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Department of Mechatronics Engineering,
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RESEARCHER ID: J-5247-2015

Academic Qualifications :

- Received Doctor of Philosophy (Ph.D) in the area of advanced manufacturing processes under Mechanical faculty in Anna University, Chennai. [2014]
- Received Master of Engineering (M.E) in Mechatronics (Faculty of Mechanical) with CGPA 8 at Madras Institute of Technology, Anna University, Chennai. [2008]
- Received Bachelor of Engineering (B.E) in Electrical and Electronics Engineering (Faculty of Electrical) with aggregate of 74.08% at K.L.N. College of Engineering, Madurai affiliated to Anna University, Chennai. [2006]

Field of Specialization:

- Micro Machining
- Mechatronics
- Manufacturing automation
- Syntactic foams
- Optimization

Funded Projects Involved:

- Involved as Project team member titled as “Optimization of Machining Process applied on Titanium and Aluminum Alloys” Funded by **(2000 Australian dollars)** Bharat Forge India, Capral Australia and Deakin University, Australia under the scheme “**Industrial Partner projects**” along with Dr. Guy littlefair, Auckland University of Technology, New Zealand and Dr. Moshe Goldberg, Deakin University, Australia during 2018.
- Involved as Project team member titled as “Development of Aluminium matrix composites” Funded by **(1200 US dollars)** Leshan Normal University, China under the scheme “**Leshan Normal University talent introduction project (XJR17003)**” along with Dr. Cao Fenghong; Dr. Chen Chang, Leshan Normal University, China and Dr. Wang Zhenyu, Chengdu University of Technology, China during 2018.

- Involved as Project Investigator titled as “Design and development of UAV” Funded by **(260000 Indian rupees)** SRM Institute of Science and Technology, Kattankulathur, India under the scheme “**Selective Excellence Initiative**” along with Dr. Mohamed Rabik, SRM Institute of Science and Technology, Kattankulathur, India during 2018.

Book Chapters/Monographs Published:

- “Recent Trends in Micro and Nano Machining of Engineering Materials” Chapter in the book of “Micro and Nano Machining of Engineering Materials” Edited by Kaushik Kumar, Divya Zindani, Nisha Kumari , Paulo Davim Published by Springer Nature Switzerland, 2019. ISBN: 9783319998992. DOI: <https://doi.org/10.1007/978-3-319-99900-5>.
- “Significance of Pulse Generators in Electrical Discharge Machining” Published by LAP Lambert Academic Publishing, Germany, 2015. ISBN: 9783659798030.

Selected Publications:

1. R Mathiyazhagan, S Sampathkumar, **T Muthuramalingam**, “Prediction Modeling of Surface Roughness using Capacitive Sensing Technique in Machining Process,” **IEEE Sensors**, Accepted for publication, 2019.
2. T Geethapriyan, **T Muthuramalingam**, K Kalaichelvan, “Influence of Process Parameters on Machinability of Inconel 718 by Electrochemical Micromachining Process using TOPSIS Technique,” **Arabian Journal for Science and Engineering**, Accepted for publication, 2019.
3. Cao Fenghong, Chen Chang, Wang Zhenyu, **T Muthuramalingam**, G Anbuechezhiyan, “Effects of Silicon Carbide and Tungsten Carbide in Aluminium Metal Matrix Composites,” **Silicon**, Accepted for publication, 2019.
4. Jiaofei Huo, Shoufa Liu, Yinwei Wang, **T Muthuramalingam**, Vu Ngoc Pi, “Influence of process factors on surface measures on electrical discharge machined stainless steel using TOPSIS,” **Materials Research Express**, 6(8), 086507, 2019.
5. **T Muthuramalingam**, “Measuring the influence of discharge energy on white layer thickness in electrical discharge machining process,” **Measurement**, 131, 694-700, 2019.
6. **T Muthuramalingam**, A Ramamurthy, K Sridharan, S Ashwin, “Analysis of surface performance measures on WEDM processed titanium alloy with coated electrodes,” **Materials Research Express**, 5(12), 126503, 2018.
7. P Nanthakumar, A Rajadurai, **T Muthuramalingam**, “Dynamic Mechanical Analysis of Sub-micron Size Flyash Particles Filled Polyester Resin Composites,” **Lecture Notes in Mechanical Engineering: Advances in Materials and Metallurgy**, 199-205, 2018. doi:10.1007/978-981-13-1780-4_20

8. G Anbuechziyan, B Mohan, **T Muthuramalingam**, "Synthesis and Characterization of Nano-Glass Particles Reinforced AZ91D Magnesium Alloy Composites," **Lecture Notes in Mechanical Engineering: Advances in Materials and Metallurgy**, 39–45, 2018. doi:10.1007/978-981-13-1780-4_5
9. S Vasanth, **T Muthuramalingam**, "A Study on Machinability of Leather Using CO₂-Based Laser Beam Machining Process," **Lecture Notes in Mechanical Engineering: Advances in Manufacturing Processes**, 239–244, 2018. doi:10.1007/978-981-13-1724-8_23
10. A Ramamurthy, **T Muthuramalingam**, "Analysis of Machinability on WEDM Processed Titanium Alloy with Coated Electrodes," **Lecture Notes in Mechanical Engineering: Advances in Manufacturing Processes**, 279–285, 2018. doi:10.1007/978-981-13-1724-8_27
11. T Geethapriyan, **T Muthuramalingam**, S Vasanth, J Thavamani, VH Srinivasan, "Influence of Nanoparticles-Suspended Electrolyte on Machinability of Stainless Steel 430 Using Electrochemical Micro-machining Process," **Lecture Notes in Mechanical Engineering: Advances in Manufacturing Processes**, 433–440, 2018. doi:10.1007/978-981-13-1724-8_42
12. G Anbuechziyan, **T Muthuramalingam**, B Mohan, "Effect of process parameters on mechanical properties of hollow glass microsphere reinforced magnesium alloy syntactic foams under vacuum die casting," **Archives of Civil and Mechanical Engineering**, 18 (4), 1645-1650, 2018.
13. U Jayakrishnan, Ikshit Sanghrajka, S Manikandakumar, **T Muthuramalingam**, Moshe Goldberg, Guy Littlefair, "Optimisation of multiple response characteristics on end milling of Aluminium alloy using Taguchi-Grey relational approach," **Measurement**, 124, 291–298, 2018.
14. P Nanthakumar, A Rajadurai, **T Muthuramalingam**, "Thermal and mechanical behaviour of sub micron sized fly ash reinforced polyester resin composite," **Materials Research Express**, 5(4), 045303, 2018.
15. D Saravanakumar, B Mohan, **T Muthuramalingam**, G Sakthivel, "Performance Evaluation of Interconnected Pneumatic Cylinders Positioning System," **Sensors & Actuators: A. Physical**, 274(1), 155-164, 2018.
16. M Manoj, GR Jinu, **T Muthuramalingam**, "Multi response optimization of AWJM process parameters on machining TiB₂ particles reinforced Al7075 composite using Taguchi-DEAR methodology," **Silicon**, 10 (5), 2287-2293, 2018.
17. **T Muthuramalingam**, S Vasanth, P Vinothkumar, T Geethapriyan, M Mohamed Rabik, "Multi criteria decision making of abrasive flow oriented process parameters in abrasive water jet machining using Taguchi-DEAR Methodology," **Silicon**, 10 (5), 2015-2021, 2018.
18. G Sakthivel, D Saravanakumar, **T Muthuramalingam** "Application of failure mode and effects analysis in manufacturing industry- an integrated approach with FAHP - FUZZY

TOPSIS and FAHP -FUZZY VIKOR,” *International Journal of Productivity and Quality Management*, 24(3), 398-423, 2018.

19. **T Muthuramalingam**, B Mohan, S Vignesh, “Performance Analysis of Pulse Generators on Residual Stress of Machined Silicon Steel Using EDM Process,” *Silicon*, 10 (5), 1785-1792, 2018.
20. P Nanthakumar, A Rajadurai, **T Muthuramalingam**, “Multi Response Optimization on Mechanical Properties of Silica Fly Ash Filled Polyester Composites Using Taguchi-Grey Relational Analysis,” *Silicon*, 10(4), 1723-1729, 2018.
21. T Geethapriyan, K Kalaichelvan, **T Muthuramalingam**, A Rajadurai, “Performance analysis of process parameters on machining α - β titanium alloy in electrochemical micromachining process,” *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 232(9), 1577–1589, 2018.
22. **T Muthuramalingam**, M Mohamed Rabik, D Saravanakumar, K Jaswanth, “Sensor integration based approach for automatic fork lift trucks,” *IEEE Sensors*, 18(2), 736-740, 2018.
23. M Mohamed Rabik, **T Muthuramalingam**, “Tracking and locking system for shooter with sensory noise cancellation,” *IEEE Sensors*, 18(2), 732-735, 2018.
24. K Jaswanth, Ashwin, **T Muthuramalingam**, “Influence of duty factor of pulse generator in electrical discharge machining process,” *International Journal of Applied Engineering Research*, 12(21), 11397-11399, 2017.
25. T Geethapriyan, R Manoj Samson, **T Muthuramalingam**, A C Arunraj, “Stiffness Analysis of Inverted Tripod Parallel Manipulator,” *Applied Mechanics and Materials*, 867, 205-211, 2017.
26. G Anbuhezhiyan, B Mohan, D Sathianarayanan, **T Muthuramalingam**, “Synthesis and characterization of hollow glass microspheres reinforced magnesium alloy matrix syntactic foam,” *Journal of Alloys and Compounds*, 719(1), 125-132, 2017.
27. D Saravanakumar, B Mohan, **T Muthuramalingam**, “A review on recent research trends in servo pneumatic positioning systems,” *Precision Engineering*, 49(1), 481-492, 2017.
28. **T Muthuramalingam**, S Vasanth, T Geethapriyan, “Influence of Energy Distribution and Process Parameters on Tool Wear in Electrical Discharge Machining,” *International Journal of Control Theory and Applications*, 9(37), 353-359, 2016.
29. T Geethapriyan, K Kalaichelvan, **T Muthuramalingam**, “Multi Performance Optimization of Electrochemical Micro-Machining Process Surface Related Parameters on Machining Inconel 718 using Taguchi-grey relational analysis,” *La Metallurgia Italiana*, 2016(4), 13-19, 2016.

30. S Vasanth, **T Muthuramalingam**, P Vinothkumar, T Geethapriyan, G Murali, "Performance Analysis of Process Parameters on Machining Titanium (Ti-6Al-4V) Alloy Using Abrasive Water Jet Machining Process," *Procedia CIRP*, 46(1), 139-142, 2016.
31. T Geethapriyan, K Kalaichelvan, **T Muthuramalingam**, "Influence of coated tool electrode on drilling Inconel alloy 718 in Electrochemical micro machining," *Procedia CIRP*, 46(1), 127-130, 2016.
32. **T Muthuramalingam**, S Vasanth, P Vinothkumar, G Murali, "Effect of pulse duration and flushing pressure on performance measures in EDM process," *Australian Journal of Basic and Applied Sciences*, 9 (32), 66-70, 2015.
33. A Ramamurthy, R Sivaramakrishnan, **T Muthuramalingam**, S Venugopal, "Performance analysis of wire electrodes on machining Ti-6Al-4V alloy using wire electrical discharge machining process," *Machining Science and Technology*, 19(4), 577-593, 2015.
34. A Ramamurthy, R Sivaramakrishnan, **T Muthuramalingam**, "Taguchi-Grey Computation Methodology for Optimum Multiple Performance Measures on machining Titanium alloy in WEDM Process," *Indian Journal of Engineering and Materials Sciences*, 22 (2), 181 – 186, 2015.
35. **T Muthuramalingam**, B Mohan, D Saravanakumar, "Evaluation of Surface Finish of Electrical Discharge Machined AISI 304 Stainless Steel With Various Pulse Generators," *Applied Mechanics and Materials*, 772 (1), 279 – 283, 2015.
36. D Saravanakumar, B Mohan, **T Muthuramalingam**, "A study on influence of system parameters on servo pneumatic system and multi-response optimization using Taguchi – Grey methodology," *Applied Mechanics and Materials*, 789 (1), 901-905, 2015.
37. A Ramamurthy, R Sivaramakrishnan, **T Muthuramalingam**, S Venugopal, "Multi-Response Optimization of Wire -EDM Process Parameters of Titanium Alloy Using Taguchi Method and Grey Relational Analysis," *Applied Mechanics and Materials*, 772 (1) , 245 – 249, 2015.
38. A Ramamurthy, R Sivaramakrishnan, **T Muthuramalingam**, S Venugopal, "Application of Taguchi-Grey relational methodology for multiple optimal performance measures in WEDM process," *Applied Mechanics and Materials*, 766- 767 (1) , 861 -866, 2015.
39. S Vignesh, B Mohan, **T Muthuramalingam**, S Karthikeyan, "Evaluation of Recast layer thickness of Electrical Discharge Machined AISI 202 Stainless Steel With Various Pulse Generators," *Applied Mechanics and Materials*, 766- 767 (1) , 518 -522, 2015.
40. T Geethapriyan, GM Gopal, K Kalaichelvan, **T Muthuramalingam**, "Analyzing the effect of Electrochemical Micromachining process parameters on Alpha-Beta Titanium," *International Journal of Mechanical Dynamics & Analysis*, 1(1), 18-22, 2015.
41. **T Muthuramalingam**, B Mohan, "Application of Taguchi-grey multi responses optimization on process parameters in electro erosion," *Measurement*, 54(1) , 495-502, 2014.

42. **T Muthuramalingam**, B Mohan, A Jothilingam, "Effect of tool electrode re-solidification on surface hardness in electrical discharge machining," ***Materials and Manufacturing Processes***, 29(11-12), 1374-1380, 2014.
43. **T Muthuramalingam**, B Mohan, "A review on influence of electrical process parameters in EDM process," ***Archives of Civil and Mechanical Engineering***, 15 (1), 87 – 94, 2014.
44. **T Muthuramalingam**, B Mohan, A Rajadurai, D Saravanakumar, "Monitoring and fuzzy control approach for efficient electrical discharge machining process," ***Materials and Manufacturing Processes***, 29(3) , 281-286, 2014.
45. D Saravanakumar, B Mohan, **T Muthuramalingam**, "Application of response surface methodology on finding influencing parameters in servo pneumatic system," ***Measurement***, 54(1) , 40-50, 2014.
46. **T Muthuramalingam**, B Mohan, "Performance analysis of iso current pulse generator on machining characteristics in EDM process," ***Archives of Civil and Mechanical Engineering***, 14(3), 383-390, 2014.
47. **T Muthuramalingam**, B Mohan, A Rajadurai, M D Antony, "Experimental investigation of iso energy pulse generator on performance measures in EDM ," ***Materials and Manufacturing Processes***, 28(10) , 1137-1142, 2013.
48. **T Muthuramalingam**, B Mohan, "Influence of tool electrode properties on machinability in electrical discharge machining," ***Materials and Manufacturing Processes***, 28(8) , 939-943, 2013.
49. **T Muthuramalingam**, B Mohan, "Influence of discharge current pulse on machinability in electrical discharge machining ," ***Materials and Manufacturing Processes***, 28(4) , 375-380, 2013.
50. **T Muthuramalingam**, B Mohan, "Design and fabrication of control system based iso current pulse generator for electrical discharge machining," ***International Journal of Mechatronics and Manufacturing Systems***, 6(2) , 133-143, 2013.
51. **T Muthuramalingam**, B Mohan, "A study on improving machining characteristics of electrical discharge machining with modified transistor pulse generator ," ***International Journal of Manufacturing Technology and Management***, 27(1/2/3) , 101-111, 2013.
52. **T Muthuramalingam**, B Mohan, "Enhancing the surface quality by iso pulse generator in EDM process ," ***Advanced Materials Research***, 622-623(1) , 380-384, 2013.
53. **T Muthuramalingam**, B Mohan, "Taguchi-grey relational based multi response optimization of electrical process parameters in electrical discharge machining ," ***Indian Journal of Engineering and Materials Sciences***, 20(6) , 471-475, 2013.

54. **T Muthuramalingam**, B Mohan, "Multi response optimization of electrical process parameters on machining characteristics in EDM using Taguchi-DEAR methodology," *Journal of Engineering and Technology*, 3(1), 57-60, 2013.
55. D Saravanakumar, B Mohan, **T Muthuramalingam**, "Optimization of Proportional Fuzzy Controller for Servo Pneumatic Positioning system using Taguchi - DEAR Methodology," *Journal of Engineering and Technology*, 4(2), 115-118, 2014.
56. T Geethapriyan, K Kalaichelvan, A.Rajadurai, **T Muthuramalingam**, S Naveen, "A Review on Investigating the effects of process parameters in electrochemical machining," *International Journal of Applied Engineering Research*, 10 (2), 1743- 1748, 2015.
57. **T Muthuramalingam**, S Vasanth, M Mohammed Rabik, T Geethapriyan, A Ramamurthy, "Multi response optimization of EDM process parameters using assignments of weight method," *International Journal of Engineering Research & Technology*, 4 (26), 110-112, 2016.
58. **T Muthuramalingam**, R Parasuraman, B Mohan, "Analysis of machining characteristics with different pulse generators in electrical discharge machining," *Journal of Engineers Today*, 14 , 143-146, 2012.

International Conferences:

- 1) With G Anbuechezhiyan, "Development And Characterization Of TiC Reinforced Magnesium Nano Composites" in Proc. ICONN 2019, Chennai, 2019.
- 2) With K Sridharan, B Muthuselvan, A Ramamurthy, "Investigation on the Tribological Properties of Lubricant Oil with Nano-Particle Additives" in Proc. ICONN 2019, Chennai, 2019.
- 3) With G Anbuechezhiyan, "Analysis of drilling parameters on hybrid metal matrix composites using RSM," in Proc. ICAME 2018, Turkey, 2018.
- 4) With S Vasanth, Sanjeev Gupta, "Optimization of cutting parameters in CO₂ laser beam machining of buffalo leather using genetic algorithm," in Proc. ICAME 2018, Turkey, 2018.
- 5) With A Ramamurthy, K Sridharan, Sanjeev Gupta, "Experimental investigation and parameter optimization of abrasive water jet machining," in Proc. ICAME 2018, Turkey, 2018.
- 6) With K Jaswanth, "Influence of uniform pulse energy on surface hardness in electrical discharge machining process", in Proc. ICEMMM 2018, Chennai, 2018.
- 7) With S Vasanth, "A study on machinability of leather using CO₂ based Laser Beam Machining process", in Proc. ICEMMM 2018, Chennai, 2018.
- 8) With A Ramamurthy, "Analysis of machinability on WEDM processed titanium alloy with coated electrodes", in Proc. ICEMMM 2018, Chennai, 2018.

- 9) With T Geethapriyan, S Vasanth, J Thavamani, Vignesh, "Influence of Nanoparticles Suspended Electrolyte on machinability of Stainless Steel 430 using Electrochemical Micro Machining Process", in Proc. ICEMMM 2018, Chennai, 2018.
- 10) With G Anbuechezhiyan, B Mohan, "Synthesis and characterization of nano glass particles reinforced AZ91D magnesium alloy composites", in Proc. ICEMMM 2018, Chennai, 2018.
- 11) With P Nanthakumar, A Rajadurai, "Dynamic mechanical behaviour of sub micron size fly ash particles filled polyester resin composites", in Proc. ICEMMM 2018, Chennai, 2018.
- 12) Single author paper, "Application of response surface methodology on finding influencing parameters over surface roughness in EDM process," in Proc. Electrophysical Machining in Modern Industry 2017, Russia, 2017.
- 13) With T Geethapriyan, K Kalaichelvan, H S Vignesh, " Optimization of Electro-Chemical Micro Machining Process using Additive Manufactured Tool on Titanium Alloy (Ti-3Al-2.5V) by Taguchi-Grey Method," in Proc. COPEN-10 2017, Chennai, 2017.
- 14) With K Jaswanth, K Selvashankar, G Sooryaprakash, S Mahesh, S Vasanth, "Design and development of modified pulse generator for electrical discharge machining," in Proc. ICARM 2017, Chennai, 2017.
- 15) With R Prasanna, S Akalya, Ashwin, P Vinothkumar, "Design and development of low cost direct extruder 3D printer using mechatronics approach," in Proc. ICARM 2017, Chennai, 2017.
- 16) With Ravi Akash, R Dilipkumar, K Shravan, S Vasanth, "Influence of process parameters of Laser Beam Machining on machining AISI304 SS," in Proc. RIPE 2017, Chennai, 2017.
- 17) With S Vasanth, P Vinothkumar, T Geethapriyan, G Murali, "Performance analysis of process parameters on machining Titanium (Ti-6Al-4V) alloy using abrasive water jet machining process," in Proc. HPC 2016, Germany, 2016.
- 18) With T Geethapriyan, K Kalaichelvan, "Influence of coated tool electrode on drilling Inconel alloy 718 in Electrochemical micro machining," in Proc. HPC 2016, Germany, 2016.
- 19) With T Geethapriyan, R Manoj Samson, A C Arunraj, " Stiffness analysis of inverted tripod parallel manipulator," in Proc. TAMMIE 2016, Coimbatore, 2016.
- 20) With T Geethapriyan, A C Arunraj, R Manoj Samson, " Optimization of machining parameters in wire-cut EDM on pure Titanium using Response Surface Methodology," in Proc. ICCMEET 2016, Coimbatore, 2016.
- 21) With G Kumaresan, "Multi dome test of super plastic forming in Magnesium alloy to investigate strain rate sensitivity index ," in Proc. IMagcon 2016, Chennai, 2016.

- 22) Single author paper, "Influence of energy distribution on surface hardness in Electrical Discharge Machining," in Proc. ISCA 2016, Mysuru, 2016.
- 23) With S Vasanth, P Vinothkumar, G Murali, "Effect of pulse duration and flushing pressure on performance measures in EDM process," in Proc. ICMME 2015, Bangkok, 2015.
- 24) With T Geethapriyan, K Kalaichelvan, G Kumaresan, "Experimental Investigation of Electrochemical Machining (ECM) Process Parameters on Micro Holes in Inconel 718," in Proc. APM 2015, IISc Bengaluru, 2015.
- 25) With T Geethapriyan, K Kalaichelvan, A Rajadurai, S Naveen, "A Review on Investigating the Effects of Process Parameters in Electrochemical Machining," in Proc. ICET 2k15, 2015.
- 26) With B Mohan, D Saravanakumar, "Evaluation of Surface Finish of Electrical Discharge Machined AISI 304 Stainless Steel With Various Pulse Generators," in Proc. ICMMC, 2014.
- 27) With D Saravanakumar, B Mohan, "A study on influence of system parameters on servo pneumatic system and multi-response optimization using Taguchi – Grey methodology," in Proc. ICMMC, 2014.
- 28) With A Ramamurthy, R Sivaramakrishnan, S Venugopal, "Multi-Response Optimization of Wire -EDM Process Parameters of Titanium Alloy Using Taguchi Method and Grey Relational Analysis," in Proc. ICMMC, 2014.
- 29) With A Ramamurthy, R Sivaramakrishnan, S Venugopal, "Application of Taguchi-Grey relational methodology for multiple optimal performance measures in WEDM process," in Proc. ICAMME, 2014.
- 30) With S Vignesh, B Mohan, S Karthikeyan, "Evaluation of Recast layer thickness of Electrical Discharge Machined AISI 202 Stainless Steel With Various Pulse Generators," in Proc. ICAMME, 2014.
- 31) With B Mohan, "Fuzzy based computational methodology pulse generator for improving surface finish in EDM," in Proc. ICICCA, 2013.
- 32) With R Parasuraman, B Mohan, "Performance evaluation of iso current pulse generator in Electrical Discharge Machining," in Proc. INCACMA, 2012.
- 33) With R Parasuraman, B Mohan, "Effect of pulse generators on machining characteristics in electrical discharge machining," in Proc. INCACMA, 2012.
- 34) With R Parasuraman, B Mohan, "Effect of tool material in thermal erosion process," in Proc. INCACMA, 2012.
- 35) With B Mohan, "Optimization of material removal rate in EDM process using orthogonal array with regression analysis," in Proc. SET, 2012

- 36) With B Mohan, "Enhancing the surface quality by iso pulse generator in EDM process," in Proc. ICMST, 2012.
- 37) With A Senthilnathan, B Mohan, "Design and fabrication of pulse generator for micro EDM process," in Proc. INCRAME, 2011.
- 38) With A Senthilnathan, B Mohan, "Improvement of micro EDM process using high frequency transistor iso duration discharge current pulse generator," in Proc. ICGMSM, 2011.
- 39) With A Senthilnathan, B Mohan, "Design and fabricaton of iso discharge current pulse generator with servo feed control for micro EDM ," in Proc. ICMTIC, 2011.
- 40) With M Anbarasan, "Sensor based automatic pallet pick up fork lift trucks for industrial environment," in Proc. ICDF,2008.

National Conferences:

- 1) With T Geethapriyan, K Kalaichelvan, "Influence of process parameters on machinability of Inconel 718 in Electro chemical micro machining process," in Proc. NCARMS, 2016.
- 2) With A Ramamurthy, S Vasanth, M Mohammed Rabik, T Geethapriyan, "Multi response optimization of EDM process parameters using assignments of weight method," in Proc. NCARMS, 2016.
- 3) With T Geethapriyan, K Kalaichelvan, G Madhana Gopal , "Analysis the Effect of Electrochemical Micromachining Process Parameters on Alpha-Beta Titanium," in Proc. NCMTFC,2015.
- 4) With K Harishkumar, "A study on energy conservation in industrial drive systems," in Proc. NCETIME, 2013.
- 5) With B Mohan, "Experimental investigation of pulse generators in Electrical Discharge Machining," in Proc. NCETIME, 2013.
- 6) With R Parasuraman, B Mohan, "Analysis of machining characteristics with different pulse generators in electrical discharge machining," in Proc. NCCAME, 2012.
- 7) With M Chandramohan, "Reactive power compensation of lighting system to improve the power factor in industries," in Proc. NCETIME, 2011.
- 8) With M Anbarasan, "Sensor based pallet pick up fork lift trucks for intelligent material handling," in Proc. NCRTES, 2011.
- 9) With A Senthilnathan, B Mohan, "High efficiency pulse generator for micro EDM process," in Proc. NCRTES, 2011.
- 10) With M Chandramohan, "Energy auditing and conservation in aerospace industry," in Proc. NCETIME, 2011.

- 11) With B Mohan, "PWM aided switching for producing spark in micro EDM," in Proc. NCETIME, 2011.
- 12) With M Chandramohan, "Energy utilization of electric drives by adopting conservation techniques in industries," in Proc. NCETIME, 2011.
- 13) With M Anbarasan, "Evolving colour based segregate material handling," in Proc. NCETIME, 2011.
- 14) With B Mohan, "Pulse parameter analysis of thermo electric process," in Proc. NCETIME, 2011.
- 15) With M Anbarasan, "Path detection robot of automated guided vehicle by IR sensor," in Proc. NCETIME, 2011.
- 16) With M Anbarasan, "Automatic fork lifter for variable pallet pick up using colour sensor," in Proc. AIRPAM,2008.

Professional Development:

- Two weeks "Faculty Industry Immersion Program (FIIP)" at Visteon Automotive Electronics, Chennai on December, 2018.
- One day workshop on Sensors held at SRM University, Chennai on October 29, 2017.
- Faculty Development Program on Mobile robotics held at SRM University, Chennai on June 20 -24, 2016.
- Two days workshop on Advanced Materials Characterization and Techniques held at CEG campus, Anna University, Chennai on February 23-24, 2015.
- Faculty Development Program on Applied Hydraulics and Pneumatics held at Madras Institute of Technology, Anna University, Chennai on June 4-10, 2012.
- Faculty Development Program on Engineering Materials and Metallurgy held at Madras Institute of Technology, Anna University, Chennai on December 5-12, 2012.
- Faculty Development Program on Applied Hydraulics and Pneumatics held at Madras Institute of Technology, Anna University, Chennai on June 13-19, 2011.
- Advance training programme on Programmable systems on chip (PSoC) based embedded control system held at Advanced Training Institute(Government of India), Chennai on June 27- July 1, 2011.
- Advance training programme on CNC programming and machining on 4 axis die sinker EDM (For tool & die making) held at Advanced Training Institute(Government of India), Chennai on September 05 – 16, 2011
- Faculty Development Program on Introduction to Finite Element Analysis held at Madras Institute of Technology, Anna University, Chennai on December 1- 7, 2011.
- Staff Development Program on Robotics for Manufacturing held at Madras Institute of Technology, Anna University, Chennai on December 10-23, 2011.

Academic Experience:

- Associate Professor, Department of Mechatronics, School of Mechanical Engineering, SRM University, 2018-Till now

- Assistant Professor, Department of Mechatronics, School of Mechanical Engineering, SRM University, 2014-2017
- JRF(FT) and visiting faculty(PT), Department of Production Technology, MIT Campus, Anna University, 2010-2014
- Lecturer, Prathyusha Institute of Technology and Management, 2009-2010

Other Professional Experience:

- Application Engineer, Kamalam Group of Company, 2006-2008.
- Research Forum Organizer, Department of Production Technology, MIT Campus, Anna University, 2010-2013
- Maintenance Manager, Kamalam Group of Company, 2013-2014

Awards and Achievements:

- Best research paper award at ICEMMM 2018, Chennai, India.
- Best research paper award at RIPE 2017, Chennai, India.
- Gold medalist during SRM research day 2017, Chennai, India.
- Outstanding reviewer award from “archives of civil and mechanical engineering” by Elsevier 2017
- Best research paper award at NCARMS2016, Chennai, India.
- Gold medalist during SRM research day 2016, Chennai, India.
- Best research paper award at ICMC2014, Singapore.
- Anna Centenary Research Fellow 2011, India.
- GATE 2007 scorer

Journal Positions held:

As Editorial board member:

- International journal of manufacture system and design - published by Journalspub
- International Journal of Production Engineering - published by Journalspub

As Associate Editorial board member:

- Open Materials Science Journal - published by Bentham Open

As Reviewer:

- SN applied Science - published by Springer
- IEEE sensors – published by IEEE
- Transactions of the Canadian Society for Mechanical Engineering
- Sensors and Actuators A: Physical – published by Elsevier
- Measurement - published by Elsevier
- Materials Performance and Characterization – Published by ASTM
- Ain Shams Engineering Journal- published by Elsevier
- Alexandria Engineering Journal- published by Elsevier
- Archives of Civil and Mechanical Engineering - published by Elsevier
- Engineering Science and Technology, an International Journal - published by Elsevier
- Indian Journal of Engineering and Materials Sciences – published by Nisair
- Journal of Engineering Manufacture - published by Sage
- Journal of Process Mechanical Engineering - published by Sage
- Journal of Power and Energy systems - published by Elsevier

- Machining Science and Technology - published by Taylor & Francis
- International Journal of Heat and Mass Transfer - published by Elsevier
- Materials and Manufacturing Processes - published by Taylor & Francis
- SpringerPlus – published by Springer
- Silicon – published by Springer
- Microsystems Technologies - published by Springer
- Transactions of the Indian Institute of Metals – published by Springer
- Advanced Materials Research – published by Trans Tech publication
- SN applied Science - published by Springer

Conference Positions:

As Coordinator:

- ICARM 2017 conducted by SRM University, India.

As Scrutiny committee member:

- NCMTFC 2015 conducted by SRM University, India.

As Chair person:

- NCARMS 2016 conducted by MIT, Anna University, Chennai, India
- ICMME 2015 conducted by IPN Thailand chapter at Bangkok, Thailand
- AUTOHUNT 2K15 conducted by BSA University, India
- ETME 2K15 conducted by SRM engineering college, India

As Technical Committee member:

- AMTIA 2016, China
- EAME 2015, Thailand
- CMSE 2015, China
- IRP
- IACSIT
- IPN Thailand chapter