PUBLICATIONS

2008-2009

1. Sanjeev kumar, P.C.Tewari, Sunand Kumar,Meenu,"Availability Optimization for Urea Synthesis System of Fertilizer plant using Genetic Algorithm Technique", Published in International Journal of Engineering Science and Technology(EJEST) Volume 2., No. 3, March 2009, pp70-83, ISSN: 0974-2050.

2. Sanjeev kumar, P.C.Tewari, Sunand Kumar,Meenu,"Performance Evaluation and Optimization for Urea Crystallization System in a fertilizer plant using Genetic Algorithm Technique", Published in International Journal of Applied Engineering & Research(IJAER), Volume 4., No. 6, June 2009,pp1093-1105, ISSN: 0973-4562.

2009-2010

3. Sanjeev kumar, P.C.Tewari, unand Kumar, Meenu,"Performance Eval;uation and Optimization for Urea Prilling System of Fertilizer plant using Genetic Algorithm Technique", Published in International Journal of Mechanical and Automobile Engineering(IJMAE), Volume 3., No. 4, Dec 2009, pp68-80, ISSN: 0974-231X.

4. Sanjeev kumar, P.C.Tewari, SunandKumar,Meenu," Availability Optimization of CO-Shift Conversion System of Fertilizer plant using Genetic Algorithm Technique", Bangladesh Journal of Scientific and Industrial research(BJSIR), 45(2),133-140, before june 2010

5. Deepika Garg, Kuldeep Kumar , Meenu," Availablity Optimization for Screw plant based on Genetic Algorithm", International Journal of Engineering Science and Technology, vol. 2(4),April 2010, pp658-668, ISSN:0975-5462.

2010-2011

6. Surinder Kumar,Meenu, P.S. Satsangiand H.K. Sardana "Optimization of machining parameters in turning UD-GFRP composites using Taguchi's design of experiments approach", International Journal of Materials Science and Engineering, Vol. 2, No. 1-2, 2011, pp. 19-28.International Science Press, ISSN: 0976-6243

7. Surinder Kumar, Meenu, P.S. Satsangiand H.K. Sardana "Modeling and Analysis for surface roughness and material removal rate in machining of UD-GFRP using polycrystalline diamond (PCD) tool", International Journal of Engineering, Sciences and Technology, Vol. 3, No. 8, 2011, pp. 248-270.

   2011-2012

8. Surinder Kumar, Meenu, P.S. Satsangi and H.K. Sardana "Optimization of surface roughness in turning unidirectional glass fiber reinforced plastics(UD-GFRP) composites using polycrystalline diamond (PCD) cutting tool", Indian Journal of Engineering & Materials Sciences, Vol. 19, Issue 3, 2012, pp. 163-174.

9. Surinder Kumar, Meenu, P.S. Satsangi and H.K. Sardana "Multiple regression model for cutting force in turning UD-GFRP using polycrystalline diamond cutting tool", International Journal of Advanced Engineering Technology, Vol. 3, Issue 1, 2012, pp. 108-115.

10 Surinder Kumar, Meenu and P.S. Satsangi "Experimental investigation and optimization in turning of UD-GFRP composite material by regression analysis using (PCD) tool", International Journal of Advanced Engineering Technology Vol. 3, Issue 3, 2012, pp. 32-38.

11 Surinder Kumar, Meenu, P.S. Satsangi, Sushil Kumar and H.K. Sardana "Experimental Evaluation of Surface Roughness for Turning of UD-GFRP Composites Material using Regression Modeling", International Journal of Engineering & Technology Education, Vol. 6, No. 1, 2012, pp. 35-43.

12. Surinder Kumar, Meenu, P.S. Satsangiand H.K. Sardana "Cutting forces optimization in the turning of UD-GFRP composites under different cutting environment with polycrystalline diamond tool", International Journal of Engineering, Science and Technology, Vol. 4, No. 2, 2012, pp. 106-121.

13. Surinder Kumar, Meenu and P.S. Satsangi, "A genetic algorithmic approach for optimization of surface roughness prediction model in turning using UD-GFRP composite", Indian Journal of Engineering & Material Sciences, Vol. 19, Issue 6, 2012, pp. 386-396.

2012-2013

14 Meenu and Surinder Kumar “Prediction of cutting force in turning of UD-GFRP using mathematical model and simulated annealing”, International Journal of Frontier of Mechanical Engineering, 7(4) Sept 2012, pp. 417-426.

15. Surinder Kumar, Meenu, P.S. Satsangi and H.K. Sardana “Predictive modeling of surface roughness and material removal rate in turning of UD-GFRP composites using carbide (K10) tool”, International Journal of Advanced Design and Manufacturing Technology, ISSN: 2008-1421 Vol 6 Issue 2, June 2013 pp 37-49

16 Surinder Kumar, Meenu and P.S. Satsangi “Multiple Performance Optimization in Machining of UD-GFRP Composites by a PCD Tool using Distance – Based Pareto Genetic Algorithm (DPGA)”, International Journal of MECHANICA CONFAB , Vol 2, No. 2, pp 49--62 February-March 2013

17. Surinder Kumar, Meenu and P.S. Satsangi “Optimization of surface roughness in turning unidirectional glass fiber reinforced plastics (UD-GFRP) composite using Carbide (K10) cutting tool”, International Journal of Academic Research Journal of Multidisciplinary, Volume 1 Issue 9, May 2013, pp 105-128

18 Surinder Kumar, Meenu and P.S. Satsangi “Prediction of cutting forces in machining of unidirectional glass fiber reinforced plastic composites ”, International Journal ofFrontier of Mechanical Engineering, vol 8, issue 2 June 2013 pp 187-200

19 Surinder Kumar, Meenu and P.S. Satsangi “Multiple-response optimization of turning machining using UD-GFRP composite using carbide (K10) cutting tool through Taguchi method and Utility concept”, International Journal of Mechanical Science and Technology, 27(9) 2013, pp 2829-2837

20 Surinder Kumar, Meenu and P.S. Satsangi “Multi-objective optimization of cutting parameters for cutting forces in turning using polycrystalline diamond cutting tool”, International Journal of MECHANICA CONFAB , Vol 2, No 3, April-May 2013, 17-33,

21 Meenu and Surinder Kumar “Multi-characteristic optimization of turning process parameters using Utility-based Taguchi method”, International Journal of Asian Academic Research Journal of Multidisciplinary, Volume 1 Issue 9, May 2013,pp 129-149

22 Meenu and Surinder Kumar “Multi-objective optimization of cutting forces in turning of UD-GFRP Composite using Taguchi grey relational analysis”, International Journal of mechanical engineering, 2013 ,pp 166-177.

23 Anuj Kumar Sehgal, Meenu," Optimized Prediction and Modeling Under End Milling Machining By ANOVA And Artificial Neural Network" , International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181,Vol. 2 Issue 3, March – 2013, pp1-9

24 Anuj Kumar Sehgal, Meenu ,"Application of Artificial Neural Network and Response Surface Methodology for Achieving Desired Surface Roughness in End Milling Process of Ductile Iron Grade 80-55-06 ", IJCEM International Journal of Computational Engineering & Management, Vol. 16, Issue 3, May 2013, pp 4-14

25 Meenu and Surinder Kumar “Prediction of surface roughness in turning of UD-GFRP using mathematical model and simulated annealing”, International Journal of Advanced Engineering Technology, E-ISSN 0976-3945 IJAET/Vol. IV/ Issue II/April-June, 2013/81-85

26 Meenu and Surinder Kumar ,” Prediction of surface roughness in turning of Ud-GFRP using artifical neural network” , International Journal of Mechanica Confab ISSN: 2320-2491 Vol. 2, No. 3, April-May 2013 PP 46-56.

27 Ram Singar Yadav, Meenu ,"Jobs scheduling using genetic algorithm, International Journal of Mechanica Confab ISSN: 2320-2491 Vol. 2, No. 3, April-May 2013 34-45

28 Tushar Jain, Meenu ,”Automation and Integration of Industries through Computer Vision Systems”, International Journal of Information and Computational Technology, Vol 3, Number 9(2013) pp 963-970. (Repeated)

29 Meenu and Surinder Kumar ,” Multi objective optimization of cutting parameters in turning using grey relational analysis”, International Journal of Industrial Engineering Computations” 4(2013)547-558

2013-2014

30 Meenu and Surinder Kumar," Optimization of the Material Removal Rate in Turning of UD-GFRP using the Particle Swarm Optimization Technique" ,International Journal of Automotive and Mechanical Engineering Vol 8, July-Dec 2013 pp 1226-1241

31 Meenu, Anuj Kumar Sehgal., "Surface Roughness Optimization by Response Surface Methodology and Particle Swarm Optimization", International Journal of Engineering Science and Technology", Vol.5 Issue 7, July 2013.

32 A.K Sehgal, Meenu, "Application of Artificial Neural Network in Surface Roughness Prediction considering Mean Square Error as Performance Measure", International Journal of Engineering and Technical Research ISSN: 2321-0869, Special Issue, May 2014. 72-76

33 Dipesh, Meenu,"Machining process parameters of USM :A review" International Journal of Engineering Research in Management and Technology ISSN 2278-9359 vol 2 , Issue 10, Oct 2013

2014-2015

34 Nirmal Singh, Meenu,"Design optimization of Spur gear for its center distance using genetic algorithm", international research journal of Science and technology, vol 1, issue 2, Jan 2015, ISSN 2394-5680 pp 19-28

35 Surinder kumar, Meenu Gupta, P.S.Satsanghi,"Multi response optimization of cutting forces in turning of UD-GFRP composite using distance-based pareto genetic algorithm approach "International Journal of Engineering Science and Technology 18(2015), 680-695.

36 Meenu gupta , Surinder Kumar," Investigation of surface roughness and MRR for turning of UD-GFRP using PCA and Taguchi method", International Journal of Engineering and Science,18(2015), 70-81

37 Tushar Jain and Meenu,"Mahine Vision System with Industrial Automation and Applications: The Mechanical Prespective" NIET Journal of Engineering & Technology [ISSN:2229-5828] Vol 1, Number 1(2015) pp.17-21. (not with me) actually it is conference paper

2016-2017

38 D. Popli and M. Gupta, “Sequential procedure for selecting the ranges of process parameters in rotary ultrasonic machining, ”International Journal of Manufacturing Research, vol. 12, no. 3, pp. 364–378, Jan 2017.

39 Pradeep Jain and Meenu,” Real Time Object Recognition System”, International Journal of Theoretical and Applied Mechanics, Volume 12, Number 2 (2017) pp. 241-266,2017, ISSN 0973-6085

40 Pradeep Jain and Meenu , Automatic contrast enhancement using fuzzy logic for real time object recognition system” ,International Journal of Scientific & Engineering Research, Volume 8, Issue 3, March-2017 pp. 762-765 ,ISSN 2229-5518

41 Surinder Kumar,Meenu,P.S.Satsangi,”Optimization of material turning operation -a literature review”, International Journal of Scientific Research in Science, Engineering and Technology (IJSRET) ,Vol 2, Issue 6, ,pp 381-390,Nov-Dec 2016

42 Surinder Kumar, Meenu, P.S. Satsangi “ Investigation of surface roughness and MRR for UD-GFRP composites using Taguchi grey relation analysis” ,International Journal of Automotive and Mechanical Enggineering , Vol 14, Issue 2,June 2017 , 4298-4314

43 S Verma, Meenu, J P Misra, “Study on temperature distribution during Friction Stir Welding of 6082 aluminum alloy” Materials Today: Proceedings 4 (2017) 1350–1356

2017-2018

44 Tushar Jain, Dr. Meenu and Dr. H K Sardana “Mechanical CAD Parts Recognition for Industrial Automation”. Springer SIST Smart Innovation, Systems and Technologies, Vol. 78, (SCOPUS, EI-COMPENDEX AND SPRINGERLINK) International Journal of Smart Computing and Informatics, 978-981-10-5546-1, 431837_1_En, (37). November 2017 pp. 341-349. Paper Download Link, http://www.springer.com/series/8767 NOT WITH ME

45 D. Popli and M. Gupta, “Experimental study and optimization of cutting parameters in machining of super alloy with hybrid ultrasonic method,” Advances in Manufacturing, no. 5, pp. 1–36, August 2017.

46 Tushar Jain, Dr. Meenu and Dr. H K Sardana “Machine Vision System for Industrial Parts Recognition”. International Journal of Engineering and Manufacturing Sciences ISBN 2249-3115 (UGC Approved) (Journal No.-63291). ISSN 2249-3115 Vol. 7, No. 1 (2017) pp. 51-57.

47 Anuj Kumar Sehgal , Meenu,” Grey relational analysis coupled with principal component analysis to optimize the machining process of ductile iron”, Materials Today: Proceedings,5(2018) 1518-1529.

48 D. Popli and M. Gupta,” Investigation of machining rate and roughness for rotary ultrasonic drilling of Inconel 718 alloy with slotted diamond metal bonded tool”, International Journal of Manufacturing Research, 2017. 13(1), pp. 68–95

49 D. Popli and M. Gupta, A Chipping reduction approach in Rotary Ultrasonic Machining of Advance Ceramic” in Science Direct ICMPC 2017, Materials Today: Proceedings , 5 (2018) 6329–6338 (to check whether with me)

50 D.Popli, Meenu ,”Investigation of the circularity and conicity of super alloy during rotary ultrasonic machining” Iranian Journal of science and technology , June 2018.

51 Pawan Kumar, Meenu and Vineet Kumar, Optimization of process parameters for WEDM of Inconel 825 using grey relational analysis “,DSL Decision Science Letters Growing Science, 7 (2018) 405–416 (Scoups)

52 Arvind, Meenu Gupta, ”Optimum design for a composite hollow helical Spring By Particle Swarm Optimization”, International Journal of Engineering Technology Science and Research, ISSN 2394-3386 vol 4, Issue 7, July 2017

53 D. Popli and M. Gupta, “Experimental Investigation of Tool Wear and Machining Rate in Rotary Ultrasonic Machining of Nickel Alloy,” International Journal of Machining. Science and Technology, Sept 2017,vol21

2018-2019

54 Shubham Verma, Meenu Gupta, Joy Prakash Misra," Performance evaluation of friction stir welding using machine learning approaches" Method X (Elsevier),5(2018) 1048-1058 After july

55 Pradeep Jain and Meenu,"Object Recognition using Neural Networks ",International Journal of Applied Engineering Research, Vol 13, No. 6 , pp 139-143, 2018 (Scopus)

56 Tushar Jain, Dr. Meenu and Dr. H K Sardana "Unmanned Machine Vision System for Automated Recognition of Mechanical Parts". International Journal of Intelligent Unmanned Systems (IJIUS) (ESCI JOURNAL, SCOPUS). Emerald Publishing UK. Vol. 6 (4), pp.184-196, 2018.

57 Tushar Jain, Meenu, and H.K.Sardana," Design of machine vision system for automated inspection in robotics", International Journal of Applied Engineering Research, Vol 13 No.6, 2018 pp 30-34 (Scopus)

58 Tushar Jain, Dr. Meenu and Dr. H K Sardana "Automated Recognition of Mechanical Parts with Machine Vision System". Journal of Experimental and Applied Mechanics pp. 1-6, Vol. 9, No. 3 2018.

59 Shubham Verma,Meenu, J.P.Mishra ," Optimization of process parameters in friction stir welding of armormarine grade aluminium alloy using desirability approach" Material research express , SCI vol 6 No 2 (Nov 2018) 0265505

60 Shubham Verma, Meenu Gupta, Joy Parkash Misra ,"Study of thermal cycle, mechanical and Metallurgical properties of friction stir welded aviation grade aluminium alloy" Institution of Mechanical Engineers , Journal Aerospace Engineering published online on Dec 4 2018 Issue published: September 1, 2019 Volume: 233 issue: 11, page(s): 4202-4213

61 Shubham Verma, Meenu Gupta, Joy Parkash Misra,"Effect of pin profiles on thermal cycle, mechanical and metallurgical properties of friction stir welded aviation grade aluminium alloy", Journal of Engineering Manufacture Article, published online: February 22, 2019; Issue published: September 1, 2019 , Volume: 233 issue: 11, page(s): 2183-2195

62 Surinder Kumar & Meenu "Optimization of the surface roughness and material removal rate in turning of unidirectional glass fiber reinforced plastics using the fuzzy-grey relational

technique , Indian Journal of Engineering & Materials Sciences Vol. 26, February 2019, pp. 7-19 (to be printed)

63 Shubham Verma, Meenu Gupta, and Joy Prakash Misra, ”Effect of Preheating and Water Cooling on the Performance of Friction-Stir-Welded Aviation-Grade Aluminium Alloy Joints”, Journal of Materials Engineering and Performance Vol 26 No.1 3 July 2019.

64 Pawan Kumar, Meenu Gupta and Vineet Kumar ,” Surface integrity analysis of WEDMed specimen of Inconel 825 superalloy “International Journal of Data and Network Science 2 (2018) 79–88 (26 July) Non Scoups

65 Tushar Jain, Dr. Meenu and Dr. H K Sardana “Robust Active Vision Industrial CAD Parts Recognition System”. International Journal of Intelligent Machines and Robotics (IJIMR).Inderscience Publishers UK . Vol 1 No 1, pp 16-33, 2018 (after july)

66 Tushar Jain, Dr. Meenu and Dr. H K Sardana “Design of Computer Vision System for Objects Recognition in Automation Industries” .Global Journal of Enterprise Information System (GJEIS). Vol 10, No.1, pp 86-90, 2018 UGC

67 Shubham Verma, Joy Prakash Misra, Meenu Gupta, “Study of Temperature Distribution and Parametric Optimization during FSW of AA6082 Using Statistical Approaches”, SAE Int. J. Mater. Manuf. 12 (1), doi:10.4271/05-12-01-0005 2019

2019-2020

68 Tushar Jain, Dr. Meenu and Dr. H K Sardana “Quality Edge Extraction of Mechanical CAD Objects for Intelligent Manufacturing”. International Journal of Process Management and Benchmarking (IJPMB) (SCOPUS INDEXED)Inderscience Publishers UK. Vol 10. No1 , pp 22-47 , 2020

69 Pawan Kumar, Meenu Gupta, Vineet Kumar (2019). Parametric optimization of WEDM characteristics on Inconel 825 using desirability approach. International Journal of Recent Technology and Engineering (IJRTE), 8(2): 4992-4996 (Scopus Indexed/UGC approved list).

70 Pawan Kumar, Meenu Gupta, Vineet Kumar (2019). Experimental analysis of WEDM machined surface of Inconel 825 using single objective PSO. IOP Journal of Physics: Conference Series, 1240: 012053 (Web of Science, Scopus Indexed/UGC approved list).

71 Pawan Kumar, Meenu Gupta, Vineet Kumar (2019). Multi-Objective Particle Swarm Optimization of WEDM Process Parameters for Inconel 825. Journal of Computational and Applied Research in Mechanical Engineering (Scopus Indexed/UGC approved list). DOI: 10.22061/JCARME.2019.4297.1518

72 Pawan Kumar, Meenu Gupta, Vineet Kumar (2019). Microstructural analysis and multi-response optimization of WEDM of Inconel 825 using RSM based desirability approach. Journal of Mechanical Behavior of Materials, 28(1): 39-61 (Scopus Indexed/UGC approved list).

73 S Verma, JP Misra, M Gupta Effect of preheating and water-cooling on the wear properties of FS welded AA6082 joint Journal of Physics: Conference Series 1240 (1), 012116, 2019

2020-2021

74 Verma, M Gupta, JP Misra, Procedure to find out the optimal ranges of process parameters for friction stir welding" Journal of Materials: Design and Applications, 0(0) pp DOI: 10.1177/1464420721993145 (print to be taken) First published Feb 9 2021, Issue published: May 1, 2021, Volume: 235 issue: 5, page(s): 1172-1180 Article first published online: February 9, 2021; Issue published: May 1, 2021'

2022-2023

75. Munna Singh Dahiya, Meenu gupta" Friction Stir welding of AA8090:Experimental Investigation of Mechanical Characteristics using GREY Relational Theory" SAE International Journal of Materials and Manufacturing SAE Int. J. Mater. Manuf. 16(1):2023, doi:10.4271/05-16-01-0007. ISSN: 1946-3979 e-ISSN: 1946-3987

76 Naveen Singh, and Meenu Gupta "Determining the range of process parameters for friction stir welding using steepest ascent approach" Engineering Research Express Vol 5 015011 1-10 Jan 2023, DOI 10.1088/2631-8695/acb2b5, Published on: 23 January 2023

2023-2024

77 Munna Singh Dahiya and Meenu Gupta," Sequential procedure to investigate the optimal ranges of process parameters for the FSW of AA8090" Eng. Res. Express 6 (2024) 015013 published 28 December 2023

78 Naveen Singh, and Meenu Gupta "Optimizing friction stir welding of AA7075 and AA8090 aluminum alloys: a desirability-driven investigation into mechanical and microstructural enhancement", Eng. Res. Express vol 6 025573 2024, Published on: 24 June 2024, DOI 10.1088/2631-8695/ad58a1

2024-2025

79 Munna Singh Dahiya, Meenu Gupta," Optimization of process parameter of FS-welding of aluminum-lithium alloy (AA8090) by using desirability analysis" Research on Engineering Structure and Materials, Accepted for publication 7 August 2024

INTERNATIONAL/NATIONAL CONFERENCES

1. Meenu, Kirpal Singh, S.K.Aggarwal, "Effect of current on fatigue strength of welded joints", Modelling Measurement and Control, B, ASME press, France vol.52, No 2, 1994, pp 9-20.

2. Meenu, Kirpal Singh, S.K.Aggarwal ,"Effect of various parameters on fatigue strength of welded joints", Modelling Measurement and Control, B, ASME press, Francevol.52, No 2,1994, pp21-32

2003-2004

3. Meenu, N.P.Mehta, H.K. Sardana , "Machine vision Inspection: Application to Mechanical Inustry", X111 National Conference of Indian Society of Mechanical Engineers, IIT Roorkee Dec 30-31,2003, PE-130

2010-2011

4. Deepika garg ,kuldeepkumar, meenu, "Radial basis neural network as a mapping device for availability prediction", in Proceedings of International Conference on emerging

trends in Engineering and Technology, Geeta Institute of Management And Technology Kanipla, Kurukshetra held on 14-16 Oct 2010.

5. Tushar Jain ,Meenu , "The Strengths and Dilemmas of Organizational Integration through Computerization", National Conference on Manufacturing Excellence MANFEX - 2011,held at Amity Noida ,3rd-4th March,2011.

6. A.K. Sehgal, Meenu, "Optimization and Analysis of welding operation parameters for achieving the highest weld strength by using Taguchi Design of Experiment", in the proceedings of National Conference on Emerging Vistas of Mechanical Engineering in 21st century EVME -2011 held on 4th to 5th April pp-358-364.

2011-2012

7. Surinder Kumar, Meenu, P. S. Satsangi, H. K. Sardana, " Surface Roughness Analysis in Machining of UD-GFRP Composites by Polycrystalline Diamond (PCD) tool", in Proceedings of International Conference on Advances in Materials and Manufacturing Technology ,Chitkara University held on July 20-21,2011,pp 13-19.

8. Anuj Kumar Shegal, Meenu, Balraj Gupta, Rajeev Upadhyay " Modelling of surface roughness for end milling of rolled Aluminium by ANOVA and Artificial neural network",in the proceedings of International conference of agile manufacturing held on 18th to 20th Dec 2011, 88-94.

9. Tushar Jain, Meenu ," Computer Vision: An enterprise of Industrial , Automatic Integration", International Conference on Advances in Modelling , Optimization and Computing(AMOC-2011) , held at IIT, Roorkee 05-07th December 2011.

10. Surinder Kumar, Meenu, P.S. Satsangi and H.K. Sardana "Optimization of machining parameters in turning UD-GFRP composites using Taguchi's design of experiments approach", International Conference on Advancements & Futuristic Trends in Mechanical & Materials Engineering, Conference, PTU Jalandhar, Punjab, 2011, pp. 139.153

11. Surinder Kumar, Meenu, P.S. Satsangi, Sushil Kumar and H.K. Sardana "Experimental Evaluation of Surface Roughness for Turning of UD-GFRP Composites Material using

Regression Modeling", Advances in Manufacturing Technology, Conference, NITTR Chandigarh, March-2012, pp.70-78 in Journal

12. Tushar Jain, Dr. Meenu, Dr. H.K. Sardana "Statistical Pattern Recognition and Neural Networks: A Comparative Study", National Conference on Emerging Technologies in VLSI (NCETVLSI-2011) at MIET, Meerut 18th September 2011.

13. Tushar Jain, Meenu ,"Impact of Machine Vision Technology in Industrial Automation", International Conference on Manufacturing excellence MANFES 2012 held on 29-30 March at Amethi , 301-307

14. Tushar Jain, Meenu, " Computer Vision and Image Processing: A New Tool for Industrial Automation" National Conference on Computer Engg. & Information Tech. at NITTTR, Chandigarh "22-23rd March 2012. and Technology

2012-2013

15. Simran, Meenu Gupta," Optimization of composite leaf spring for weight using Particle Swam Optimization", in the National Conference on Technological development in Mechanical Engineering (TDME-2013) Shri Ram Murti Smarak College of Engineering Barelly on 20 th April 2013

2013-2014

16. Anug Phyoe Minn, Meenu, "Simulated annealing technique to optimize the flywheel energy storage materials", National Conference on Recent trends in Chemical Sciences, Engineering and Technology (RTCET-2014) held at N.I.T Hamirpur on 29-30 May 2014

17. Arvind Kumar, Meenu, " Optimization of Helical Extension Spring for static load", International Conference on Innovation in Design, Manufacturing and Concurrent Engineering "(IDMC 2014) at NIT, Rourkela on 2-3 March

18. A.K Sehgal, Meenu**,** "Application of Artificial Neural Network in Surface Roughness Prediction considering Mean Square Error as Performance Measure, National Conference on "Synergetic Trends in Engineering and Technology : Impact on Industry and Society (STET-2014), 25-26 April 2014, Eshan College of Engineering ,Mathura.

2014-2015

19. Surinder Kumar, Meenu, P.S. Satsangi,"Multi objective distance based Pareto genetic Algorithm for optimization of machining parameters in turning process using Carbide (K10) tool pp 292-297. Proceedings of National Conference on Advancements and Futuristics trends in Mechanical Engineering AFTME-2014 ON 17-18 on October, 2014., PEC University of Technology

20. Nirmal Singh, Ms. Meenu, "Design Optimization of Spur Gear for Its Centre Distance Using Particle Swarm Optimization Technique", Proceedings of 5th National conference on recent advances in manufacturing 15-17 May 2015 , Sardar Vallabhbhai national Institute of Technology Surat

21. Rohit Kanaujia, Meenu ,"Design optimization of screw jack for its weight using Genetic algorithm technique" National Conference on Nano Science and Instrumentation technology(NCNIT) June 6-7 , 2015, NIT Kurukshetra

22. S Verma, Meenu, J P Misra,"Study on temperature distribution during Friction Stir Welding of 6082 aluminum alloy", 5th International Conference on material processing and charsacterization held at MANIT Bhopal on 12-13 March 2016

23. Kinshuk Khandekar, Meenu" Design Optimization of wet clutch using Genetic Algorithm National Conference on "Statistics and Analytical methods in Production AND Industrial Engineering(SAMPLE -2016) ON March 11-12 2016 at PEC , University of Technology

24. Kinshuk Khandekar, Meenu,"Design Optimization of wet clutch using Particle Swarm Optimization ",4th National Conference on Nano Science and Instrumentation Technology(NCNIT-2016)held at NIT Kurukshetra,on4-5 June 2016

25. Pradeep Kumar, Meenu, "Review of object recognition techniques" ,Proceedings of the National conference on Innovative concepts in Mechanical Engineering ICME ,held at Ajay Kumar Garg Engineering College Ghaziabad on 29-30 April 2016

26. S Verma, Meenu, J P Misra,"Experimental investigation of FSW of AA6082"IVth International conference on production and industrial engineering, CPIE-2016 held at JALANDHAR 10-12 Dec 2016

2016-2017

27. Anuj Kumar Sehgal and Meenu, "Grey relational analysis coupled with principal component analysis to optimize the machining process of ductile iron", International Conference on Processing of Materials, Minerals and Energy, 29-30 July 2016, PACE Institute of Technology and Sciences, Ongole, Prakasam, Andhrapradesh, India

28. Arvind, Meenu Gupta,"Design optimization of Composite Springs:A review', National Conference on Recent Advances in Mechanical Engineering held at NIT, Kurukshetra on June 2-3 2017 vol 2,pp 123-127.

29. Tushar Jain, Dr. Meenu and Dr. H K Sardana "Mechanical CAD Parts Recognition For Industrial Automation". ANITS Springer SIST International Conference 3-4 th March 2017. Finally Accepted

2017-2018

30. Pradeep Jain and Meenu," Vision System for sheet inspection", National Conference on Unconventional Manufacturing Technology ,on22nd and 23rd September 2017 held at Ajay Kumar Garg Engineering College Ghaziabad

31. Tushar Jain, Meenu and H K Sardana,"Automated recognition of Mechanical parts with machine vision system", International Conference on advances in business and Engineering Sustainability(ABES) 2018 at ABES Ghaziabad 27-28 March 2018

2018-2019

32. Tushar Jain, Meenu and H K Sardana," Design of Machine vision system for automated inspection in robotics" International Conference of recent trends and Innovations in Mechanical Engineering(ICRTIME2018) at Krishna Institute of Engineering and Technology ,Muradnagar, Ghaziabad pp.53,20-21 July 2018 (Not with me)

33. Pradeep Jain and Meenu,"Object Recognition using Neural Networks",International Conference on Recent Trends and Innovations in Mechanical Engineering, KIET Group of Institutions, Ghaziabad, U.P,20th and21st July 2018 (not with me)

34. Pradeep Jain, Meenu and Namrata," Machine Learning Techniques", National Conference on Advanced concepts in mechanical engineering, AKGEC, Ghaziabad (U.P.), 7th and 8th September 2018

35. Sonali Verma, Meenu Gupta " Optimal design of spur gear using spider monkey optimization technique", 2nd conference on Advances in Chemical and Enviornmental engineering held at B.R. Ambedkar National Institute of Technology on March 23-24 2019

36. Sonali Verma, Meenu Gupta " Optimization of spur gear using spider monkey optimization technique" 6th International conference on Production and Industrial engineering held at B.R. Ambedkar National Institute of Technology on June 8-10 2019

37. Deepak Kumar Chandel, Meenu,"Design Optimization of Spur gear with Particle Swarm optimization Technique", 2nd conference on Advances in Chemical and Enviornmental engineering held at B.R. Ambedkar National Institute of Technology on March 23-24 2019

38. Deepak Kumar Chandel, Meenu , "Design and optimization of spur gear for optimal weight with particle swarm optimization technique" 6th International conference on Production and Industrial engineering held at B.R. Ambedkar National Institute of Technology on June 8-10 2019

2020-2021

39. K. Kumar and Meenu ,"Use of binary genetic algorithm in optimizing helical gear pair volume" 1st International Virtual Conference on Recent Advancements in Design and Manufacturing (ICRADM-2020) held on July 16-17, 2020 at Sardar Vallabhbhai National Institute of Technology, Surat

40. S. Yadav and Meenu ,"Weight optimization of bevel gear using gravitational search algorithm (GSA)" 1st International Virtual Conference on Recent Advancements in Design and Manufacturing (ICRADM-2020) held on July 16-17, 2020 at Sardar Vallabhbhai National Institute of Technology, Surat

2022-2023

41 Bhupendra Rana, Meenu " Weight optimization of helical spring using Differential Evolution Algorithm in MATLAB" National Conference on Sustainable development of smart cities Infrastructure (SDSCI-2023) organized by Department of civil engineering, National institute of Technology, Kurukshetra, Haryana during May 27-28, 2023

BOOK CHAPTER

1. Shubham, Meenu, &Mishra Joy Prakash,"Friction Stir Welding of Aerospace Materials: A state of Art review (DAAM International Scientific book 2016 pp 135-150 Chapter13
2. Shubham Verma, Joy Prakash Misra and Meenu Gupta "Study of Temperature Distribution During FSW of Aviation Grade AA6082" Manufacturing Engineering, Chapter 13 , Publisher Springer Singapore,Feb 2019 185-202
3. S. Verma ,M. Gupta ," Optimization of Spur gear using spider monkey optimization technique", Optimization Methods in Engineering Lecture notes on Multidisciplinary Industrial Engineering, Chapter 33 Publisher Springer Nature Singapore Pte Ltd.2021PP 523-535 First online 6 JUNE 2020
4. Jain P., Meenu (2021) Recognition of Mechanical Tools Using Artificial Neural Network. In: Muzammil M., Chandra A., Kankar P.K., Kumar H. (eds) Recent Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-8704-7_78 (JAN 2021)
5. Kishor Kumar, Meenu. "Optimizing Volume of Helical Compression Spring by Genetic Algorithm and Comparing with Simulated Annealing " , Optimization of Industrial systems, Chapter 12, Wiley Scrivener ,2022 ,147-159 ISBN:9781119750314 Published on 28 july 2022
6. Surinder Kumar, Meenu" Process parameters optimization on Surface roughness in turning of E-Glass UD-GFRP composites using Flower Pollination Algorithm" Evolutionary Optimization of Material Removal Processes Ist Edition CRPC press eBook ISBN 9781003258421 ,Chapter 5, 79- 94 , doi:1201/9781003258421-6 2022-2023
7. Meenu, Surinder Kumar "Experimental Investigation of Surface Roughness for turning of UD-GFRP composite using PSO,GSA,PSOGS 1st Edition CRPC press eBook ISBN 9781003258421 Chapter 1 ,3-20 , DOI:10.1201/9781003258421-2 2022-2023

8. Surinder Kumar, Meenu ,"Investigation of MRR in face turning Unidirectional GFRP composites by using Multiple Regression Methodology and an Artificial Neural Network(ANN) "Evolutionary Optimization of Material Removal Processes 1st Edition CRPC press eBook ISBN 9781003258421 ,Chapter 7,129-145 doi:1201/9781003258421-8 2022-2023
9. Meenu, Surinder Kumar" Multi-Response optimization in turning of UD-GFRP composites using Weighted Principal Component Analysis (WPCA) ") "Evolutionary Optimization of Material Removal Processes 1st Edition CRPC press eBook ISBN 9781003258421 ,Chapter4 ,61-78,doi:1201/9781003258421-5 2022-2023

PATENT

1. Verma, Shubham, Mishra, Joy Prakash, Gupta, Meenu, Patent No. 465702,Force Measuring Fixture for Friction –Stir Welding(FSW) Machine, India, 3.11.2023

SPONSORED RESEARCH PROJECT

Title: "Industrial vision Inspection system"

Funding Agency: Ministry of Human Resource Development (MHRD), Government of India

Project Duration: Nov 2027 – March 2030

Role: Principal Investigator

Total Project Outlay: Rs. 17 Lakh

Institution: Department of Mechanical Engineering, NIT, Kurukshetra

SYMPOSIUM/SEMINAR ATTENDED

1. National symposium on Instrumentation jointly organized by NPL & Instrument society of India at New Delhi from 22nd -25th Oct 1997.

2. Seminar on Ethics and value education in Science and Technology on Nov 14,2011 by Department of Humanities and Science, NIT, Kurukshetra

WORKSHOP/SUMMER SCHOOL ATTENDED

1. Short term course on MATLAB programming for Engineers in civil Engineering Department at NIT, Kurukshetra on 11-15 Dec 2013

2. Workshop on Predictive Mathematical Models in Science and Engineering (PMMSE-2013)held in department of Mathematics, NIT, Kurukshetra on May 24-25

3. Faculty development program of TEQIP-11/AICTE "Recent Developments in Mechanical Engineering from 11th June 2012 to 22nd June 2012 PEC University of Technology.

4. Short term program on "Bio inspired computational techniques" conducted by NITTR Chandigarh from 29th Nov 2010 to 3rd Dec 2010

5. Short term program on "Artificial Neural Network and fuzzy logic" conducted by NITTR Chandigarh from 4 -8 Feb 2008 .

6. Short term program on "Instructional planning and delivery " conducted by NITTR Chandigarh from 20-24 Oct 2008.

7. AICTE sponsored faculty development program on "Entrepreneurial awarness" organized by the department of Mechanical Engineering,N.I.T, Kurukshetra from June 25,2007 to July 04, 2007.

8. Short term program on "CAD/CAM using CATIA" at NITTR Chandigarh from 30 th May to 3rd Dec 2005.

9. Short term program on "Integrated CAD/CAM at NITTR Chandigarh from 4th July to 8th July 2005.

10. Short term program on "CAD with Master CAM software" at NITTR Chandigarh fro 5th to 9th Dec 2005.

11. National workshop on "Design and Development of Non-Destructive testing equipment for Industrial products" from 29-30 Sept 2005.

12. AICTE-ISTE sponsored two week short term training program on "Advanced manufacturing systems" held at NIT Kurukshetra from 14th July to 26th July 2003.

13. International workshop on "Soft Computing and Intelligent Systems" from 12th-13th Jan 1998.

14. QIP course on "Advanced manufacturing processes" from 21st-26th July 1997.

15. Induction training program organized by Academic staff college Kurukshetra University, Kurukshetra in collaboration with R.E.C Kurukshetra and sponsored by AICTE ,New Delhi from 17th June to 5th July 1996.

16. Short term course on "Advances in Welding" conducted by IIT, Delhi from May 22 to June 2, 1995.

17. Summer school on "Metal forming Theory and Practice" from 6th t0 18th June 1994.

18. Orientation course on " Educational technology at P.E.C Chandigarh from 3rd -26th Aug 1992.

19. Professional Development Training Program for Faculty & Administrators of Project Institutions AT IIM VISHAKHAPATANUM FROM 17-19 DEC 2020

20. .Webinar on" Introduction to simulink for system modelling and simulation" on 19 jan 2021

EXPERT LECTURE

2020-2021

1 keynote address and expert lecture on "Applications of artificial intelligence in Mechanical systems" from 29-30 July 2020 Bansal institute of science and technology , Bhopal under TEQIP-ıı

2022-2023

2 Expert lecture on optimization by Metaheuristic techniques on 20 April 2023 at CGC Jhanzeri

AWARDS/RECOGNITION

S. No.	Details
1.	**Best technical paper award** A.K. Sehgal, Meenu "Optimization and Analysis of welding operation parameters for achieving the highest weld strength by using Taguchi Design of Experiment" in National Conference on Emerging Vistas of Mechanical Engineering in 21st century 2011
2.	**Best technical paper award** Simran, Meenu Gupta "Optimization of composite leaf spring for weight using Particle Swam Optimization" in the National Conference on Technological development in Mechanical Engineering (TDME-2013) 2013
3.	**Thomas Edison Award-2013** **Meenu and Surinder Kumar**, "Multi-objective optimization of cutting forces in turning of UD-GFRP Composite using Taguchi grey relational analysis", Journal of Mechanical Engineering Photon 2013

DUTIES PERFORMED

Professor in-charge (Students, club) From 23.4.2025 till Now

Professor in-charge Annual Report From 15.9.23 till Now

Convener DUGC for B.Tech Robotics and Automation 8.11.2024 till now

Professor in-charge Website Updation Mechanical Engineering Department 11.6.12 till now

Professor in-charge feedback till now

Professor incharge Machine Vision lab for more than 15 years

Professor incharge result 2.5.11 for 2 years

Professor incharge conduct 17.12.2008 to 1.5.11

Faculty incharge Sports 1996-1998

EXTRA CURRICULAR ACTIVITIES

President staff club 28 Feb 2025 till now

Secretary Jan 2 2024 till 27 Feb 2025

PH.D COMPLETED / IN PROGRESS

Regd. No. and Reg. Date of the scholar **Full time/part time**	**Title**	**Co-guide**	**Remarks**
Tushar Jain 1278/10 Par time	Development of Industrial vision system for two-dimensional parts recognition	Dr. H.K. Sardana	Completed
Anuj Shegal 1284/10 Part time	Modeling of machining parameters of S.G. Iron using Response Surface Methodology and ANN		Completed
Surinder Kumar 2K09/Ph.D../NITK 1251-M Full time	Cutting parameters optimization during turning of Glass fiber reinforced composites using Poly crystalline diamond and Carbide tool	Dr. P.S. Satsangi and Dr. H.K.Sardana	Completed
Pradeep Jain Regn. No. Ph.D. /1282 Part time	Object recognition using Artificial Neural Network		Completed
Dipesh popli 6120022 Dec 2012 Full time	Optimization of process parameters of ultrasonic machining during		Completed

	machining of Nimonic alloy		
Pawan Kumar 6120038 08-03-2013 Par time	Optimization of process parameters of Wire EDM using non conventional optimization techniques	Dr Vineet Singla HOD MEUIET,MDU Rohtak	Completed
Shubham Verma Regn. No. 6140005 27.1.2014	Experimental Investigation on friction stir welding of Aluminium alloys	Dr. Joy Mishra	Completed
Munna Singh Dahiya 2K19-NITK-Phd-61900003 From 28.3.2023(part time)	Investigation and Optimization of Process Parameters for Friction Stir Welding of Aluminium Lithium Alloy		In progress
Naveen Singh 2K20/NITK/PhD/61900111	Experimental studies on friction stir welding of dissimilar Al alloys		In Progress