Dr. M.PRADEEP KUMAR
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Present Position

Professor, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai from December-2013.

Present Additional Responsibility

- Director, AU-FRG Institute for CAD/CAM, Anna University, Chennai from December-2018.
- Student Advisor , College of Engineering Guindy, Anna University, Chennai from July-2014.

Previous Positions

- Professor, , College of Engineering Guindy, Anna University, Chennai from December-2013.
- Associate professor, Faculty of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai during December-2010 and December-2013.
- Assistant Professor, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai during December-2007 and December-2010.
- Lecturer, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai during August-2004 and December-2007.
- Teaching Research Associate, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai during January-2001 and August-2004.

Previous Additional Responsibility

- President, Society Of Materials Science Engineers, Department of Mechanical Engineering, Anna University, Chennai during July-2013 and July-2018.
- Deputy Controller Of Examination, College of Engineering Guindy, Anna University, Chennai during January-2007 and August-2013.
- Ug/pg Incharge - Hod Office, Department of Mechanical Engineering, Anna University, Chennai during November-2005 and January-2007.

- Additional Chief Superintendent Of Examinations Ug, Department of Mechanical Engineering, Anna University, Chennai during April-2005 and May-2005.
- Deputy Warden, Anna University, Anna University, Chennai during December-2004 and July-2020.
- Additional Chief Superintendent Of Examinations Ug, Department of Mechanical Engineering, Anna University, Chennai during November-2004 and December-2004.
- Cam Lab Incharge, Department of Mechanical Engineering, Anna University, Chennai during January-2004 and December-2018.

Other Employment

- Senior Engineer, M/S Lakshmi Machine Works Ltd., Coimbatore, Tamil Nadu for 3 years.

Degree

- M.E. in PRODUCTION ENGINEERING , College of Engineering, Anna University (1996 - 1998).

Research Degree

- Ph.D. in Manufacturing from Faculty of Mechanical, College of Engineering , Anna University (2001 - 2004).
  Title: Finite Element Analysis to investigate the effects of Groove geometry in machining AISI 1045 steel .

Area of Specialisation

- Metal Cutting
- FEM in Manufacturing
- CAD/CAM
- CNC programming
- Cryogenic Machining
- ADVANCED MANUFACTURING

Membership in Professional Organization

- The Insitution of Engineers (India)
- Indian Society for Non-Destructive Testing

- Indian Society for Technical Education
- YMCA MADRAS
- International Association of Computer science and Information Technology
- The American Society of Mechanical Engineers

Research Guidance

Number of Ph.D Scholars Guided	: 16
Number of Ph.D Scholars Guiding	: 6
Number of M.E./ M.Tech. Projects Guided	: 26
Number of M.E./ M.Tech. Projects Guiding	: 1
Number of Ph.D Scholars Guided as Joint-Supervisor	: 2
Number of Ph.D Scholars Guiding as Joint-Supervisor	: 1

Papers Published in Journals

Research Papers Published in International Journals	: 88
Research Papers Published in National Journals	: 9

1. Pradeep Kumar M and Rajadurai A, " Shear Stress Distribution on Primary Shear Deformation Zone in Metal Cutting Operation FEM Study", Journal of Engineering Today, pp. 22-25 (2005).

2. Pradeep Kumar.M. and Rajadurai A, " Finite element analysis of orthogonal machining with grooved tool", Journal of Manufacturing Technology Today, Vol. 5, pp. 3-6 (2006).

3. Pradeep Kumar.M., Vijay Sekar K.S and Rajadurai A., " Comparison of different Flow stress models of the orthogonal metal cutting process using Finite Element Analysis", Journal of Manufacturing Technology Today, pp. 21-26 (2008).

4. S. Ramesh, M. Pradeep Kumar, L. Karunamoorthy, K. S. Vijay Sekar, " Orthogonal Cutting Investigations on Ti64 Alloy Machining by Using Artificial Neural Networks", Manufacturing Technology Today, published by iScholar Education Services Private Limited. Vol. 7, Issue 1, pp. 22-27 (2008).

5. Pradeep Kumar.M., Vijay Sekar K.S, "An Investigation to the effect of three Flow stress Models on the Finite Element simulation AISI 1045 steel", The Institution of Engineers (India) , Vol. 89, pp. 9-13 (2008).

6. Dhananchezian M., Karthikeyan K.V. and Pradeep Kumar M.,, " Finite Element Analysis of Cryogenic Machining of AISI 1045 Steel", Manufacturing Technology Today, Vol. 8, pp. 26-30 (2009).

7. M.Dhananchezian, M. Pradeep kumar, A. Rajadurai, "Experimental Investigation of Cryogenic Cooling by Liquid Nitrogen in the Orthogonal Machining Process", International Journal of Recent Trends in Engineering, published by RESEARCH PAPER. Vol. 1, Issue 5, pp. 55 (2009).

8. Vijay Sekar K.S and Pradeep Kumar M, " Finite Element Analysis of the effect of cutting speeds on the orthogonal machining process of AA6082 (T6) alloy", International Journal of Applied Engineering Research, published by Research India publications. Vol. 4, Issue 11, pp. 2189-2202 (2009).

9. Dhananchezian M., Pradeep Kumar M. and Rajadurai A., "Experimental Investigation of Cryogenic Cooling by Liquid Nitrogen in the Orthogonal Machining Process", International Journal of Recent Trends in Engineering, Vol. 1, Issue 5, pp. 55-59 (2009).

10. Dhananchezian M. and Pradeep Kumar M, " Experimental Investigation of Cryogenic Cooling in the Turning of Ti-6Al-4v Alloy with Modified Cutting Tool Insert", International J.of Multidispl.Research & Advcs. in Engg, published by ASCENT. Vol. 3, Issue 4, pp. 131-144 (2010).

11. Dhananchezian M. and Pradeep Kumar M, " Experimental Investigation of Cryogenic Cooling by Liquid Nitrogen in the Orthogonal Machining of Aluminium 6061-T6 alloy", International Journal of Machining and Machinability of Materials, published by Interscience. Vol. 7, Issue 3, pp. 274-285 (2010).

12. Ravi. S , Pradeep Kumar M, " Experimental investigations on cryogenic cooling by liquid nitrogen in the end milling of hardened steel", Cryogenics, published by Elsevier. Vol. 51, Issue 2, pp. 509-515 (2011).

13. KSV Sekar, MP Kumar, "Finite Element Investigations of Material Models in the Machining Simulation of AA 6082 (T6) Alloy", (2011).

14. Dhananchezian M and Pradeep Kumar M, " Cryogenic turning of the Ti-6Al-4V alloy with modified cutting tool inserts", Cryogenics, published by Elsevier. Vol. 51, Issue 4, pp. 34-40 (2011).

15. Dhananchezian M. and Pradeep Kumar M, "Influence of Cryogenic Cooling with Modified Cutting Tool Inserts in Turning of Aluminium 6061- T6 alloy", Journal on Mechanical Engineering, published by i-managers. Vol. 1, Issue 3, pp. 42-48 (2011).

16. Dhananchezian M. and Pradeep Kumar M, " Influence of Cryogenic Cooling in Turning of AISI 1045 Steel with Modified Cutting Tool Inserts", International Journal of Applied Engineering Research, published by Research India publications. Vol. 6, Issue 14, pp. 1721-1731 (2011).

17. Dhananchezian M., Pradeep Kumar M, "Cryogenic turning of AISI 304 stainless steel with modified tungsten carbide tool inserts", Materials and Manufacturing Process , published by Taylor & Francis . Vol. 26, Issue 5, pp. 781-785 (2011).

18. Dilip Jerold B., Pradeep Kumar M, "Experimental investigation of turning AISI 1045 steel using cryogenic carbon dioxide as the cutting fluid", Journal of Manufacturing Processes, published by Elsevier. Vol. 13, Issue 2, pp. 113-119 (2011).

19. Vijay Sekar K.S and Pradeep Kumar M, " Finite Element Simulations of Ti-6Al-4V Titanium Alloy Machining to Assess Material Model Parameters of the Johnson – Cook Constitutive Equation", Journal of the Brazilian Society for Mechanical Sciences and Engineering, published by The Brazilian Society of Mechanical Sciences and . Vol. 33, Issue 2, pp. 203-211 (2011).

20. VSKSP Kumar M, "Optimizing flow stress input for machining simulation using Taguchi methodology", International journal of Simulation Modeling , Vol. 11, Issue 17, pp. 17-28 (2012).

21. PKM Manimaran G, " Investigation of Liquid nitrogen (LN2) as coolant in grinding AISI D3 steel", Advanced Material Research , Vol. 341, Issue 400, pp. 400-405 (2012).

22. Vijay Sekar K.S and Pradeep Kumar M, "Flow Stress Optimization for Machining Simulations", Advanced materials Research, published by Trans Tech. Vol. 622, pp. 91-98 (2012).

23. Dilip Jerold B., Pradeep Kumar M, "Experimental comparison of carbon-dioxide and liquid nitrogen cryogenic coolants in turning of AISI 1045 steel", Cryogenics, published by Elsevier. Vol. 52, Issue 10, pp. 569-574 (2012).

24. Vinoth Kumar. S, MD Azeem Basha.A and Pradeep Kumar. M., "A Study of Optimization of Machining Parameters for Electrical Discharge Machining of AISI D2 Tool Steel", Journal of Engineering Today, Issue 2, pp. 9-14 (2012).

25. Dilip Jerold B., Pradeep Kumar M, "Machining of AISI 316 stainless steel under carbon-di-oxide cooling", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 27, pp. 1059-1065 (2012).

26. Ravi. S, Pradeep Kumar M, "Experimental investigation of cryogenic cooling in milling of AISI D3 tool steel", Materials and Manufacturing Process, published by Taylor & Francis. Vol. 27, Issue 10, pp. 1017-1021 (2012).

27. R Manivannan, S Vinoth Kumar, M Pradeep Kumar, " Multi response optimization of process parameters in Electro-Discharge Machining in AISI D2 die steel using grey relational analysis", Journal of Manufacturing Engineering , Vol. 8, Issue 1, pp. 022-7 (2013).

28. G Manimaran, MP Kumar, " Multiresponse optimization of grinding AISI 316 stainless steel using grey relational analysis", Materials and Manufacturing Processes , Vol. 28, Issue 4, pp. 418-423 (2013).

29. BD Jerold, MP Kumar, " The influence of cryogenic coolants in machining of Tiâ€“6Alâ€“4V", Journal of manufacturing science and engineering , Vol. 135, Issue 3, (2013).

30. Seshadri R, Naveen I, Sharan Srinivasan, Viswasubrahmanyam M, VijaySekar K S, Pradeep Kumar M, " Finite element simulation of the orthogonal machining process with Al 2024 T351 aerospace alloy", Procedia Engineering , Vol. 64, Issue 1454, pp. 1454-1463 (2013).

31. G.Manimaran, M.Pradeep Kumar, "Effect of cryogenic cooling and solâ€“gel alumina wheel on grinding performance of AISI 316 stainless steel", Archives of Civil and Mechanical Engineering, published by Elsevier. Vol. 13, Issue 3, pp. 304-312 (2013).

32. MP Kumar, SV Kumar, "Performance Evaluation on Cryogenic Cooling of Electrode in Electrical Discharge Machining in AISI D2 Steel", ASME International Mechanical Engineering Congress and Exposition … , Vol. 56192, Issue 2013, (2013).

33. Pradeep Kumar M. and Dilip Jerold. M, "Effect of Cryogenic Cutting Coolants on Cutting forces and Chip morphology in machining Ti-6Al-4V Alloy", Asian International Journal of Science and Technology in Production and Manufacturing Engineering, Vol. 6, Issue 2, pp. 1-7 (2013).

34. G Manimaran, MP Kumar, " Effect of cryogenic cooling and solâ€“gel alumina wheel on grinding performance of AISI 316 stainless steel", Archives of civil and mechanical engineering , Vol. 13, Issue 3, pp. 304-312 (2013).

35. G Manimaran, MP Kumar, " Investigation of Cooling Environments in Grinding EN 31 Steel", Materials and Manufacturing Processes , Vol. 28, Issue 4, pp. 424-429 (2013).

36. PKM Manimaran G, " Influence of cryogenic cooling on the surface grinding of stainless steel 316", Cryogenics , Vol. 59, Issue 76, pp. 76-83 (2014).

37. N Govindaraju, AL Shakeel, M Pradeepkumar, " Experimental investigations on cryogenic cooling in drilling of aluminium alloy", Applied mechanics and materials , Vol. 592, Issue 316, pp. 316-320 (2014).

38. V Muthuraman, M Pradeepkumar, " Performance Evaluation of Liquid Nitrogen as coolant in Turning of Al/SiC Metal Matrix Composites (AMMC)", Advanced Materials Research , Vol. 893, Issue 341, pp. 341-345 (2014).

39. V Kumar. S, P Kumar. M, " Optimization of cryogenic cooled EDM process parameters using grey relational analysis", Journal of Mechanical Science and Technology , Vol. 28, Issue 3777, pp. 3777-3784 (2014).

40. SS Kumar, M Pradeep Kumar, " Cycle Time Reduction of a Truck Body Assembly in an Automobile Industry by Lean Principles", Procedia Materials Science , Vol. 5, Issue 1853, pp. 1853-1862 (2014).

41. Siva, Parivallal, M. Pradeep Kumar, "Investigation on the Effect of Process Parameters in Micro Electrical Discharge Machining", Procedia Materials Science, published by Elsevier. Vol. 5, pp. 1829-1836. (2014).

42. N Govindaraju, L Shakeel Ahmed, M Pradeep Kumar, " Experimental Investigations on Cryogenic Cooling in the Drilling of AISI 1045 Steel", Materials and Manufacturing Processes - , Vol. 29, Issue 11, pp. 1417-1421 (2014).

43. J. Gowtham Sriram, N. Nivas, S. Balasivanandha Prabu, M. Pradeep Kumar, "Characteristics Of Batio3 / Carbon Nanotube Composite Synthesized By Mechanical Milling,", Materials Research Innovations, published by Taylor & Francis. (2014).

44. Vinoth Kumar, S., Pradeep Kumar. M, " Machining process parameter and surface integrity in conventional EDM and cryogenic EDM of AlSiCp MMC", Journal of Manufacturing Processes, published by Elsevier. Vol. 20, Issue 1, pp. 70-78 (2015).

45. LS Ahmed, MP Kumar, " Cryogenic Drilling of Ti-6Al-4V Alloy Under Liquid Nitrogen Cooling", Materials and Manufacturing Processes , (2015).

46. LS Ahmed, N Govindaraju, M Pradeep Kumar, " Experimental Investigations on Cryogenic Cooling in the Drilling of Titanium Alloy", Materials and Manufacturing Processes , (2015).

47. M Nataraj, M Ramamoorthy, MP Kumar, " Study on surface integrity of high speed turning of Inconel 718 using taguchi DOE approach", Int J Appl Eng Res , Vol. 10, Issue 2, pp. 4191-4200 (2015).

48. S Vanangamudi, MP Kumar, "EXPERIMENTAL STUDY OF DOUBLE POINT CUTTING TOOL ON CHIP–TOOL INTERFACE TEMPERATURE IN TURNING", International Journal of Research in Engineering and Technology IJRET-Vol … , pp. International Journal of Research in Engineering a (2015).

49. Yuvaraj N and Pradeep Kumar M, "Multiresponse Optimization of Abrasive Water Jet Cutting Process Parameters Using TOPSIS Approach, ", Materials and Manufacturing Processes, published by Taylor & Francis. Issue 7, pp. 882-889 (2015).

50. J. Elancheizhan, M. Pradeep Kumar, G. Manimaran, " Grinding titanium Ti-6Al-4V alloy with electroplated cubic boron nitride wheel under cryogenic cooling", Journal of Mechanical Science and Technology, published by SPRINGER. Vol. 29, Issue 11, pp. 4885-4890 (2015).

51. Manimaran. G, Pradeep Kumar M, "Surface modifications in grinding AISI D3 steel using cryogenic cooling", Journal Of The Brazilian Society Of Mechanical Sciences And Engineering, published by SPRINGER. Vol. 37, Issue 4, pp. 1357-1363 (2015).

52. Vinoth Kumar, S., Pradeep Kumar. M, "Experimental Investigation of the process parameters on AISI D2 tool steel under cryogenic cooling electrode in EDM process", Journal of Mechanical Science and Technology, published by SPRINGER. Vol. 29, Issue 9, pp. 3865-3871 (2015).

53. Pragadish N and Pradeep Kumar M, "Surface characteristics analysis of dry EDMed AISI D2 steel using modified tool design", International Journal of Mechanical Science and Technology, published by SPRINGER. Vol. 29, Issue 4, pp. 1737-1743 (2015).

54. Shakeel Ahmed. L, Govindaraju. N, Pradeep Kumar. M, " Experimental Investigations on Cryogenic Cooling in the Drilling Of Titanium alloy", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 31, pp. 603-607 (2016).

55. Yuvaraj, N., and Pradeep Kumar, M, "Cutting of Aluminium Alloy with Abrasive Water Jet and Cryogenic Assisted Abrasive Water Jet: A Comparative Study of the Surface Integrity Approach", Wear, published by Elsevier. Vol. 262, pp. 18-32 (2016).

56. Manivannan, R., and Pradeep Kumar, M, "Multiresponse optimization of micro-EDM process parameters AISI304 steel using TOPSIS", Journal of Mechanical Science and Technology, published by SPRINGER. Vol. 30, Issue 1, pp. 137-144 (2016).

57. N Pragadish, MPradeep Kumar, " Optimization of dry EDM process parameters using grey relational analysis", Arabian Journal for Science and Engineering , Vol. 41, Issue 11, pp. 4383-4390 (2016).

58. 5Sriram S, Vignesh V, Vijay Sekar KS, Pradeep Kumar M, "Finite Element Modelling of orthogonal cryogenic machining process", Applied Mechanics and Materials, Vol. 852, pp. 248-254 (2016).

59. Shakeel Ahmed. L, Pradeep Kumar. M, "Multi response optimization of cryogenic drilling on Ti-6Al-4V alloy using Topsis method", Journal of Mechanical Science and Technology, published by SPRINGER. Vol. 30, Issue 4, pp. 1835-1841 (2016).

60. S. Vanangamudi, M. Pradeep Kumar, "Experimental study on surface roughness in MS bar by using double point cutting tool in turning", International Journal of recent and innovation trends in computing and communication, Vol. 3, Issue 9, pp. 5493-5499 (2016).

61. S. Vanangamudi, M. Padeep Kumar, " Exerimental Study of double point cutting tool on feed force during turning of mild steel bar", International Journal of Mechanical Engineering and Technology, Vol. 6, Issue 9, pp. 126-132 (2016).

62. " Cryogenic drilling of Ti-6Al-4V alloy under Liquid nitrogen cooling", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 31, Issue 7, pp. 951-959 (2016).

63. MP Kumar, LS Ahmed, "Drilling of AISI 304 Stainless Steel under Liquid Nitrogen Cooling: A Comparison with Flood Cooling", Materials Today: Proceedings , Vol. 4, Issue 2, pp. 1518-1524 (2017).

64. Vinoth Kumar, S., Pradeep Kumar. M, "Experimental Investigation and Optimization of Machining Process Parameters in AISI D2 Steel Under Conventional EDM and Cryogenically Cooled EDM Process", Transactions of the Indian Institute of Metals, published by SPRINGER. Vol. 70, Issue 9, pp. 2293-2301 (2017).

65. Seshadri R , Naveen I, Sharan Srinivasan , Viswasubrahmanyam M , Vijay Sekar K S , Pradeep Kumar M, " Finite Element Simulation of Machining of an Aerospace alloy", Vol. 13, Issue 4, pp. 268-277 (2017).

66. Yuvaraj, N., and Pradeep Kumar, M, "Study And Evaluation Of Abrasive Water Jet Cutting Performance On Aa5083-H32 Aluminium Alloy By Varying The Jet Impingement Angles With Different Abrasive Mesh Sizes", International Journal of Machining Science and Technology, published by Taylor & Francis. Vol. 3, pp. 1-31 (2017).

67. Yuvaraj, N., and Pradeep Kumar, M, "Surface Integrity Studies On Abrasive Water Jet Cutting Of Aisi D2 Steel", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 32, Issue 2, pp. 162-170 (2017).

68. Shakeel Ahmed. L, Pradeep Kumar. M, "Investigation of cryogenic cooling effect in reaming Ti-6AL-4V alloy", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 32, Issue 9, pp. 970-978 (2017).

69. Yuvaraj, N., and Pradeep Kumar, M, "Investigation of Process parameters influence in AWJ cutting of D2 steel", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 32, Issue 2, pp. 151-161 (2017).

70. Manivannan, R., and Pradeep Kumar, M, "Multi-attribute decision making of cryogenically cooled Micro-EDM drilling process parameters using TOPSIS method", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 32, Issue 2, pp. 209-215 (2017).

71. Shakeel Ahmed. L, Pradeep Kumar. M, "Performance Evaluation of Cryogenic Cooling in Reaming Titanium Alloy", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 32, Issue 3, pp. 302-308 (2017).

72. N. Yuvaraj, M. Pradeep Kumar, "Optimisation of abrasive water jet cutting process parameters for AA5083-H32 aluminium alloy using fuzzy TOPSIS method", International Journal of Machining and Machinability of Materials, published by Interscience. Vol. 20, Issue 2, pp. 118-140 (2018).

73. R Manivannan, M Pradeep Kumar, " Improving the machining performance characteristics of the ÂµEDM drilling process by the online cryogenic cooling approach", Materials and Manufacturing Processes , Vol. 33, Issue 4, pp. 390-396 (2018).

74. J Elanchezhian, M Pradeep Kumar, " Effect of nozzle angle and depth of cut on grinding titanium under cryogenic CO2", Materials and Manufacturing Processes , Vol. 33, Issue 13, pp. 1466-1470 (2018).

75. Lakshmanan Selvam , Pradeep Kumar Murugesan , Dhananchezian Mani and Yuvaraj Natarajan, "Investigation of AlCrN-Coated Inserts on Cryogenic Turning of Ti-6Al-4V Alloy ", Metals, published by Mdpi. Vol. 9, Issue 1138, pp. 1-15 (2019).

76. Chandrasekhara Sastry, C, Hariharan, P & Pradeep Kumar, M, "Experimental investigation of dry, wet and cryogenic boring of AA 7075 alloy", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 34, Issue 7, pp. 814-831 (2019).

77. M Jebaraj, M Pradeep Kumar, N Yuvaraj, G Mujibar Rahman, " Experimental study of the influence of the process parameters in the milling of Al6082-T6 alloy", Materials and Manufacturing Processes , Vol. 34, Issue 12, pp. 1411-1427 (2019).

78. Y Natarajan, PK Murugasen, LR Sundarajan, R Arunachalam, "Experimental investigation on cryogenic assisted abrasive water jet machining of aluminium alloy", International Journal of Precision Engineering and Manufacturing-Green … , pp. International Journal of Precision Engineering and (2019).

79. M Jebaraj, MP Kumar, " End milling of DIN 1.2714 die steel with cryogenic CO2 cooling.", Journal of Mechanical Science & Technology , Vol. 33, Issue 5, (2019).

80. Chandrasekhara Sastry, C, Hariharan, P, Pradeep Kumar, M & Muthu Manickam, MA, "Experimental investigation on boring of HSLA ASTM A36 steel under dry, wet, and cryogenic environments", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 34, Issue 12, pp. 1352-1379 (2019).

81. M Jebaraj, M Pradeep Kumar, " Effect of cryogenic CO2 and LN2 coolants in milling of aluminum alloy", Materials and Manufacturing Processes , Vol. 34, Issue 5, pp. 511-520 (2019).

82. V Sivalingam, J Sun, B Selvam, PK Murugasen, B Yang, S Waqar, " Experimental investigation of tool wear in cryogenically treated insert during end milling of hard Ti alloy", Journal of the Brazilian Society of Mechanical Sciences and Engineering Â â€¦ , Vol. 41, Issue 2019, (2019).

83. Pragadish N, Pradeep Kumar M , Elango N, "Optimum Control Parameters During Machining of LM13 Aluminum Alloy Under Dry Electrical Discharge Machining (EDM) With A Modified Tool Design", MATERIALS SCIENCE (MEDŽIAGOTYRA), published by MEDŽIAGOTYRA. Vol. 25, Issue 3, pp. 270-275 (2019).

84. N. Pradeep, K. Shanmuga Sundaram, M. Pradeep Kumar, "Multi‑response optimization of electrochemical micromachining parameters for SS304 using polymer graphite electrode with NaNO3 electrolyte based on TOPSIS technique", Journal of the Brazilian Society of Mechanical Sciences and Engineering, published by Springer. Vol. 41, pp. 2-10 (2019).

85. Yuvaraj Natarajan, Pradeep Kumar Murugesan , Mugilvalavan Mohan, Shakeel Ahmed Liyakath Ali Khan, " Abrasive Water Jet Machining process: A state of art of review", Journal of Manufacturing Processes, published by Elsevier. Vol. 49, pp. 271-322 (2019).

86. C. Chandrasekhara Sastry1 · K. Gokulakrishnan P. Hariharan, M. Pradeep Kumar, S. Rajendra Boopathy, "Investigation of boring on gunmetal in dry, wet and cryogenic conditions", Journal of the Brazilian Society of Mechanical Sciences and Engineering, published by Springer. Vol. 42, pp. 1-24 (2020).

87. S. Lakshmanan , M. Pradeep Kumar , M. Dhananchezian & N. Yuvaraj, "Investigation of monolayer coated WC inserts on turning Ti-alloy", Materials and Manufacturing Processes, published by Taylor & Francis. pp. 826â€“835 (2020).

88. M Pradeep Kumar, C Chandrasekhara Sastry, "Experimental investigation of dry and cryogenic broaching of AISI 4340 steel", Materials and Manufacturing Processes, published by Taylor & Francis. Vol. 35, Issue 14, pp. 1584-1597 (2020).

89. N Pradeep, KS Sundaram, M Pradeep Kumar, " Performance investigation of variant polymer graphite electrodes used in electrochemical micromachining of ASTM A240 grade 304", Materials and Manufacturing Processes , Vol. 35, Issue 1, pp. 72-85 (2020).

90. M Jebaraj, M Pradeep Kumar, N Yuvaraj, R Anburaj, "Investigation of surface integrity in end milling of 55NiCrMoV7 die steel under the cryogenic environments", Machining Science and Technology , Vol. 24, Issue 3, pp. 465-488 (2020).

91. M Jebaraj, P Kumar, R Anburaj, " Effect of LN2 and CO2 coolants in milling of 55NiCrMoV7 steel", Journal of Manufacturing Processes , Vol. 53, Issue 318, pp. 318-327 (2020).

92. C. Chandrasekhara Sastry, K. Gokulakrishnan, P. Hariharan, M. Pradeep Kumar & S. Rajendra Boopathy, " Investigation of boring on gunmetal in dry, wet and cryogenic conditions", Journal of the Brazilian Society of Mechanical Sciences and Engineering, published by Springer Link. Vol. 42, Issue 16, (2020).

93. M Jebaraj, M Pradeep Kumar, R Anburaj, " Investigations on milling SKT4 steel by using cryogenic carbon-dioxide", Materials and Manufacturing Processes , Vol. 1, Issue 7, pp. 1-7 (2021).

94. R Anburaj, M Pradeep Kumar, " Experimental studies on cryogenic CO2 face milling of Inconel 625 superalloy", Materials and Manufacturing Processes , Vol. 36, Issue 7, pp. 814-826 (2021).

95. PS Prabha, IG Ragavi, R Rajesh, MP Kumar, " FEA analysis of ballistic impact on carbon nanotube bulletproof vest", Materials Today: Proceedings , (2021).

96. N. Pragadish ,M. Pradeep Kumar, " Comparison of Surface Characteristics and Micro Hardness of AISI D2 Tool Steel and LM13 Aluminum Alloy Machined under dry EDM (Green Machining) Process", FME TRANSACTIONS, published by FME TRANSACTIONS. Vol. 49, Issue 1, pp. 488-493 (2021).

97. R Anburaj, M Pradeep Kumar, " Influences of cryogenic CO2 and LN2 on surface integrity of inconel 625 during face milling", Materials and Manufacturing Processes , Vol. 1, Issue 11, pp. 1-11 (2021).

Papers Presented in Programmes

Research Papers Presented in International Programmes	: 30
Research Papers Presented in National Programmes	: 34

1. Pradeep Kumar.M., Mohan B., Dinakar B.R. and Rajadurai A, "Simulation of the orthogonal metal cutting process using finite element method" presented in a International level conference on ICET-2003, organised by Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Orissa, India .

2. Pradeep Kumar.M., Mohan B., Dinakar B.R. and Rajadurai A, "Modeling and analysis of orthogonal cutting of steel using FEM" presented in a International level conference on ICME-2003, Bangladesh .

3. Madhavan S., Pradeep Kumar.M., Mohan B. and Rajadurai A. , "Finite element analysis of metal cutting operation under different cutting speed" presented in a International level conference on International Conference on soft computing, organised by Bharath Institute of Higher Education and Research, India .

4. Pradeep Kumar.M., Babu V. and Rajadurai A, "Effect of friction co-efficient during orthogonal machining of AISI1045 steel with tungsten carbide Tool" presented in a International level conference on International Conference on Soft computing, organised by Bharath Institute of Higher Education and research, India .

5. Pradeep Kumar.M., Babu V. and Rajadurai A, "Modeling and simulation of orthogonal machining AISI 1045 steel with tungsten carbide tool" presented in a International level conference on International Conference on Soft Computing, organised by Bharath Institute of Higher education and research, India .

6. Pradeep Kumar.M., Shanmuga sundram.K and Rajadurai A, "Finite Element Analysis of Machining AISI1045 Steel with a Grooved Tool" presented in a International level conference on AMPC 2006, organised by CEG Anna University, India .

7. Pradeep Kumar.M. and K.S.Vijay Sekhar, "Finite Element Analysis of the Orthogonal Metal Cutting Process with Different Flow Stress Models" presented in a International level conference on ICADM-2007, organised by Sethu Institute of Technology, India .

8. Dhananchezian M. and Pradeep Kumar M, "Experimental investigation of cryogenic cooling by liquid nitrogen in the Orthogonal Machining of AISI 1045 Steel" presented in a International level conference on RAMPT 09, organised by National Engineering College, India .

9. Dhananchezian M. and Pradeep Kumar M, "Influence of cryogenic cooling in turning of AISI 304 Stainless steel" presented in a International level conference on COPEN6, organised by PSG & AMRITA, India .

10. K.S.Vijay Sekhar and Pradeep Kumar.M, "Finite Element Analysis of the Orthogonal Metal Cutting Process with AISI 1045 Steel" presented in a International level conference on ERA-2009, organised by Velammal Engineering College, India .

11. Muthuraman.V and Pradeep Kumar M, "Investigation and Solidification analysis of Aluminium – 12% wt. silicon alloy piston casting using Finite Element Method" presented in a International level conference on ERA-2009, organised by Velammal Engineering College, India .

12. Vijay Sekar K.S and Pradeep Kumar.M, "Finite Element Analysis of the machining characteristics of AA6082 (T6) alloy" presented in a International level conference on TEAM TECH 2009, India .

13. Vijay Sekar K.S and Pradeep Kumar.M, "Finite Element Analysis of the orthogonal machining Process of AA6082 (T6) alloy" presented in a International level conference on AU 2009, organised by Annamalai University, India .

14. Madhu. B and Pradeep Kumar.M, "Experimental Investigation in Orthogonal Cutting of fabricated carbon reinforced polymer composite tubes with 45° and 60° fiber orientation" presented in a International level conference on AIMTDR, organised by IIT guwahati, India .

15. Pradeep Kumar.M., and Dilip Jerold.B , "Effect of Cryogenic Coolants on Cutting Forces and Chip Morphology in Machining Ti-6Al-4V Alloy" presented in a International level conference on GCMM2012, organised by AUT University, New Zealand .

16. Manivannan.R, Vinoth Kumar.S and Pradeep Kumar.M, "Multi response optimization of process parameter in electrical discharge machining in AISI D2 tool steel using grey relational analysis" presented in a International level conference on RAMPT2013, organised by National Engineering College, Kovilpatti, India .

17. Vinoth Kumar.S and Pradeep Kumar.M, "Multi response optimization of process parameter in electrical discharge machining with cryogenic cooling of electrode using grey relational analysis" presented in a International level conference on AMPC2013, organised by College of Engineering , Guindy, Anna University, India .

18. Ravi.S and Pradeep Kumar.M, "Experimental investigation to study the performance of cryogenic cooling in end milling of AISIp20 steel" presented in a International level conference on AMPC2013, organised by College of Engineering, Guindy, Anna University, Chennai, India .

19. Manimaran.G and Pradeep Kumar.M, "Taguchi and grey relational analysis for grinding AISI D3 steel under cryogenic cooling" presented in a International level conference on AMPC2013, organised by College of Engineering, Guindy, Anna University, Chennai, India .

20. Shakeel Ahmed.L , Govindaraju.N , Pradeep Kumar. M, "Taguchi Method Based Optimization of Drilling Parameters in Drilling of AISI 1045 Steel With Indexable Insert Coated Carbide Drill" presented in a International level conference on INCAMA 2013, organised by Kalasalingam University, Srivilliputhur, India .

21. Mahammadraffi S, Pradeep Kumar.M, Azad A and Vijaya sekar K S, "Analysis of shear stress distribution on primary shear deformation in metal cutting operation using FEM" presented in a National level conference on Institution of Engineers (India) 2003, organised by NSS College of Engineering, Palghat, India .

22. Pradeep Kumar.M., Rajadurai A., Siva Sankar R. and Gopal M, "FEM simulation of metal cutting operation under different cutting speeds" presented in a National level conference on National Conference on Modeling and simulation in Manufacturing, organised by Annamalai University, India .

23. Pradeep Kumar.M., Rajadurai A. and Siva Sankar R, "Analysis of orthogonal metal cutting process using FEM" presented in a National level conference on AMS- 2003, organised by Jadavpur University, India .

24. Rajadurai A. and Pradeep Kumar.M, "Optimal design of turning tool using FEM" presented in a National level conference on National Conference on World Class Manufacturing (2003), organised by Amrita Institute of Technology, Coimbatore, India .

25. Pradeep Kumar.M., Rajadurai A. and Mahendran B, "Finite element analysis of Orthogonal metal cutting under different depth of cut" presented in a National level conference on National Conference on Emerging Trends in Engineering, Technology And Management, organised by Adhiyamaan Engineering College, hosur, India .

26. Pradeep Kumar.M., Rajadurai A., Mahendran B. and Jayabalan V, "Finite element analysis of metal cutting operation and comparison with machining experiment" presented in a National level conference on National Conference on Recent Developments In Mechanical Engineering, organised by Taper Institute of Engineering and Technology, Patiala, India .

27. Pradeep Kumar.M., Babu V. and Rajadurai A, ""Finite element analysis of machining AISI1045 steel with the multicoated carbide tool" presented in a National level conference on COMET-2004, organised by BHU, Varanasi, India .

28. Madhavan S., Pradeep Kumar.M., Mohan B. and Rajadurai A, "Investigation of the effect of corner radius on cutting forces in machining AISI4140 steel" presented in a National level conference on COMET-2004, organised by BHU, Varanasi, India .

29. Pradeep Kumar.M., Babu V. and Rajadurai A, "Finite element analysis of machining AISI1045 steel with coated carbide tool" presented in a National level conference on National Conference on Design, Simulation and Modeling of mechanical systems, organised by Nehru Technological University, Kakinada, India .

30. Pradeep Kumar.M., Babu V. and Rajadurai A, "Finite element analysis of orthogonal cutting under different cutting feeds" presented in a National level conference on AIMTDR , organised by VIT vellore, India .

31. Ramesh S, Karana Moorthy L. Pradeep Kumar.M., and Senthil kumar V.S , "Metallurgical Studies and Machining of Titanium alloy Ti-6AL-4V" presented in a National level conference on National Conference on Modeling of Simulation In Manufacturing Engineering, organised by Annamalai University, India .

32. Chitty Babu.S., Madhu.B. and Pradeep Kumar.M, "Modeling and Simulation of Machining on Carbon Composites-An FEM study" presented in a National level conference on Recent Advances in Manufacturing & Management (RAMM-2008) , organised by Annamalai University, India .

33. Karthikeyan.K.V, Dhananchezian.M, Pradeep Kumar.M. and Senthilkumaran.S, "Investigation of the effect of cryogenic cooling by LN2 in the machining of AISI 1045 using Finite Element Method" presented in a National level conference on National Conference on RAMM 2008, organised by Annamalai University, India .

34. Dhananchezian.M, Karthikeyan.K.V and Pradeep Kumar.M, "Investigation of the effect of cutting speed on cryogenic machining of AISI 1045 steel using Finite Element Method" presented in a National level conference on RAIME 2008, organised by National Engineering college, India .

35. Karthikeyan.K.V, Dhananchezian.M, Pradeep Kumar.M. and S.Senthilkumaran, "Investigation of the effect of feed rate on cryogenic machining of AISI 1045 steel using Finite Element Method" presented in a National level conference on AIRPAM - 2008, organised by MIT campus Anna University Chennai, India .

36. Saravana kumar. CT, Kanakaraj. R, Pradeep Kumar.M, "A Finite Element Study of the effect of the Coulomb Friction in Orthogonal Machining" presented in a National level conference on AIRPAM - 2008, organised by MIT campus Anna University Chennai, India .

37. Saravana kumar.CT, Kanakaraj.R, Pradeep Kumar.M, "To study the effect of shear frictional values in Orthogonal metal Cutting Using FEM" presented in a National level conference on NCAPDMME, organised by B.S.Abdur Rahman Crescent Engineering College, India .

38. Mahammadraffi S, Pradeep Kumar.M, Azad A and Vijaya sekar K S, "Evaluation of flow stress models in orthogonal metal cutting using Finite Element Analysis" presented in a National level conference on AIRPAM -2008, organised by MIT campus, Anna University-Chennai, India .

39. Jaisankar N., Dhananchezian M. and Pradeep Kumar M, "Investigation of the Effect of Cryogenic Cooling in Orthogonal Machining of AISI 304 Stainless steel" presented in a National level conference on RTMT'09, organised by CEG Campus, Anna University Chennai, India .

40. Satheesh Kumar. M, Madhu. B and Pradeep Kumar M, "Experimental Investigation in orthogonal cutting of CFRP composite" presented in a National level conference on RTMT' 09, organised by CEG campus, Anna University Chennai, India .

41. Pradeep. A, Dilip Jerold. B, Dhananchezian M. and Pradeep Kumar M, "Application of Fem to evaluate the performance of CO2 as a cutting fluid in orthogonal cutting of AISI 1045 steel" presented in a National level conference on RTMT' 09, organised by CEG campus, Anna University Chennai, India .

42. Vinoth Kumar. S, Dilip Jerold. B, Dhananchezian M. and Pradeep Kumar M, "Performance evaluation in turning of AISI 316 stainless steel using cryogenic carbon dioxide as cutting fluid" presented in a National level conference on IDEA 2010, organised by GCE Triunelveli, India .

43. Gopinath babu. S, Ravi.S , Dhananchezian M. and Pradeep Kumar M, "Experimental investigation of end milling of AISI D2 tool steel when using cryogenic liquid nitrogen as coolant" presented in a National level conference on IDEA 2010, organised by GCE Triunelveli, India .

44. Vinothkumar.J.P and Pradeep Kumar.M, "Experimental investigation of end milling of AISI D2 tool steel when using cryogenic liquid nitrogen as coolant" presented in a National level conference on IDEA 2010, organised by GCE Triunelveli, India .

45. Vinoth Kumar. S, Dilip Jerold. B, Dhananchezian M. and Pradeep Kumar M, "Application of ANN to investigate the tuning of AISI 316 stainless steel" presented in a National level conference on RIPE 2010, organised by MIT campus- Anna university Chennai, India .

46. Gopinath babu. S, Ravi.S, Dhananchezian M. and Pradeep Kumar M, "Optimization of surface roughness in end milling of AISI D2 tool steel using Taguchi design" presented in a National level conference on RIPE-2010, organised by MIT campus- Anna university Chennai, India .

47. Vijay Sekar K.S, Pradeep Kumar.M and Manoraj. S, "Experimental and Finite Element Investigation of the Orthogonal Machining Process of Ti-6Al-4V Alloy" presented in a National level conference on RIPE-2010, organised by MIT campus- Anna university Chennai, India .

48. Yuvaraj.N, Pradeep Kumar.M, "Cost Benefit Analysis of Bonded Warehouse for Mobile Phone Manufacturing Industry in Special Economic Zone" presented in a National level conference on RTCME-2011, organised by BIT campus-Anna University, Trichy, India .

49. Elanchezhian. J and Pradeep Kumar.M, "Implementation of Lean Manufacturing Methodology in Air Pre heater component" presented in a National level conference on RTMT- 2011, organised by CEG Campus –Anna University Chennai, India .

50. Vinothkumar.J.P and Pradeep Kumar.M, "Lead Time Reduction in a Valve Manufacturing Company Using Taguchi Technique to Meet Customer Requirement" presented in a National level conference on RTMT- 2011, organised by CEG Campus –Anna University Chennai, India .

51. Pradeep Kumar.M., Babu V. and Rajadurai A, "Effect of corner radius on cutting forces and chip geometry in machining AISI 1045 steel – FEM study" presented in a National level conference on ICAMAT 2004, MALAYSIA .

52. Manivannan. R, Vinoth kumar. S and Pradeep Kumar. M, "Multi Response Optimization Of Process Parameters In Electrical Discharge Machining In Ti-6Al-4V Using Grey Relational Analysis" presented in a National level conference on RTMT 2013, organised by ANNA UNIVERSITY, India .

53. Pradeep Kumar.M, Vinoth Kumar. S, Manivannan. R, "Performance Evaluation on cryogenic cooling of electrode in EDM in AL-10% SiCp Metal Matrix Composite" presented in a International level conference on ICRACM 2013, organised by International Centre, Goa, India .

54. N Yuvaraj, MP Kumar, "EXPERIMENTAL INVESTIGATION OF ABRASIVE WATER JET CUTTING PERFORMANCE ON AISI D2 STEEL BY INFLUENCING OF JET IMPINGEMENT ANGLES AND ABRASIVE MESH SIZES" presented in a International level conference on International Conference on Precision .

55. LS Ahmed, S Narmadha, MP Kumar, "Multi Response Optimization of Drilling Ti-6Al-4V Alloy using Grey Relation Analysis" presented in a International level conference on Proceedings of International Conference on Advances in Materials … .

56. SGSRKMPK N. Yuvaraj, "Optimization of AWJ Cutting Process Parameters for Machining of AA5083-H32 Aluminium Alloy with Grey Relational Analysis" presented in a International level conference on Proceedings of International Conference on Advances in Materials … .

57. Pradeep Kumar.M, "Analysis of shear stress distribution on primary shear deformation in metal cutting operation using FEM" presented in a National level conference on AMT 2003, organised by NSS College of Engineering & The Institution of Engineers, India from 15-Feb-2003 to 16-Feb-2003.

58. A. Rajadurai and M. Pradeep Kumar, "Optimal Design Of Turning Tool Using FEM" presented in a National level conference on WCM 2003, organised by Amrita Institute of Technology and Science, Coimbatore, INDIA from 07-May-2003 to 09-May-2003.

59. Pradeep Kumar.M., Rajadurai A., Siva Sankar R. and Gopal M, "Effect of rake angle on the distribution of stress and strain in shear deformation zone of orthogonal metal cutting – FEM Study" presented in a International level conference on International Conference on CAD, CAM, Robotics and Autonomous Factories, organised by IIT delhi, India from 11-Aug-2003 to 13-Aug-2003.

60. Pradeep Kumar.M., Mohan B., Rajadurai A. and Dinakar B.R, "Modeling and simulation of metal cutting operation using nodal release procedure" presented in a International level conference on APORS 2003, organised by IIT Delhi, India from 22-Dec-2003 to 24-Dec-2003.

61. N.Praggadish and M.Pradeep Kumar , "Comparison of surface characterstics and micro hardness of AISI D2 and LM13 Aluminium Alloy Machined undere dry EDM (Green Machining) Process" presented in a International level conference , organised by S.A.ENGINEERING COLLEGE, CHENNAI, INDIA from 21-Mar-2019 to 22-Mar-2019.

62. N. Pradeep , K. Shanmuga Sundaram , M Pradeep Kumar, "Reducing the effect of micro spark in Electrochemical Micromachining of Molybdenum using cryogenically treated pencil graphite cathode" presented in a International level conference on 6th Asian Conference on Heat Treatment and Surface Engineering, organised by 6th Asian Conference on Heat Treatment and Surface Engineering, INDIA from 05-Mar-2020 to 07-Mar-2020.

63. Sri Rathinamani Ramdoss, Muthukani@Pooja Kathiresan, M.Pradeep Kumar, K. Shanmuga Sundaram, "DESIGN AND FABRICATION OF 3-D PRINTED SCAFFOLD FOR LUNG TUMOUR TREATMENT " presented in a International level conference on 6th Asian Conference on Heat Treatment and Surface Engineering, organised by 6th Asian Conference on Heat Treatment and Surface Engineering, INDIA from 05-Mar-2020 to 07-Mar-2020.

64. M Pradeep Kumar, Arun KUmar, Akshay Madhu,rajarajan Anandh Arun Prakash, "Design and Fabrication of orthopaedic Cast Using 3D Printer" presented in a International level conference on Ist International Conference on Emerging Trends in Mechanical Engineering , organised by Easwari Engineering College , INDIA from 06-Sep-2021 to 07-Sep-2021.

Books Published

1. "MANUFACTURING TECHNOLOGY LAB - 1 (TAMIL MEDIUM)" authored by M. PRADEEP KUMAR and D. SAMUEL RAJ and published by CENTRE FOR ACADEMIC COURSES, ANNA UNIVERSITY CHENNAI.(2011)

2. "MANUFACTURING TECHNOLOGY LAB - 2 (TAMIL MEDIUM)" authored by M. PRADEEP KUMAR and V.S.SENTHIL KUMAR and published by CENTRE FOR ACADEMIC COURSES, ANNA UNIVERSITY CHENNAI.(2012)

3. "Proceedings of first international conference on materials, design and manufacturing process (ICMDM 2016) " authored by V.S.SENTHIL KUMAR , V.S.SENTHIL KUMAR and SUNDRAM M. PRADEEP KUMAR and published by Anna University.(2016)

4. "Book chapter on Performance and Surface Evaluation Characteristics on Cryogenic-Assisted Abrasive Water Jet Machining of AISI D2 Steel - IN Non-Conven" authored by M.PRADEEP kUMAR and 84. N. Yuvaraj and published by IGI Global publishers .(2018)

Current Sponsored Projects

1. "Designing and fabrication of >1KW prototype vertical axiz wind turbine", funded by M/s Enmas O&M Services Pvt Ltd (April-2019 - October-2019). Project Cost: 1.00.

2. "Design and development of safety mechanism in a winch assembly", funded by M/s Siemens Gamesa Renewable Power Pvt Ltd (August-2019 - September-2019). Project Cost: 4.72.

3. "Testing,design and analysis of worm and worm wheel assembly in a winch", funded by M/s Siemens Gamesa Renewable Power Pvt Ltd (August-2019 - September-2019). Project Cost: 4.72.

4. "Design of 155m meteorological mast(rail mechanism with lifter/puller) with guyed wires", funded by M/s Siemens Gamesa Renewable Power Pvt Ltd (December-2019 - January-2020). Project Cost: 4.95.

5. "Finite Elemnt analysis of modfied 220kv GIS Substation structures for SHAPAR Substation", funded by M/s KNR Engineers India Pvt Ltd (July-2020 - August-2020). Project Cost: 0.88.

6. "Design for the development of 5-meter Electro-Mechanical Telescopic Mast", funded by M/s Sharada Mechanical Engineering (September-2020 - December-2020). Project Cost: 5.31.

7. "ANALYSIS OF CREW SAFETY AGAINST MINE BLAST", funded by CVRDE (September-2021.. Project Cost: 25.35.

Sponsored Projects Completed

1. "Design and Fabrication of 3D printed scaffold for tumour treatment " (July-2019 - December-2020). Project Cost: 0.25.

2. "Design and Fabrication of Powder based Inkjet 3D Printing " (March-2015 - September-2015). Project Cost: 0.25.

3. "Design Revision of 165m wind mast", funded by M/s Siemens Gamesa Renewable Power Pvt Ltd (January-2019 - February-2019). Project Cost: 1.00.

4. "Electrical Power Generation from spring with Clock Escapement", funded by Manivannan M (May-2019 - July-2019). Project Cost: 1.00.

5. "Design of 100M Lattice steel wind mast for wind speed of 55 m/s", funded by M/s Divine Enterprises (June-2019 - June-2019). Project Cost: 4.00.

6. "Design of Instrument enclosure for a PCB", funded by M/s Alder Instruments (July-2019 - July-2019). Project Cost: 0.29.

7. "Finite Element Analysis of GIS Substation Structure(TUTICORIN)", funded by M/s KNR Engineers India Pvt Ltd (November-2019 - December-2019). Project Cost: 1.00.

8. "Finite Element Analysis of GIS Substation Structure(BHUJ)", funded by M/s KNR Engineers India Pvt Ltd (November-2019 - December-2019). Project Cost: 2.00.

9. "CFD analysis of the flow pattern of milk in the nipple design created", funded by Samuelraj S (March-2020 - March-2020). Project Cost: 0.08.

10. "Finite Element Analysis of GIS substation Structure(SHAPAR 400KV)", funded by M/s KNR Engineers India Pvt Ltd (March-2020 - March-2020). Project Cost: 2.00.

11. "Finite Element Analysis of GIS substation Structure(SHAPAR 220KV)", funded by M/s KNR Engineers India Pvt Ltd (March-2020 - March-2020). Project Cost: 2.00.

12. "Finite Element Analysis of GIS substation Structure(PHAGI 765KV)", funded by M/s KNR Engineers India Pvt Ltd (March-2020 - April-2020). Project Cost: 2.00.

13. "3D Printing of V Plug, D36 cover, Baffle, ULX5 new cover, ULX5 new top plate", funded by M/s Tractors and Farm Equipment Ltd (June-2020 - July-2020). Project Cost: 0.22.

14. "Computational fluid dynamic analysis in Sewer Line", funded by Dr.Kari thangaratnam (September-2020 - September-2020). Project Cost: 0.40.

15. "Computational fluid dynamic analysis inSewer Line 500mm diameter", funded by Dr.Kari thangaratnam (November-2020 - November-2020). Project Cost: 0.40.

16. "FEA Analysis of platform Structure", funded by M/s ULOGA Engineers (March-2021 - March-2021). Project Cost: 0.17.

17. "Finite Element Analysis of GIS insulated Substation structures(SHAPAR 220kv Revised)", funded by M/s KNR Engineers India Pvt Ltd (April-2021 - May-2021). Project Cost: 1.00.

18. "Finite Element Analysis of Temporary Platform", funded by M/s Mira Engineering (May-2021 - May-2021). Project Cost: 0.41.

19. "Stability review of the drive system for Aerial View Tower drive Modification", funded by M/s Wonderla Holidays Ltd (March-2021 - April-2021). Project Cost: 1.00.

20. "FEA Analysis of Antenna Positioner Unit", funded by M/s Techware systemsPvt Ltd (September-2021 - September-2021). Project Cost: 0.53.

21. "Vibration Measurement of ground at factory", funded by M/s Sri Bhuvaneswari Enterprises (September-2021 - September-2021). Project Cost: 0.14.

22. "FEA Analysis of Platform Structure and Stand", funded by M/s ULOGA Engineers (September-2021 - September-2021). Project Cost: 0.17.

23. "Experimental investigations on the effect of cryogenic colling in Drilling difficult to machine materials", funded by CTDT (September-2015 - September-2016). Project Cost: 0.50.

24. "Drilling Operation", funded by St. Joseph College of Engineering (March-2017 - March-2017). Project Cost: 0.11.

Programme Chaired

1. Chairman, National level conference titled "RTMT 2011" conducted by Dept. of Manufacturing Engineering, Anna University.

2. Co Chairman, International level conference titled "AMPC 2006" conducted by Dept. of Mechanical Engineering Anna University from 28-Aug-2006 to 30-Aug-2006.

3. Co Chairman, International level conference titled "AMPC 2013" conducted by Dept. of Mechanical Engineering, Anna University from 06-Feb-2013 to 08-Feb-2013.

4. Chairman, International level conference titled "ICRDME 2019" conducted by S.A.ENGINEERING COLLEGE, CHENNAI from 21-Mar-2019 to 22-Mar-2019.

Programme Organized

1. ASSISTANT SECRETARY, International level conference on "AMPC 2006" from 28-Aug-2006 to 30-Aug-2006.

2. CO-ORDINATOR, National level workshop on "ADVANCES IN CNC MACHINING SKILL DEVOLOPMENT TECHNIQUES" from 02-Nov-2012.

3. ASSISTANT SECRETARY, International level conference on "AMPC 2013" from 06-Feb-2013 to 06-Feb-2013.

4. Co-Ordinator, National level workshop on "Fail safe design, Early detection, & avoiding future recurrence of failures" from 28-Oct-2013 to 29-Oct-2013.

5. Co-Ordinator, National level workshop on "Aerospace and Aircraft Materials" from 26-Mar-2014.

6. Co-Ordinator, National level Short Course on "Faculty Development Training Programme on “ME2402 COMPUTER INTEGRATED MANUFACTURING" from 18-Jun-2014 to 25-Jun-2014.

7. Co-Ordinator, National level workshop on "Friction stir welding" from 27-Sep-2014.

8. Co-Ordinator, National level Short Course on ", Faculty Development Training Programme on “ME6402 Manufacturing Technology II”" from 08-Dec-2014 to 14-Dec-2014.

9. Co-Ordinator, National level workshop on "Smart materials" from 26-Sep-2015.

10. JOINT SECRETARY, International level conference on "7th International & 28th All India Manufacturing Technology, Design and Research Conference 2018" from 13-Dec-2018 to 15-Dec-2018.

11. Coordinator , National level Short Course on "AICTE and Anna University jointly sponsored "ME 8691-Computer Aided Design and Manufacturing "" from 02-Dec-2019 to 06-Dec-2019.

Programme Attended

1. Attended a National level Short Course.

2. Attended a National level Short Course on "CERTIFICATE COURSE ON CADD Rel. 14" organized by CADD CENTRE TRAINING SERVICES, COIMBATORE, INDIA from 01-Sep-1998 to 30-Sep-1998.

3. Attended a National level Short Course on "CONVERSIONAL AUTOMATIC PROGRAMMING SYSTEMS CAPSturn and CAPSmill" organized by CADEM TECHNOLOGIES, BANGALORE, INDIA from 25-Feb-1999 to 26-Feb-1999.

4. Attended a National level Short Course on "SOFTWARE TRAINING ON SOLIDWORKS, CADSI AND TEKSOFT" organized by BAYSTATE INFOTECH, COIMBATORE, INDIA from 05-Apr-1999 to 07-May-1999.

5. Attended a National level Short Course on "CIMATRON SOFTWARE" organized by NETTUR TECHNICAL TRAINING FOUNDATION, BANGALORE, INDIA from 26-Jun-2000 to 30-Jun-2000.

6. Participated in a International level conference on "INTERNATIONAL CONFERENCE ON CAD, CAM, ROBOTICS AND AUTONOMOUS FACTORIES" organized by IIT DELHI, INDIA from 11-Aug-2003 to 13-Aug-2003.

7. Attended a National level Short Course on "NON DESTRUCTIVE TESTING" organized by CENTRE FOR FACULTY DEVOLOPMENT, ANNA UNIVERSITY, INDIA from 15-Nov-2003 to 16-Nov-2003.

8. Attended a National level seminar on "TRANSPORTATION IN CHENNAI- CHALLENGES AND SOLUTIONS" organized by ALUMNI ASSOCIATION, ANNA UNIVERSITY, CHENNAI, INDIA from 19-Aug-2005 to 20-Aug-2005.

9. Participated in a National level workshop on "SOFTWARE QUALITY AND RELIABILITY" organized by CENTRE FOR FACULTY DEVOLOPMENT, ANNA UNIVERSITY, CHENNAI, INDIA from 25-Nov-2005 to 25-Nov-2005.

10. Attended a National level Short Course on "VEHICLE VIBRATION PROBLEMS AND THEIR SOLUTIONS" organized by AU-FRG INSTITIUTE FOR CAD/CAM, ANNA UNIVERSITY, INDIA from 23-Feb-2006 to 25-Feb-2006.

11. Participated in a National level workshop on "SERVICE TO COMMUNITY" organized by CEG ANNA UNIVERSITY, INDIA from 25-Mar-2006 to 25-Mar-2006.

12. Participated in a International level conference on "INTERNATIONAL CONFERENCE ON ADVANCES IN MATERIALS PROCESSING AND CHARACTERIZATION" organized by CEG, ANNA UNIVERSITY, CHENNAI, INDIA from 28-Aug-2006 to 30-Aug-2006.

13. Participated in a National level workshop on "ADVANCED AUTOMATION TECHNOLOGY" organized by GOVERNMENT COLLEGE OF ENGINEERING, SALEM, INDIA from 06-Oct-2006 to 07-Oct-2006.

14. Attended a National level Short Course on "WELDING TECHNOLOGY AND INSPECTION" organized by INDIAN INSTITUTE OF TECHNOLOGY, MADRAS, INDIA from 03-Nov-2006 to 04-Nov-2006.

15. Attended a National level Short Course on "AICTE FACULTY DEVELOPMENT PROGRAMME ON FUNDAMENTALS OF NANOSCIENCE AND TECHNOLOGY" organized by DEPARTMENT OF PHYSICS, ANNA UNIVERSITY, CHENNAI, INDIA from 18-Jan-2007 to 31-Jan-2007.

16. Participated in a National level workshop on "EMERGING TRENDS IN CORROSION CONTROL AND SURFACE ENGINEERING (CC&SE 2007)" organized by NATIONAL INSTITUTE OF TECHNOLOGY, TRICHY, INDIA from 09-Feb-2007 to 10-Feb-2007.

17. Attended a National level Short Course on "FDP ON FINITE ELEMENT ANALYSIS" organized by CEG, ANNA UNIVERSITY, CHENNAI, INDIA from 23-Feb-2007 to 03-Mar-2007.

18. Participated in a National level workshop on "CYBER CRIME AND SECURITY MANAGEMENT" organized by RCC, ANNA UNIVERSITY, CHENNAI, INDIA from 27-Apr-2007 to 28-Apr-2007.

19. Attended a National level Short Course on "VIBRATION AND NOISE FOR PRACTICING ENGINEERS" organized by CEG, ANNA UNIVERSITY, CHENNAI, INDIA from 28-Sep-2007 to 29-Sep-2007.

20. Participated in a National level workshop on "WORKSHOP ON INTELLECTUAL PROPERTY RIGHTS AND RELATED ISSUES" organized by CENTRE FOR INTELLECTUAL PROPERTY RIGHTS, ANNA UNIVERSITY, CHENNAI, INDIA from 21-Feb-2008 to 22-Feb-2008.

21. Attended a National level Short Course on "FDP ON APPLIED HYDRAULICS AND PNEUMATICS" organized by CENTRE FOR FACULTY DEVELOPMENT, ANNA UNIVERSITY, CHENNAI, INDIA from 12-Jun-2008 to 20-Jun-2008.

22. Participated in a National level workshop on "IT APPLICATIONS FOR MANAGEMENT OF UNIVERSITY ADMINISTRATION AND EXAMINATION REFORMS IN HIGHER EDUCATION" organized by INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, ALLAHABAD, INDIA from 27-Dec-2009 to 30-Dec-2009.

23. Participated in a National level conference on "RECENT TRENDS IN THE FIELD OF NANOSCIENCE AND TECHNOLOGY, NANOMEET-2010" organized by CENTRE FOR NANOSCIENCE AND TECHNOLOGY, ANNA UNIVERSITY, CHENNAI, INDIA from 25-Mar-2010 to 26-Mar-2010.

24. Participated in a National level workshop on "ISTE WORKSHOP ON EFFECTIVE TEACHING/LEARNING OF COMPUTER PROGRAMMING" organized by INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY, INDIA from 28-Jun-2010 to 10-Jul-2010.

25. Attended a National level Short Course on "PROCESS SIMULATION SOFTWARE-WITNESS" organized by DEPARTMENT OF MECHANICAL ENGINEERING, CEG, ANNA UNIVERSITY, CHENNAI, INDIA from 02-Aug-2010 to 03-Aug-2010.

26. Participated in a International level workshop on "ELECTROMAGNETIC FORMING TECHNOLOGY (EMFT 2010)" organized by DEPARTMENT OF MECHANICAL ENGINEERING, CEG, ANNA UNIVERSITY, CHENNAI, INDIA from 11-Nov-2010 to 12-Nov-2010.

27. Participated in a National level workshop on "ADVANCED FUNCTIONAL NANOMATERIALS" organized by ANNA UNIVERSITY, INDIA from 21-Feb-2011 to 24-Feb-2011.

28. Participated in a National level workshop on "ROLE OF NDT AND METALLOGRAPHY IN FAILURE ANALYSIS" organized by ANNA UNIVERSITY, INDIA from 11-Aug-2012 to 11-Aug-2012.

29. Participated in a National level workshop on "ADVANCED METROLOGY IN MANUFACTURING ENGINEERING" organized by CEG ANNA UNIVERSITY, INDIA from 03-Oct-2012 to 05-Oct-2012.

30. Participated in a International level conference on "EFFECT OF CRYOGENIC COOLANTS ON CUTTING FORCES AND CHIP MORPHOLOGY IN MACHINING Ti-6Al-4V ALLOY " organized by AUT UNIVERSITY, NEW ZEALAND from 28-Oct-2012 to 30-Oct-2012.

31. Attended a National level seminar on "Recent Trends in Industry" organized by AU-FRG Institutefor CAD/CAM ,Department of Muchanical Engineering, Anna University, India from 12-Dec-2018.

32. Participated in a International level conference on "Autodesk University 2019" organized by Autodesk India , India from 05-Sep-2019.

33. Attended a National level Short Course on "3D Printing & Design" organized by AICTE Training and Learning (ATAL) Academy, Trivandrum from 16-Sep-2019 to 20-Sep-2019.

34. Attended a National level seminar on "Engineering Education for Digital Transformation & Industry 4.0" organized by RMK Engineering college , chennai, India from 06-Dec-2019 to 07-Dec-2019.

Special Reprasentations

1. 2 PAPERS SELECTED ON TOP 25 HOTTEST ARTICLES in SCIENCE DIRECT - ELSEVIER from 02-Jan-2012 to31-Dec-2012.

Honours

1. "GATE - 87.83" from INDIA (1996).

2. "ACTIVE CONSULTANT AWARD -2021" given by ANNA UNIVERSITY from INDIA (2021).

3. "Best paper award" given by EASWARI ENGINEERING COLLEGE, (ICETME 2021) CHENNAI from INDIA (2021).

Patents

1. Having a patent for " METHOD OF CRYOGENIC BROACHING OF AISI 4340 STEEL" awarded by Australia. Patent number:2021103624 (04-Aug-2021).

Experience Abroad

1. Visited UNIVERSITY OF AUCKLAND, NEW ZEALAND from 28-Nov-2012 to 30-Nov-2012. Purpose of visit :Participation and presentation in the International Conference..

2. Visited ASME , San Diego, CA, USA from 15-Nov-2013 to 21-Nov-2013. Purpose of visit :Participation and presentation in the International Conference..

3. Kuwait from 09-Jan-2015 to 10-Jan-2015. Purpose of visit :participate in the India Education Exhibition 2015.

4. Visited ASME , Houston, TX, USA from 13-Nov-2015 to 19-Nov-2015. Purpose of visit :Participation and presentation in the International Conference..

5. Visited ASME , Phoenix, USA from 11-Nov-2016 to 17-Nov-2016. Purpose of visit :Participation and presentation in the International Conference..

6. Visited Dr B R Ambedkar National Institute of Technology, Jalandhar in academic collaboration with Global I, Bangkok, Thailand from 26-Jun-2018 to 29-Jun-2018. Purpose of visit :Participation and presentation in the International Conference..

7. Visited University of Edinburgh , Edinburgh, Scotland, United Kingdom from 22-Jul-2019 to 29-Jul-2019. Purpose of visit :Visited University of University of Edinburgh .

8. Dubai from 25-Mar-2022 to 26-Mar-2022. Purpose of visit :participate in the India Education Exhibition 2022.

9. Abudhabi from 27-Mar-2022 to 27-Mar-2022. Purpose of visit :participate in the India Education Exhibition 2022.

Invited Lectures

1. Delivered a Lecture on "MECHATRONICS" in FDP organized by TECHNICAL TEACHERS TRAINING INSTITUTE, CHENNAI (16-Sep-2003).

2. Delivered a Lecture on "CNC MACHINES AND PROGRAMMING" in QIP organized by NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING , CHENNAI (13-Sep-2004).

3. Delivered a Lecture on "FEA IN MANUFACTURING" in QIP organized by NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING , CHENNAI (05-Jul-2005).

4. Delivered a Lecture on "FEA IN MANUFACTURING" in FDP organized by NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING , CHENNAI (25-Sep-2012).

5. Delivered a Lecture on "MATERIAL MODELLING IN NUMERICAL SIMULATION OF MACH" in TEQIP organized by NIT, TRICHY (25-Jul-2013).

6. Delivered a Lecture on "FEA IN MANUFACTURING" in FDP organized by NATIONAL INSTITUTE OF TECHNICAL TEACHER TRAINING A, CHENNAI (30-Jul-2013).

7. Delivered a Lecture on "ADVANCES IN MACHINING" in QIP organized by NIT, TRICHY (09-Aug-2013).

8. Delivered a Lecture on "Recent Trends in Computer Aided Design" in AICTE organized by Vel Tech High Tech Engineering College, Chennai (30-Apr-2014).

9. Delivered a Lecture on "FEA in manufacturing" in Faculty development Programme organized by by NATIONAL INSTITUTE OF TECHNICAL TEACHER TRAIN, Chennai (06-Aug-2014).

10. Delivered a Lecture on "Green Manufacturing" organized by RMK college of engineering and technology, Chennai (30-Apr-2015).

11. Delivered a Lecture on "Recent Trends in Mechanical Engineering" organized by Madha Engineering College, Chennai (09-Sep-2015).

12. Delivered a Lecture on "Overview of manufacturing process" in Employability skill enhancement programme (E-SEP) jointly by AU-CUIC & RNTBCI, organized by CEG , Anna University, Chennai (14-Sep-2015).

13. Delivered a Lecture on "Overview of manufacturing process" in Employability skill enhancement programme (E-SEP) jointly by AU-CUIC & RNTBCI, organized by Sri Krishna College of Engineering and Technology, Coimbatore (15-Sep-2015).

14. Delivered a Lecture on "Overview of manufacturing process" in Employability skill enhancement programme (E-SEP) jointly by AU-CUIC & RNTBCI, organized by PSNA College of Engineering and Technology, Dindugal (21-Sep-2015).

15. Delivered a Lecture on "Additive manufacturing technology and FEA in manufacturing" in Modern manufacturing systems organized by Department of Mechanical and Automobile Engineerin, Tiruchirappalli (23-Aug-2016).

16. Delivered a Lecture on "Overview of Manufacturing Processes" in RNTBCI - E-SEP Phase -III organized by CUIC ANNA UNIVERSITY, SRI ESHWAR COLLEGE of ENGINEERING , Coimbatore (15-Feb-2019).

17. Delivered a Lecture on "Design and Development of New Product using Additive Manufacturing " in FDP on Design of Machine Elements organized by University College of Engineering Kancheepuram, Kancheepuram (10-Jun-2019).

18. Delivered a Lecture on "Additive Manufacturing of Automobile Parts" organized by Sathyabama Insitute of Science and Technology, Chennai (12-Jul-2019).

19. Delivered a Lecture on "FEA in Manufacturing" in FDP on Computer Aided Manufacturing organized by NITTTR, Chennai (08-Aug-2019).

20. Delivered a Lecture on "Additive Manufacturing " in TEQIP - III organized by NIT , Manipur (22-Aug-2019).

21. Delivered a Lecture on "Additive Manufacturing " in FDP on Digital Manufacturing : Intagrated Technology from Design to Manufacturing organized by K.S.Rangasamy College of Technology, Tiruchengode (11-Sep-2019).

22. Delivered a Lecture on "Additive Manufacturing " in National level workshop and Technical symposium organized by Stella Mary"s college of Engineering , Kanyakumari (19-Feb-2020).

23. Delivered a Lecture on "Additive Manufacturing Techniques" in AICTE ATAL Sponsored Five days Faculty Development Program on "Recent Advancement in Automation Tech organized by Chennai Institute of Technology, Chennai (28-Jan-2021).

24. Delivered a Lecture on "Advance in Rapid Prototyping" in AICTE - STTP on Sustainable Development through Industry 4.0 organized by Chennai Institute of Technology, Chennai (19-Feb-2021).

25. Delivered a Lecture on "current and Future scope Additivd manufacturing in Medical application" in Computer Assisted Design and Manufacturing (CAD/CAM) in clinical diagnosis and therapeutics" organized by AICTE Training and Learning (ATAL) Academy- Chetti, Chennai (10-Aug-2021).

26. Delivered a Lecture on "3D Printing of Metals" in AICTE TRAINING AND LEARNING ACADEMY Sponsored One Week (Online) FDP-3D PRINTING & DESIGN organized by MURUGAPPA POLYTECHNIC COLLEGE, Chennai (26-Aug-2021).

27. Delivered a Lecture on "FEA in Manufacturing" in Faculty development programme organized by National Institute of Technical Teachers Training , Chennai (25-Nov-2021).