

# CURRICULUM-VITAE

---



---

**Name : Dr. Tauseef Uddin Siddiqui**

**Father's name: Late Rais Uddin Siddiqui**

Permanent address: H No 350/A, Faiq Enclave Colony, Phase II, Pilibhit Bypass Road, Bareilly, Uttar Pradesh, India-243006

Contact No: +91-8433408964, Email: tsiddiqui3@jmi.ac.in, tauseefus@gmail.com

**Associate Professor**, Department of Mechanical Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia (A Central University), New Delhi-110025

## **Educational Qualification :**

**Ph.D in Mechanical Engineering** on “Abrasive Waterjet Cutting of Continuous Fiber-reinforced polymer composites: Experimental studies, Modeling and Multi-objective optimization” from Motilal Nehru National Institute of Technology, Prayagraj, Uttar Pradesh, India in 2010.

**M.Tech in Mechanical Engineering (Industrial & Production)** from Zakir Husain College of Engineering & Technology, AMU Aligarh, Uttar Pradesh, India in 2005.

**B.Tech in Mechanical Engineering** from Zakir Husain College of Engineering & Technology, AMU Aligarh, Uttar Pradesh, India in 2002.

## **GRANTS / FUNDED RESEARCH PROJECTS:**

1. *Travel Grant from Department of Science & Technology, Govt. of India to attend the “International Conference at University of Nottingham, UK”* in 2008.
2. *Travel Grant from Department of Science & Technology, Govt. of India to attend the “International Conference at University of New South Wales, Sydney, Australia”* in 2010.
3. UGC Research Project titled “*Comparative Investigations of Surface Integrity and Micro-Structural Details for Different Grades of Fiber-Reinforced Polymer Composites Used in Critical Aerospace Applications by Abrasive Water Jet Cutting*” in 2011.
4. UGC Research Project titled “*Application of Artificial intelligence techniques for generation of knowledge base for different grades of hybrid composites used in Indian Aerospace sector by Abrasive water jet machining*” in 2012.
5. TEQIP-III World bank funded project titled “*Design and fabrication of self lubricated textured tool in dry machining*” in 2019.
6. Research project titled “*Environment friendly machining of aerospace grade alloy Ti-4Al-4V using vegetable oil based nano-lubrication*” granted by Department of Higher Education, Govt. of U.P in 2021.

## **AWARDS/RECOGNITIONS:**

1. **Received “Best Paper Award”** in International Conference on Advances In Manufacturing Technology (ICAMT 2008) for Young Engineers, February 6-8, 2008 at IIT Chennai.
2. **Received “Research Excellence Award”** by Institute of Scholars, Bangalore in November 2020.
3. **Received “Certificate of Honor”** from MJP Rohilkhand University, Bareilly on 5<sup>th</sup> September, 2021.

4. Received **“Certificate of Appreciation”** from MJP Rohilkhand University, Bareilly on 5<sup>th</sup> September, 2022.
5. Received **“Best Researcher Award”** from Knowledge Research Academy, Coimbatore on 13<sup>th</sup> August 2023.
6. Received **“Award of appreciation”** from M.J.P. Rohilkhand University, Bareilly on 5<sup>th</sup> September, 2023.

## **LIST OF PUBLICATIONS:**

### **Book/Chapters (06):**

- 1 **“Optimisation of Process Parameters for Abrasive Water Jet Machining of Kevlar-Epoxy Composites Using Taguchi Method and Response Surface Methodology”**, in “Advances in Manufacturing Technology”, ISBN - 978-81-7371-755-0, Published by Universities Press (India) Pvt. Ltd., 2012.
2. **“Modeling and Optimization of Abrasive Water Jet Cutting of Kevlar Fiber-Reinforced Polymer Composites”**, in “Computational Methods for Optimizing Manufacturing Technology - Models and Techniques”, ISBN - 978- 1466601284, Published by IGI Global, USA, pp. 262-286, 2012.
3. **“State-of-the art review of research and development in Abrasive water jet machining of Advanced fiber-reinforced composites”**, in “Advancements and futuristic trends in material science”, ISBN – 978-81-8424-706-0, Published by Allied Publications, New Delhi, 2011.
4. **“3D printing technology for fabrication of battery components of Electric vehicle: A review”**, Green and Bio-inspired manufacturing: The way forward, ISBN: 978-81-966131-2-9, 2024
5. **“Experimental Investigations for Assessment of Carbon Emissions and Tool Temperature in Dry Turning Operation Using Al1070 Alloy”**, ISBN: 978-3-0364-0557-5, Trans Tech Publication, 2024
6. **“Advanced personalized medicine: The roll of additive manufacturing in patient specific implants and tissue engineering”**, Biomaterials in orthopaedics & Trauma, Springer (under publication).

### **Book published (03):**

- 1 **“Abrasive Waterjet Cutting of Continuous Fiber-reinforced polymer composites: Experimental studies, Modeling and Multi-objective optimization”** Mahi Publication, Ahmedabad, Gujarat, 2020.
- 2 **“Modeling for surface roughness prediction and control using Artificial Neural Network in CNC Machining”** Iterative International Publishing, Karnataka/USA, 2023.
- 3 **“Ergonomic Studies Pertaining to Internet Sites on Operators Performing Web Based Task”** Kindle Direct Publishing, Amazon.com, 2023.

**Patent (03):** 02 National patents, 01 Design patent is under review

### **1 Refereed Journals (27 papers):**

1. T. U. Siddiqui, M. Shukla and P. B. Tambe, **“Optimization of Surface Finish in Abrasive Water Jet Cutting of Kevlar Composites Using Hybrid Taguchi and Response Surface Method”**, International Journal of Machining and Machinability of Materials, ISSN:1748572X, Vol. 4, No. 3 & 4, pp. 382-402, 2008.
2. T. U. Siddiqui and M. Shukla, **“Robust Parameter Design for Multi-characteristic Optimization of Abrasive Waterjet Cutting of Aramid Composite”**, Journal of Modern Manufacturing Technology, ISSN: 0974-8415, Vol. 1, No. 1, pp. 27-41, 2008.
3. T. U. Siddiqui and M. Shukla, **“Robust Process Parameter Design in Abrasive Water Jet Cutting of Kevlar Composites”**, Journal Proceedings in Manufacturing Systems, ISSN -1842-3183, Vol. 3, pp. 253-258, 2008.
4. T. U. Siddiqui and M. Shukla, **“Modeling of Depth of Cut in Abrasive Waterjet Cutting of Thick Kevlar-Epoxy Composites”**, Key Engineering Materials, ISSN: 1013-9826, Vol. 443, pp. 423-427, 2010.
5. T. U. Siddiqui and M. Shukla, **“Experimental Investigation and Optimization of Kerf Characteristics in Abrasive Waterjet Trepanning of Thick Kevlar-Epoxy Composites”**, Journal Proceedings in Manufacturing Systems, ISBN - 2067-9238, Vol. 5, No. 2, pp.109-112, 2010.

6. T. U. Siddiqui and M. Shukla, “*Abrasive Waterjet Hole Trepanning of Thick Kevlar-Epoxy Composites for Ballistic Applications – Experimental Investigations and Analysis Using Design of Experiments Methodology*”, International Journal of Machining and Machinability of Materials, ISSN: 1748572X, Vol. 10, No. 3, pp. 172-186, 2011.
7. T. U. Siddiqui, *Artificial neural network based modeling of abrasive waterjet cutting of Kevlar-epoxy composites used in aerospace applications*, International Journal of Research and Development, ISSN:2279-0438, Vol. 1, 2011, pp. 119-128.
8. T. U. Siddiqui, *Multi-characteristic Optimization in Abrasive Water Jet Cutting of Kevlar Composites using Taguchi Orthogonal Array with Principal Component Analysis*, International Journal of Research and Development, ISSN:2279-0438, 2012.
9. T. U. Siddiqui, *Optimization of multiple performance characteristics using AWJ cutting process for aerospace grade fibrous kevlar composites*, International Review of Applied Engineering & Research, Vol 3, No.4, pp. 74-78, 2013.
10. T. U. Siddiqui, Munendar Pal, *Mathematical Model And Optimized Parameters Design In AWJ Machining Of Aircraft Grade Kevlar-Epoxy Composites*, International Journal of Advance Research In Science And Engineering, Vol 4, Special Issue 1, Feb.,2015, pp. 29-39.
11. T. U. Siddiqui, Gurang Deep, *Effect of Electrochemical Techniques of Hard Coatings on Friction and Wear Properties of Light Metal Alloys: A Review*, International Journal of Advance Research In Science And Engineering, Vol 4, Special Issue 1, Feb., 2015, pp. 214-220.
12. T. U. Siddiqui, Gurang Deep, *Investigation and analysis for Mechanical Properties of Aluminium Silicon Carbide Composite*, International Journal of Innovative Research in Science, Engineering and Technology, ISSN:2347-6710, Vol. 5, Issue 9, Sep. 2016.
13. Siddiqui et al., *The role of vocational education in India to make skill development programme a success*, Research Journal of Social and Life Sciences, Vol. XXIII, Issue Dec-2017 (UGC approved).
14. Siddiqui and Ramkumar, *Micro-wire electric discharge machining of Mg alloy used in biodegradable orthopaedic implants*, Materials Today: Proceedings 4 (2017) 10273-10277.
15. Siddiqui and Sumit, Design, *Design, Fabrication and Characterization of a Self-Lubricated Textured Tool in Dry Machining*, Materials Today: Proceedings, 20 Oct, 2020.
16. Siddiqui and Singh, *Experimental investigations on the performance of nanoboric acid suspensions in coconut oil during milling operation on Al 6061-T6 alloy*, IOP Publishing: Material science and Engineering, 2020.
17. *Environment friendly machining of different engineering materials: A review*, SKIT Journal, Vol 13 Special issue 3 (2023), ISSN 2278-2508.
18. *Process optimization of CO<sub>2</sub> laser beam cutting of coir-carbon reinforced hybrid epoxy composites*, International Journal of Mechanical Engineering, Vol 6, Special issue, Nov-Dec. 2021.
19. *Environmentally Sustainable Milling operation on Ti-6Al-4V Aerospace grade alloy using Vegetable oil based Nano-lubrication*, International Journal of Mechanical Engineering, Vol 6, Special issue, Nov-Dec. 2021.
20. *Mechanical and Tribological Characterization of Al1070 Alloy Based Self-lubricating Metal Matrix Composites*, Materials today: Proceedings Elsevier in May, 2023.
21. *Influence of heat enhancement technique on the thermal performance of solar water heater for sustainable built environment. State-of-the-art review*, Sustainable Energy Technologies and Assessments, 57(2023).
22. *Numerical Analysis of Various Shapes of Lozenge Pin-Fins in Microchannel Heat Sink*, International Journal of chemical reactor engineering, 2024.
23. *Heat dissipation and fluid flow in micro-channel heat sink equipped with semi-elliptical pin-fin structures: A numerical study*, International communications in heat and mass transfer, 2024.
24. *Fabrication and characterization of green composites using basalt and jute fibers used in agriculture applications*, Journal of advanced zoology, 2023.
25. *Experimental Investigations for Assessment of Carbon Emissions and Tool Temperature in Dry Turning Operation Using Al1070 Alloy*, Key Engineering Materials, Trans Tech Publication, Vol. 996, pp. 3-11, 2024.
26. *Economic and Sustainable Dry Machining of Al1070 Alloy using Textured Tool and Nano MoS<sub>2</sub> Solid Lubricant*, International journal of Interactive design and manufacturing, Springer (under review).
27. *Machine Learning Based Parametric Optimization and Porosity Mapping in Selective Laser Melting of SS316L Alloy*, Journal of materials testing and performance, Springer (under review).

### **International Conference (30 papers):**

23. T. U. Siddiqui and M. Shukla, “*Modeling of Depth of Cut in Abrasive Waterjet Cutting of Thick Kevlar-Epoxy Composites*”, International conference APCMP2010, University of New South Wales, Sydney, Australia, June 2010.

24. T. U. Siddiqui, M. Shukla and P. B. Tambe, "Comparative Investigation of Abrasive Waterjet Cut Kerf Quality Characteristics for Aramid, Glass and Carbon Fiber Reinforced Composites Used in Transport Aircraft Applications", 2009 American WJTA Conference and Expo, Houston, Texas, August 18-20, 2009.
25. T. U. Siddiqui and M. Shukla, "Experimental investigation and Hybrid Multi-response Robust Parameter Design in Abrasive Water Jet Machining of Aircraft grade Layered Composites" in: *Proceedings of International Conference on Advanced Manufacturing and Automation*, Kalasalingam University, Tamil Nadu, March 26-28, pp. 95, 2009.
26. T. U. Siddiqui and M. Shukla, "Experimental study and Optimization of Multiple Performance Characteristics in Abrasive Water Jet Cutting of Glass Fiber Reinforced Polymer Composites", 2nd International and 23rd AIMTDR Conference, IIT Madras, December 15-17, 2008.
27. T. U. Siddiqui and M. Shukla, "Robust Process Parameter Design In Abrasive Water Jet Cutting Of Kevlar Composites", International Conference on Manufacturing Systems, ICMA S 2008, 13- 14 November, Bucharest, Romania.
28. T. U. Siddiqui, M. Shukla and P. B. Tambe "Minimization of Surface Roughness in Abrasive Water Jet Cutting of Transport Aircraft Glass Fiber Composite Components", 19th International Conference on Water Jetting, Nottingham, UK, ISBN: 9781855981034, 15 - 17 October 2008.
29. T. U. Siddiqui and M. Shukla, "Optimization of surface finish and kerf taper in design of experiments based abrasive water jet cutting aramid composites", ICMR 08 - 6th International Conference on Manufacturing Research, 9th-11th September 2008, Brunel University, UK.
30. T. U. Siddiqui and M. Shukla, "Response Surface Modeling and Optimization of Surface Finish in Abrasive Water Jet Cutting of Aerospace Grade Carbon Composites", International Conference On Aerospace Science and Technology, INCAST, June 26-28, 2008, NAL Bangalore.
31. T. U. Siddiqui and M. Shukla, "Optimization of Process Parameters for Abrasive Water Jet Machining Of Kevlar-Epoxy Composites Using Taguchi Method", INAE-DAE International Conference on Advances In Manufacturing Technology (ICAMT 2008) for Young Engineers, February 6-8, 2008, IIT Chennai. **(Best Paper Award)**
32. T. U. Siddiqui and M. Shukla, "Conceptual PDM Implementation Framework for Manufacturing of Polymer Composite Components in Aerospace Industry", International Conference on ENGINEERING DESIGN.IN, IISc Bangalore, 9-11 Aug, 2007.
33. T. U. Siddiqui and Rajat Srivastava, Robust process parameter design in abrasive water jet cutting of aerospace grade Kevlar fiber polymer composites, International conference on recent advances in mechanical engineering INCRAME 2012, Dr. MGR Educational and Research Institute, Chennai Tamilnadu, 25-26 April 2012.
34. T. U. Siddiqui and M. Shukla, Experimental and Analytical Investigations for Abrasive Waterjet Hole Trepanning of Thick Kevlar-epoxy Composites used in Ballistic Applications, 21<sup>st</sup> BHR International water jetting conference, 19-21 Sep., 2012, Ottawa, Canada.
35. T. U. Siddiqui, OPTIMIZATION OF MULTIPLE PERFORMANCE CHARACTERISTICS USING AWJ CUTTING PROCESS FOR AEROSPACE GRADE FIBROUS KEVLAR COMPOSITES, International Conference on Innovative trends in natural/Applied sciences and Energy technology for sustainable development, JNU, New Delhi, 27-28 July, 2013.
36. T. U. Siddiqui, Munendar pal, MATHEMATICAL MODEL AND OPTIMIZED PARAMETERS DESIGN IN AWJ MACHINING OF AIRCRAFT GRADE KEVLAR-EPOXY COMPOSITES, International conference on academic research in engineering, management and information technology, 21-23 Feb., 2015, pp. 10.
37. T. U. Siddiqui, Gurang deep, EFFECT OF ELECTROCHEMICAL TECHNIQUES OF HARD COATINGS ON FRICTION AND WEAR PROPERTIES OF LIGHT METAL ALLOYS: A REVIEW, International conference on academic research in engineering, management and information technology, 21-23 Feb., 2015, pp. 35.
38. T. U. Siddiqui, Faran Khan, Manufacturing and characterization of Al based particle composites: a review, SRMS International Conference on Science & Technology, SRMSCET Bareilly, 27-28 Feb., 2015.
39. T. U. Siddiqui, Deepak yadav, Pradeep Kushwaha, Tribological investigations of coated Aluminium alloy used in automobile applications, International Conference on Advanced and Agile Manufacturing Systems, KNIT Sultanpur, 28-29 Dec., 2015.
40. 22.
41. T U Siddiqui, J Ramkumar, Vishal kumar, Micro-wire electric discharge machining of Mg alloy used in biodegradable orthopedic implants, International conference on recent trends in engineering and material sciences (ICEMS-2016) at JNU Jaipur, 17-19 March, 2016 (2-IC-896).
42. T U Siddiqui et al., Experimental investigations on magnetic abrasive finishing process used for non-ferrous materials, International conference on new scintillations on materials horizon (ICNSMH-2016), 21-23 Oct., MJP Rohilkhand university, Bareilly.
43. T U Siddiqui et al., Tribological Investigations on Aluminium Based Hybrid Metal Matrix Composites Fabricated By Stir Casting Technique, International conference on academic research on engineering, management and information technology (ICAREMIT-2016), 9-11 Dec., 2016 at MJP Rohilkhand university, Bareilly.
44. T U Siddiqui et al., Experimental investigations on magnetic abrasive finishing process used for non-ferrous materials, International conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods, 27-29 March, 2017, HBTU Kanpur.
45. "Skill India Initiative and its impacts" at International conference on Digital India on 27 Jan., 2018 at Bareilly college Bareilly.
46. "Finite element analysis of Impression die forging: A review" at *International conference on academic research in engineering, management and information technology (ICAREMIT 2018)*, 17-19 Feb., 2018 at MJPRU Bareilly, U.P.
47. "Investigation on laser beam machining parameters on acrylic" at *International conference on academic research in engineering, management and information technology (ICAREMIT 2019)*, 16-18 APR., 2019 at MJPRU Bareilly, U.P.
48. *Design, Fabrication and Characterization of a Self-Lubricated Textured Tool in Dry Machining*, 7<sup>th</sup> International and 9<sup>th</sup> Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, IIT Ropar, 5-7 Dec., 2019, India
49. "Development of a textured tool for process improvement in dry machining" at *International conference on academic research in engineering, management and information technology (ICAREMIT 2020)*, 1-3 FEB., 2020 at MJPRU Bareilly, U.P.
50. "Comparative investigations on Depth of Cut in CO<sub>2</sub> Laser Beam Machining of MDF and Acrylic" at *International conference on academic research in engineering, management and information technology (ICAREMIT 2020)*, 1-3 FEB., 2020 at MJPRU Bareilly, U.P.
51. Siddiqui and Singh, *Experimental investigations on the performance of nanoboric acid suspensions in coconut oil during milling operation on Al 6061-T6 alloy*, ICRDMSA 2020 AT CIT Chennai, 25-26 Sept., 2020.
52. Siddiqui and Singh, Experimental Investigation on CO<sub>2</sub> Laser Cutting of Spur Gears Made of Acrylic, *International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, Punjab university, December 19-20, 2020*.
53. *Heat flow characteristics in microchannel heat sink: A numerical study*, *International conference on Frontiers in desalination, energy, environment and material sciences for sustainable development (FEEMSSD-2023)*, March 16-17, 2023.
54. Mechanical and Tribological Characterization of Al1070 Alloy Based Self-lubricating Metal Matrix Composites, *2<sup>nd</sup> International Conference and Exposition on Mechanical, Material and Manufacturing technology, CVR college of engineering, Hyderabad, 2022*.
55. Environment friendly machining of different engineering materials: A review at *International Conference on RECENT TRENDS IN EMERGING TECHNOLOGIES*, March 16-17, 2022.
56. Inter conf, DTU, 2024
57. *Multi-Objective Optimization of Wire-EDM Process Parameters for Machining AlCoCrFeNi High Entropy Alloy*, Accepted for publication in *ICAEEE*, 2024

### **National Conference (19 papers):**

58. T. U. Siddiqui, "Lean Manufacturing and Its Implementation in Modern Industrial Environment", (Principia 2003), ZHCOET, AMU, Aligarh, 6-8 March, 2003.
59. T. U. Siddiqui And M. Shukla, "PDM Implementation In Aerospace Composite Parts Manufacturing: Understanding The Challenges And Benefits", National Conference On State Of The Art Technologies In Mechanical Engineering (Stem 2007), COET, GBPUAT, Pantnagar, 29-31 Oct, 2007.
60. T. U. Siddiqui And M. Shukla, "Mathematical Modeling And Robust Process Parameter Design In Abrasive Water Jet Machining of Polymer Composites", National Symposium On Material Research (MR08), IIT Bombay, 17-18 May, 2008.
61. T. U. Siddiqui And M. Muzammil, "Design Of Experiment on Ergonomics of Visual Display Terminals", National Conference on Emerging Trends In Mechanical Engineering And Sciences (ETIMES 2007), Bait, Tamilnadu, 19-20 Dec., 2007.
62. T. U. Siddiqui And M. Shukla, "Abrasive Water-Jet Cutting Of Thick Kevlar Fiber-Reinforced Polymer Composites", National Conference On Material Science Organized By Defence Materials And Stores Research & Development Establishment (DRDO Lab) Kanpur, 14-15 Feb., 2008.
63. T. U. Siddiqui and M. Shukla "Mathematical modeling and optimized design of abrasive water jet cutting process of aircraft grade glass fiber layered composites", Recent Advances in Mechanical and Production (RAMP 2009), COET, GBPUAT, Pantnagar, 12-14 Feb., 2009.
64. T. U. Siddiqui and M. Muzammil, "Experimental Investigations on Visual Fatigue of Internet Operators Performing Web Based Task", 'Ergonomics for Improved Productivity (EIP-09)' at ZHCOET, AMU, Aligarh, pp. 81-89, 2009.
65. T. U. Siddiqui and Ahsan Ali Khan, "Neural Network Modeling of Depth of cut in Abrasive water jet Cutting of Thick Kevlar-epoxy Composites", National conference on Advances in Mechanical Engineering at University Polytechnic, AMU, Aligarh, 28-29 Nov., 2010.
66. T. U. Siddiqui, Manoj singh, Ashutosh singh, Mukul shukla, "Experimental investigations on kerf quality characteristics of fiber-reinforced polymer composites used in critical aerospace applications by Abrasive water jets", Advancements and futuristic trends in material science (AFTMS 2011), Applied physics department, MJP Rohilkhand university, Bareilly, 26-27 mar, 2011.
67. T. U. Siddiqui, Manoj singh, Mukul shukla, "State-of-the art review of research and development in Abrasive water jet machining of Advanced fiber-reinforced composites", Advancements and futuristic trends in material science (AFTMS 2011), Applied physics department, MJP Rohilkhand university, Bareilly 26-27 mar, 2011.
68. T. U. Siddiqui, Ashutosh singh, "Comparative study on kerf quality characteristics of fiber-reinforced polymer composites used in aerospace applications by abrasive water jet", National conference on Industrial engineering, West Bengal university of technology, Kolkata, 17-18 Feb, 2011.
69. T. U. Siddiqui, Kaushal kumar, "Finite Element Simulation on Flexible Multibody Dynamics System", National seminar on "Software applications in Engineering & Technology-2012", Mechanical Engg. Department, MJP Rohilkhand university, Bareilly, 17 Feb., 2012.
70. T. U. Siddiqui, sadik Hasan, "CAD modelling and finite element analysis of six stroke I.C engine", National seminar on "Software applications in Engineering & Technology-2012", Mechanical Engg. Department, MJP Rohilkhand University, Bareilly, 17 Feb., 2012.
71. T. U. Siddiqui, Manoj Kumar Singh, Brijesh Kumar, Vikrant Kumar, "Experimental and Computation Analysis of micro-Electric Discharge Machining", National seminar on "Software applications in Engineering & Technology-2012", Mechanical Engg. Department, MJP Rohilkhand university, Bareilly, 17 Feb., 2012.
72. T. U. Siddiqui, "Development of fuzzy logic controller for modeling of depth of cut of thick FRP composites using AWJ machining", National symposium on innovation in composites for general purpose to high end applications, GGSIPU, NEW DELHI, 17-18 Feb, 2015.
73. T. U. Siddiqui, Sooraj maurya, Pankaj maurya, "Effect of Hard Anodizing on the Tribological Performance of Aluminum", National conference on Advancements in Engineering Materials, M.J.P Rohilkhand university, Bareilly, 24-25 February, 2016.
74. Development of fuzzy algorithm for modeling of depth of cut in abrasive water jet machining of fiber-reinforced polymer composites, National conference on Recent innovations in mechanical engineering (RIME), Department of Mechanical Engineering, Shri Siddhi Vinayak Institute of Technology, 1<sup>st</sup> April, 2017, pp. 06-15.
75. Fabrication and mechanical characterization of Al based metal matrix composites, National conference on Technological innovations in mechanical engineering (TIME), Department of Mechanical Engineering, Shri Ram Murti Smarak College of Engineering, 8<sup>th</sup> April, 2017, pp. 61-67.
76. Experimental investigation on milling of Ti-6Al-4V Aerospace grade alloy using Vegetable oil based Nano-lubrication at National conference (NCARTE 2022) at SRMS college of engineering & Technology, 25-26 march, 2022.

### **CITATON INDICES (GOOGLE SCHOLAR)**

<https://scholar.google.com/citations?hl=en&user=Z0jytIQAAAJ>

### **JOURNAL EDITORIAL BOARD MEMBER:**

1. Journal of Indian Institute for Engineering, Management and Science, Vol 1, Nov. 2013
2. Innovare Journal of Engineering & Technology (Innovative academics Sciences).
3. Journal of Advancements in Material Engineering, MAT publication
4. Journal of Recent Activities in Production, MAT publication
5. Journal of Advanced Research in Industrial Engineering, HBRP publication
6. Journal of Recent Trends in Production Engineering, HBRP publication
7. Journal of Research and Applications of Thermal Engineering, HBRP publication

### **JOURNAL/CONFERENCES REVIEWER:**

1. BioResources, Dept. of Forest Biomaterials, NC State University, USA.
2. International Journal of Measurement Technology and Instrumentation Engineering, IGI global publication, USA.
3. International Journal of Machining & Machinability of Materials, Inderscience publications.
4. International conference on academic research in engineering, management and information technology 2015, 16 at MJPRU Bareilly, U.P.
5. Global International Conference on Polymer and Composite materials 2018, Kitayushu Japan (paper nos: PCM 2485, PCM 2519)

6. Materials today: proceedings: Elsevier publication
7. AICTE sponsored online International Conference “Cutting Edges in Mechanical Engineering”, 2021 (CEME 2021)
8. Paper reviewer in International conference (IMME2022) at MNNIT Allahabad.
8. Paper reviewer of “Journal of Recent Activities in Production”, MAT publication
9. Paper reviewer of “ Journal of Thermal science and Engineering progress”, Elsevier publication in 2024

**BEng. / BTech. PROJECT SUPERVISION: 50**

**MEng. / MTech. THESIS SUPERVISION: 02+1\***

**Ph.D UNDER SUPERVISION: 03**

**RESEARCH INTERESTS:** AWJM, Micro-machining, Additive manufacturing, Polymer /Metal matrix/ Nano-composites, Modeling and Optimization of Manufacturing processes, Design of Experiments etc.

### **WORKSHOP /SHORT TERM COURSES ORGANIZED and ATTENDED:**

1. Attended A short Term Course on “*Finite Element Analysis*” attended at National Institute of Technology, Allahabad from 29.01.2007 to 03.02.2007.
2. Attended AICTE sponsored Staff Development Program on “*Design for X*” attended at MNNIT, Allahabad (U.P) from 11.06.07 to 22.06.07.
3. Attended AICTE (MHRD) sponsored Staff Development Program on “*Knowledge Management Practices*” attended at NIT, Allahabad (U.P) from 23.06.08 to 04.07.08.
4. Attended AICTE (MHRD) sponsored Staff Development Programme on “*CAD & FEM*” attended at MNNIT, Allahabad (U.P) from 21.07.08 to 02.08.08.
5. Attended Faculty development program on “*Management Information System*” from 22 June to 03 July, 2009 at MNNIT, Allahabad.
6. Attended AICTE/BARC sponsored Quality improvement program on “*Micro-manufacturing*” from 02.9.2010 to 08.9.2010 at IIT Kanpur.
7. Attended Short term course on “*Micro and Nano Fabrication*” from Feb 26 to Mar 02, 2012 at IIT Kanpur.
8. Attended two days TEQIP sponsored workshop on “*Web based Management Information System*” at IET Lucknow from June 5-6, 2012.
9. Attended one month duration orientation program on “*Teaching Methodology and Computer Skills*” at UGC Academic Staff College, AMU Aligarh from Jul 13 to 01 Aug, 2012.
10. Organized Workshop as departmental coordinator on “*Industry-Institute Interaction*” Oct 24-29<sup>th</sup>, 2013 to increase the employability and explore the various job opportunities for our engineering students at MJP Rohilkhand University, Bareilly.
11. Organized Workshop on “*CNC Programming and Simulation*” on 02<sup>th</sup> Dec, 2013 to increase the employability in the field of industrial automation Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
12. Organized Workshop on “*2D and 3D CAD Modeling of Mechanical parts*” on 08<sup>th</sup> March, 2014 to increase the technical knowledge and hand on practice of various CAD packages Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
13. Organized two days workshop on “*MATLAB: Theory and Practice*” from 03 to 04 Dec., 2014 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
14. Organized one week faculty development programme on “*Frontier Area of Research in Mechanical Engineering*” from 25 to 29 March, 2014 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
15. Organized two days workshop on “*MATLAB: Theory and Practice*” from 03 to 04 Dec., 2014 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
16. Organized one day workshop on “*Emerging Trends and Techniques in Designing of Mechanical Components*” on 16<sup>th</sup> April, 2015 Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
17. Attended two days TEQIP sponsored workshop on “*Review of Syllabus and Curriculum*” as Subject Expert at MMTU, Gorakhpur from June 15-16, 2015.
18. Attended TEQIP sponsored short term course on “*Micro-manufacturing*” from 31 Aug to 04 Sep, 2015 at IIT Kanpur.
19. Attended TEQIP sponsored “*Visiting Research Programme*” from 01 to 23 Dec., 2015 at IIT Kanpur.
20. Organized one week faculty development programme on “*Innovations and Research Trends in Mechanical and Production Engineering*” from 25 to 29 April, 2016 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
21. Attended TEQIP sponsored one week workshop on “*Machining Dynamics*” from 18 to 22 July, 2016 at IIT Kanpur.
22. Organized one day workshop on “*ANSYS Technologies*” on 19<sup>th</sup> April, 2017 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
23. Organized debate competition on “*Skill development initiative and its future impacts on industrial growth and employability*” on 21<sup>th</sup> Feb., 2017 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
24. Attended one week faculty development programme on “*Entrepreneurship*” at Department of Business Administration, MJP Rohilkhand University, Bareilly, U.P. from 02-08 Jan., 2018.
25. Attended one day International Conference on *Digital India: Empowering the society*, 27 Jan., 2018 at Bareilly college Bareilly, U.P.
26. Attended AICTE sponsored short term course on “*Additive manufacturing*” from 05 – 09 Feb, 2018 at IIT Kanpur.
27. Attended *International conference on academic research in engineering, management and information technology (ICAREMIT 2018)*, 17-19 Feb., 2018 at MJPRU Bareilly, U.P.
28. Organized one day workshop on “*Designing and Analysis*” on 12<sup>th</sup> April, 2018 at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
29. Organized a one day International workshop on “*Youth Empowerment through skill development*” on 09<sup>th</sup> April, 2018 in collaboration with *Japan* at Mechanical Engineering Department, MJP Rohilkhand University, Bareilly.
30. Organized a ten day Virtual Workshop/Webinar on “*Performing and designing experiments on Virtual platform*” from 8-17<sup>th</sup> June, 2020 at MJP Rohilkhand University, Bareilly in collaboration with IIT Roorkee.
31. Attended seven days refresher course on “National education policy 2020” jointly organized by MJP Rohilkhand University, Bareilly and BMSCE Bangalore from March 08-14, 2021.
32. Attended NEP 2020 orientation sensitization and programe organized by MMTTC, Jamia Millia Islamia, New Delhi from 20 November to 30 November, 2023.

33. Organized one week online FDP on “*Additive manufacturing for sustainability and Industry 4.0*” at Department of Mechanical Engineering, Jamia Millia Islamia from 18-22<sup>nd</sup> November, 2024.

## OUTREACH ACTIVITY:

### Invited Talks -

1. *Taguchi Robust Design: The new perspectives*, in AICTE (MHRD) sponsored Staff Development Program on CAD & FEM at MNNIT, Allahabad from July 21 - 02 August, 2008.
2. *Modeling and Optimization: Demonstration & case study*, in AICTE (MHRD) sponsored Staff Development Program on CAD & FEM at MNNIT, Allahabad from July 21 - 02 August, 2008.
3. *Modeling of depth of cut in AWJC of Kevlar-epoxy composites used in defense applications, in National conference on recent engineering trends in energy, environment & ecology (RETEEE 2014)* at Rajshiri Group of Institutions, Bareilly from Sep., 27-28, 2014.
4. *Design of experiments and its scope in engineering applications* at one day workshop on “Taguchi optimization” with live demonstration of MINITAB 17 software applications at Rajshiri Group of Institutions, Bareilly on Mar 14, 2015.
5. *Optimization techniques and their scope in engineering problems solving* at one day workshop on “Taguchi optimization” at GNIOT, Greater Noida on Oct 01, 2015.
6. *Fabrication and mechanical characterization of Al based hybrid metal matrix composites*, at one week short term course on “Advances in composite materials 2016” at MNNIT Allahabad from 21-26 Oct., 2016.
7. *Process modeling and optimization using design of experiments* at National conference on Recent innovations in mechanical engineering (RIME) organized by Department of Mechanical Engineering, Shri siddhi vinayak institute of technology, 1<sup>st</sup> April, 2017.
8. *Fabrication and tribological characterization of Al based metal matrix composites* at National conference on Technological innovations in mechanical engineering (TIME) organized by Department of Mechanical Engineering, Shri Ram Murti college of engineering, 8<sup>th</sup> April, 2017.
9. *Computational methods for process design and optimization* in Faculty development program organized by Department of Mechanical Engineering, Shri Ram Murti smarak college of engineering, sponsored by AKTU Lucknow, 26<sup>th</sup> April, 2018.
10. *Virtual design and manufacturing* in Faculty development program organized by Department of Mechanical Engineering, Shri Ram Murti smarak college of engineering, sponsored by AKTU Lucknow, 26<sup>th</sup> April, 2018.
11. *Taguchi method based design of experiments* at one day workshop on “Taguchi technique for quality engineering” at GNIOT, Greater Noida on Sep. 19, 2018.
12. Abrasive water jet machining of fiber-reinforced polymer composites: modeling and optimization, at National conference on “Mathematical modeling and optimization techniques in mechanical engineering” organized by SRMSCET, Bareilly from 15-16 Nov., 2019.
13. Experimental investigations on fiber-reinforced polymer composites at AICTE sponsored Faculty development programme on “Emerging trends in Mechanical engineering science and green energy” at MIT Mordabad on 21 Nov., 2019.
14. Online lecture on “Computational methods for process design and optimization”, at GNIOT, Greater Noida on Nov. 26, 2020.
15. Online lecture on “Computational methods for modelling and optimization of modern manufacturing processes on 13<sup>th</sup> January 2022 at AICTE-ISTE sponsored faculty development program at MIMIT Malout.
16. Keynote lecture at National conference (NCARTE 2022) at SRMS college of engineering & Technology, 25-26 march, 2022.
17. Keynote lecture at Vishwa IP conclave, 24-25<sup>th</sup> November, 2023, Pune.
18. Keynote lecture at 38<sup>th</sup> National convention, IEI and national seminar on green and bio-inspired manufacturing: the way forward, 2-3<sup>th</sup> May, 2024 at MJP Rohilkhand university, Bareilly.
19. Invited lecture at professional development programme on “Industry 4.0 and its perspectives” at Integral university, Lucknow from 24<sup>th</sup> Feb to 7<sup>th</sup> march, 2025.
20. Invited lecture at one week online FDP on “Machine learning and its applications” at Bharat Ratna Indira Gandhi college of Engineering, Solapur Maharashtra from 23 to 27 September, 2024.

### Session chaired/Member of National advisory board –

1. Session chaired at National conference on “*Technological Developments in Mechanical Engineering*” (TDME 2013) at SRMS Group of Institutions, Bareilly on Apr 20, 2013.
2. Session chaired at International conference on “*Academic Research in Engineering, Management and Information Technology*” (ICAREMIT-2015) at M.J.P Rohilkhand University, Bareilly from Feb 21-23, 2015.
3. Member of National advisory committee, *National conference on Recent innovations in mechanical engineering (RIME)*, Department of Mechanical Engineering, Shri siddhi vinayak institute of technology, 1<sup>st</sup> April, 2017.
4. Member of National advisory committee, *National conference on Technological innovations in mechanical engineering (TIME)*, Department of Mechanical Engineering, Shri Ram Murti Smarak college of engineering, 8<sup>th</sup> April, 2017.
5. National conference on “Mathematical modeling and optimization techniques in mechanical engineering” organized by SRMSCET, Bareilly from 15-16 Nov., 2019.
6. International conference on academic research in engineering, management and information technology (ICAREMIT 2020), 1-3 FEB., 2020 at MJPRU Bareilly, U.P.
7. AICTE sponsored online International Conference “Cutting Edges in Mechanical Engineering”, 2021 (CEME 2021).

## SOFTWARE EXPERIENCE:

Minitab, SPSS, MasterCAM, Design Expert, AutoCAD etc

## MEMBERSHIP OF PROFESSIONAL BODIES

‘International Association of Engineers’ (Member No: 113782)

‘International Nano-science Community’

Associate member, ‘Institution of Engineers, India’



(Dr. Tauseef Uddin Siddiqui)