G. Buvanashakaran, K. Sankaranarayananasamy & S. Ramesh Kumar, *A transient finite element simulation of the temperature and bead profiles of*

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- T-joint laser welds*, Materials & Design, Volume 31, Issue 9, 2010, pp. 4528-4542.  
**Impact Factor: 3.997**
14. N. Siva Shanmugam, G. Buvanashakaran & K. Sankaranarayananasamy, *Experimental Investigation and Finite Element Simulation of Laser Beam Welding of AISI 304 Stainless Steel sheet*, Journal of Experimental Techniques, Volume 34, Issue 5, 2010, pp. 25-36. **Impact Factor: 0.545**
15. N. Siva Shanmugam, G. Buvanashakaran, K. Sankaranarayananasamy & K. Manonmani, *Some Studies on temperature profiles in AISI 304 stainless steel sheet during laser beam welding using FE simulation*, International Journal of Advanced Manufacturing Technology, Volume 43, Numbers 1-2 / July, 2009, pp. 78-94.  
**Impact Factor: 1.568**
16. G. Buvanashakaran, N. Siva Shanmugam, K. Sankaranarayananasamy & R. Sabarikanth, *A Study on Laser Welding Modes with varying Beam Energy Levels*, Proceedings of the Institution of Mechanical Engineers, Part C, Journal of Mechanical Engineering Science, Volume 223, Number 5 / 2009, pp. 1141-1156.  
**Impact Factor: 0.730**
17. J. Jaise, N. B. Ajay Kumar, N. Siva Shanmugam, K. Sankaranarayananasamy & T. Ramesh, *Power system: a reliability assessment using FTA*, International Journal of System Assurance Engineering and Management, DOI 10.1007/s13198-012-0100-2
18. Georgekutty S. Mangalathu, N. Siva Shanmugam, K. Sankaranarayananasamy, T. Ramesh & K. Muthukumar, *System Safety in LPG Fired Furnace – A Multi Criteria Decision Making Technique*, Advances in Production Engineering & Management Journal, Volume 7, Number 2, 2012, pp. 123 – 134.
19. Georgekutty S Mangalathu, N. Siva Shanmugam, K. Sankaranarayananasamy & T. Ramesh, *Decision Making in Risk Assessment of Producer Gas Furnaces: An Integrated Approach with AHP & Promethee Techniques*, Journal Manufacturing Engineering, Volume 10, Number 1, 2011, pp. 49-54.
20. N. Siva Shanmugam, G. Buvanashakaran, K. Sankaranarayananasamy & K. Manonmani, *Influence of Beam Incidence Angle in Laser Welding of Austenitic Stainless Steel Using Finite Element Analysis*, Journal of Multidiscipline Modeling in Materials and Structures, Volume 5, Number 3, 2009, pp. 257-262 (6).
21. K.R. Balasubramanian, N. Siva Shanmugam, G. Buvanashakaran & K. Sankaranarayananasamy, *Numerical and experimental investigation of laser beam welding of AISI 304 stainless steel sheet*, Advances in Production Engineering & Management Journal, Volume 3, Number 2, 2008, pp. 93 – 105.
22. Georgekutty S Mangalathu, N. Siva Shanmugam, K. Sankaranarayananasamy, T. Ramesh & K. Muthukumar, *System safety in LPG fired furnace – A Multi Criteria Decision Making Technique*, Advances in Production Engineering and Management – Accepted for Publication.
23. P. Sathiya, N. Siva Shanmugam, T. Ramesh & R. Murugavel *Temperature distribution modeling of Friction Stir Spot Welding of AA 6061-T6 using Finite*

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- Element Technique*, Journal of Multidiscipline Modeling in Materials and Structures (MMMS), Volume 4, Number 1, 2008, pp. 1-14.
24. P. Sathiya, N. Siva Shanmugam, S. Aravindan & A. Noorul Haq, *Modeling and Simulation of Submerged Arc Welding in Pipe Manufacturing process using Finite Element Analysis*, IWS Journal, Weld 3, Bead 2, March 2006, pp. 17-25 (9).
25. P. Sathiya, N. Siva Shanmugam & T. Ramesh, *Orthogonal Metal Cutting of SA105 Carbon Steel - A Feasibility Study*, Journal of Manufacturing Technology & Management, Volume 1, Number 1, Apr- June 2007, pp. 61-68.

### (B) Conferences/Workshops/Symposia Proceedings

1. V. Dhinakaran, Suraj Khope, N. Siva Shanmugam & K. Sankaranarayanan, *Numerical Prediction of Weld Bead Geometry in Plasma Arc Welding of Titanium Sheets Using COMSOL*, Proceedings of the 2014 COMSOL Conference, Bangalore
2. N. Siva Shanmugam, G. Buvanashakaran and K. Sankaranarayanan, *Finite Element Simulation of Nd:YAG laser lap welding of AISI 304 Stainless steel sheets*, Proc: European Conference of Mechanical Engineering (ECME'12), Paris, France.
3. N. Siva Shanmugam, G. Buvanashakaran and K. Sankaranarayanan, *Finite Element Simulation of the Temperature and Bead Profiles of T-Joint Laser Welds*, Proc: Symposium on Joining of Materials (SOJOM) 2012, BHEL, Trichy.
4. Ajay kumar NB, K. Sankaranarayanan, N. Siva Shanmugam & T. Ramesh, *Coupled Foot Shoe Analysis for Landing Impact in Occupational Shoes*, Proc: 6<sup>th</sup> International Health, Safety, Security, Environmental and Loss Prevention Professional Development Conference, 29<sup>th</sup> Nov – 1<sup>st</sup> Dec 2011, Kuwait.
5. N. Siva Shanmugam, G. Buvanashakaran & K. Sankaranarayanan, *Finite Element Simulation of Laser Welding Process of T-joint Specimens*, Proc: International Conference of Manufacturing Research (ICMR08), Brunel University, London, September 9 - 11, 2008, pp. 665 – 674.
6. N. Siva Shanmugam, K.R. Balasubramanian, G. Buvanashakaran & K.Sankaranarayanan, *Thermal analysis of laser welding process on T-joint specimens*, Proc: IISc Centenary - International Conference on advances in Mechanical Engineering, Bangalore, July 2-4, 2008, Paper No. 84.
7. N. Siva Shanmugam, G. Buvanashakaran, K. Sankaranarayanan & S. Arunachalam, *Modeling of Temperature Distribution for high density heat source used in material joining process*, Proc: International Conference on 24th International Manufacturing Conference IMC 24, 20-31 August 2007, Waterford Institute of Technology, Waterford, Ireland, pp. 1061-1070.
8. Ashish Kumar Agrawal, Anand Kumar Singh, T. Ramesh & N. Siva Shanmugam, *Synthesis and Analysis of a Complaint Gripper for MEMS Applications*, Proc: IISc Centenary - International Conference on advances in Mechanical Engineering, Bangalore, July 2-4, 2008.

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9. A.V.Dileep, N.Siva Shanmugam, K.Sankaranarayananasamy & T.Ramesh, *Risk Assessment In Seamless Steel Tube Process Using Fuzzy TOPSIS Method*, Proceedings of International Conference on Advances in Industrial Engineering Applications, Anna University, Chennai, Paper No.: MC 10, 6 - 8 January 2010.
10. J.Jaise, N.Siva Shanmugam, K.Sankaranarayananasamy & T.Ramesh, *Assessment of power system reliability using Fault Tree Analysis*, Proceedings of International Conference on Advances in Industrial Engineering Applications, Anna University, Chennai, Paper No.: RE 15, 6 - 8 January 2010.
11. Georgekutty S Mangalathu, N.Siva Shanmugam, K.Sankaranarayananasamy & T.Ramesh *System safety in LPG fired furnace-A multi criteria decision making technique*, Proceedings of International Conference on Advances in Industrial Engineering Applications, Anna University, Chennai, Paper No.: MC 11 , 6 - 8 January 2010
12. N. Siva Shanmugam, G. Buvanashakaran & K. Sankaranarayananasamy, *Finite Element Simulation of Laser Welding for Lap joint using sysweld*, Proc: Symposium On Joining Of Materials(SOJOM 08), Indian Welding Society (IWS), Welding Research Institute, 2008.
13. K.R. Balasubramanian, N. Siva Shanmugam, G. Buvanashakaran & K.Sankaranarayananasamy, *Finite Element Simulation for Laser Beam Welding of Austenitic Stainless Steel Sheet*, Proc: International Welding Symposium, IWS 2K8, paper no. 58, pp 1-10, 13th - 15th February 2008, New Delhi.
14. Sathish babu, R. Bharani Dharan, T. Ramesh & N. Siva Shanmugam, *Preparation of Prototypes by using Subtractive Rapid Prototyping Technique*, National Conference on Emerging Trends in Advance Manufacturing (ETAM'05), K.L.N. College of Engineering, Madurai, 4-5 February 2005, pp. 144-148 (5)
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Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number