Prof. Dr. Nilesh G. Patil

Professor and Director

Department of Mechanical Engineering,

Maharashtra Institute of Technology,

Beed Bypass, Aurangabad. 431 005, Maharashtra. India.

E-mail: nileshgpatil@rediffmail.com,ngpatil2007@gmail.com

Mobile:9028887885, 9421084764

Total Working Experience	: 29 Years
Teaching and Research Experience	: 27 Years
Industrial Experience	: 02 Years
Major Areas of Research	: Sustainable Machining Non-Conventional Machining Additive Manufacturing Machining of Composite Materials Machining of Aerospace Alloys, etc.

SALIENT CAPABILITIES:

- Original thinker with greater insights
- Leadership with clear vision
- System Design
- People development
- Expertise in Research and Innovation
- Creativity and resourcefulness
- Strategy and planning
- Specialized ability in communication, and management
- Strong team building through motivation, development, and empowerment.

EDUCATIONAL DETAILS:

2013: Doctor of Philosophy (Ph.D. - Mechanical Engineering) from theDr. Babasaheb Ambedkar Technological University, Lonere. Maharashtra. India.
Thesis Title: "Some Investigations into Wire Electro-Discharge Machining of Ceramic Reinforced Aluminium Matrix Composites." Guide: Prof. P. K. Brahmankar.
2005: Master's in technology (M. Tech. - Manufacturing Engineering) from the Dr. Babasaheb Ambedkar Technological University, Lonere. Maharashtra. India.

1994: Bachelor of Engineering (B. E. - Production Engineering) from Dr. Babasaheb Ambedkar Marathawada University, Aurangabad. Maharashtra. India.

EMPLOYMENT RECORD:

Director, Maharashtra Institute of Technology (MIT)	Oct. 23 to till date
Additional Director, Maharashtra Institute of Technology (MIT)	Aug. 22 to Sept. 23
Principal/Director: Marathwada Institute of Technology (MIT)	July '16 to Sept 22
Vice Principal: MIT, Aurangabad	Jan '15 to July '16
Head of Mechanical Department: MIT, Aurangabad	July'12 to Dec '14
Professor: MIT, Aurangabad	July '13 to date
Associate Professor: MIT, Aurangabad	Jan '11 to June 13
Asst. Professor(5th Pay scale): MIT, Aurangabad	Jan '09 to Jan ' 11
Training and Placement Officer- MIT, Aurangabad	Jan '07 to Jan '09
Lecturer- Jawaharlal Nehru COE, Aurangabad	Jan 97 to March '06

Total Industrial experience of two years combined in VAL Aurangabad, Anurang Engineering Aurangabad and Micro-dash consultants, Aurangabad.

A. Academic and Research Activities:

a) Teaching:

Subject Taught-
Composite Materials (P.G), Manufacturing Process Modeling (P.G.), Advanced Machining Science (PG), Theory of Metal Forming, Engineering Metallurgy, Production Process, Nonconventional Machining Processes, Machine Tools, Industrial Engineering, Design of Machine Elements.

Visiting Lectures-
Post-graduation course (South African batch) at Indo German Tool Room,in the year 2004-2005, Aurangabad.

New initiatives: Key contributions

- Designed five-year institutional development plan (IDP) of the Institute. Design of NEP based curriculum.
- Designed and implemented performance appraisal system for faculty members. New model, in line with the vision and goals of the organisation along with NIRF guidelines, has been developed.
- Designed research and consultancy policy for the Institute.
- Engineering Exploration course was started for the First-year students of all B. Tech programs. This course has been designed by considering "Project-Based Learning".

The course was introduced with a vision of inculcating the habit of exploring new ideas in students and extracting the technical skills from students. This course was found to improve the performance of the students.

- Collaboration with industries for various activities of mutual interest.

b) Ongoing/Completed Research Projects:

Sr. No.	Project Title	Funding Agency	Nature of the Project	Position	Duration	Project Cost (INR)
1.	Development of microreactor	RGSTC, Govt. of Maharashtra		Co-Investigator		29 Lakhs
2.	Photochemical Machining of metals	TEQIP – III		Co-Investigator	Completed	3.50 Lakhs
3.	Application of bio-nano cutting fluids in the machining of difficult to cut materials	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Minor research project		Completed	35,000/-
4.	MSME Innovation Lab	Giz India		Coordinator	Completed	16.2 Lakhs
5.	Additive Manufacturing. of Functionally graded metallic materials*	International Cooperation (Bilateral) Programme			**Submitted for approval and not accepted*	

c) Publications:

2025

1. **Patil, N. G., Agarwal, S., Kulkarni, A., Saraf, A., Rane, M., Dama, Y., & Saraf, A. (2025). Experimental investigation of graphene oxide-based nano cutting fluid in drilling of aluminum matrix composite reinforced with SiC particles under nano-MQL conditions. *Obrabotka Metallov/Metal Working and Material Science*, *27*(2), 103–125. (Indexed in ESCI web of science and Scopus, SJR 0.204, cite score: 1.1)**

2024

2. Farooqui, M. N., & Patil, N. G. (2024). Experimental investigations on cutting rate and kerf width on wire-electro discharge machining of silicon nitride – titanium nitride ceramic composite. *International Research Journal of Multidisciplinary Scope*, *5*(3), 131–140. (Scopus, SJR 0.102).

3. Farooqui, M. N., Patil, N. G., & Gore, A. S. (2024). Investigation into optimizing of machining parameters using RSM for Si3N4-TiN ceramic composites by WEDM. *Indian Journal of Science and Technology*, *17*(14), 1464–1473.

4. Gore, A., & Patil, N. G. (2024). Mathematical modeling and finite element analysis of wire electro-discharge machining of ceramic particulate reinforced metal matrix composite material. *Indian Journal of Science and Technology*, *17*(9), 852–862.

5. Gore, S. A., Patil, N. G., & Farooqui, M. N. (2024). Effects of ceramic volume fraction and cryogenic treatment on kerf width in WEDM of Al/SiCp metal matrix composites. *International Research Journal of Multidisciplinary Scope*, *5*(3), 152–161. (Scopus, SJR 0.102)

6. **Patil, N. G., Kulkarni, A., & Saraf, A. (2024). Semi empirical modeling of cutting temperature and surface roughness in turning of engineering materials with TiAlN coated carbide tool. *Obrabotka Metallov/Metal Working and Material Science*, *26*(1), 155–174. (Indexed in ESCI web of science and Scopus, SJR 0.204, cite score: 1.1)**

2023

7. Borleppwar, P. T., & Patil, N. G. (2023). Wire-EDM of monocrystalline silicon for photovoltaic application. *Academic Journal of Manufacturing Engineering*, *21*(4). (Scopus, SJR 0.163)

8. **Patil, N. G. (2023, September). Determination of optimal performance in wire electrical discharge machining of Al/Al2O3/22p composites using response surface methods and grey relational analysis. *Australian Journal of Mechanical Engineering*. *21*(4), 1259–1271. (IF 1.5, Emerging Sources Citation Index, ESCI, Scopus).**

2022

9. **Birajdar, S. D., Saraf, A. R., Maharolkar, A. P., Gattu, K. P., & Patil, N. G. (2022). Intrinsic defect-induced magnetism and enhanced photocatalytic activity in Zn1-xZrxO (0.0≤x≤0.07) nanoparticles for spintronic device and**

photocatalytic application. *Journal of Alloys and Compounds*, *929*, Article 167272.(IF 6.3, Science Citation Index Expanded, SCIE, Scopus, Cite score 11.8).

10. Shinde, R.H., Raut, D.N., Patil, N.G., Dharmadhikari, S.R. (2022). Powder Mixed Micro-Electric Discharge Machining—A Review. In: Narasimham, G.S.V.L., Babu, A.V., Reddy, S.S., Dhanasekaran, R. (eds) Innovations in Mechanical Engineering. Lecture Notes in Mechanical Engineering.

2021

11. Gunjal, S.U., Sanap, S.B., Jadhav, L., Patil, N.G. (2021). Role of Bio-cutting Fluids Under Minimum Quantity Lubrication: An Experimental Investigation of a Sustainable Machining Technique. In: Phanden, R.K., Mathiyazhagan, K., Kumar, R., Paulo Davim, J. (eds) Advances in Industrial and Production Engineering. Lecture Notes in Mechanical Engineering. Springer (Scopus).
12. Chittewar S. L., Patil N. G. (2021). Surface integrity of conventional and additively manufactured nickel superalloys: A review. Materials Today: Proceedings. Volume 44, Part 1, 2021, Pages 701-708. (Scopus)

2020

13. Agrawal, S., & Patil, N. G. (2020). Drilling of ceramic reinforced aluminium matrix composite under dry condition. *International Journal of Innovative Technology and Exploring Engineering*, *9*(4), 3029–3033.
14. Agrawal, S., & Patil, N. G. (2020). Drilling of ceramic reinforced aluminium matrix composite under minimum quantity lubrication using bio cutting fluid. *International Journal of Innovative Technology and Exploring Engineering*, *9*(4), 3172–3178.
15. Agrawal S. M., Patil N. G. (2020). Effects of cryogenic cooling on burr height in drilling of ceramic reinforced aluminium matrix composites. International Journal of Advanced Research in Engineering and Technology. Volume 11, Issue 12, pp. 851-856.
16. Agrawal S. M., Patil N. G. (2020).Investigation into dry machining as environment friendly drilling of ceramic reinforced aluminium matrix composites. International Journal of Advanced Research in Engineering and Technology. Volume 11, Issue 12, pp. 845-850.
17. Gunjal, S. U., Sanap, S. B., & Patil, N. G. (2020). Role of cutting fluids under minimum quantity lubrication: An experimental investigation of chip thickness. Materials Today: Proceedings. Volume 28, Part 2, 2020, Pages 1101-1105 (Scopus).

2018

18. Jadhav S. S., Patil N. G. (2018). Drilling of ceramic reinforced aluminium matrix composite under dry condition. Procedia Manufacturing, 20, 2–11. (Scopus).

19. Gunjal S. N., Patil N. G. (2018). Experimental investigations into turning of hardened AISI 4340 steel using vegetable-based cutting fluids under minimum quantity lubrication. Procedia Manufacturing, 20, 18–23. (Scopus).

20. Agrawal S. M., Patil N. G. (2018). Experimental study of non-edible vegetable oil as a cutting fluid in machining of M2 steel using MQL.Procedia Manufacturing, 20, 207–211. (Scopus).

21. Bhopale N., Patil N. G. (2018). The experimental investigations into dry turning of austempered ductile iron. Procedia Manufacturing, 20, 227–232. (Scopus).

22. Agrawal S. M, Patil N. G. (2018). The effect of Karanja based soluble cutting fluid on chips formation in orthogonal cutting process of AISI 1045 steel. Procedia Manufacturing, 20, 12–17. (Scopus)

23. Balasubramaniam I., Patil N. G. (2018). Mechanical characterization and machining of squeeze cast AZ91D/SiC magnesium-based metal matrix composites. Procedia Manufacturing, 20, 97–105. (Scopus)

24. Farooqui M. N., Patil N. G. (2018). A perspective on shaping of advanced ceramics by electro-discharge machining. Procedia Manufacturing, 20, 65–72. (Scopus)

25. Gore A. S., Patil N. G. (2018). Wire electro-discharge machining of metal matrix composites: A review. Procedia Manufacturing, 20, 41–52. (Scopus).

26. Karkade H. K., Patil N. G. (2018). Comparative investigations into high-speed machining of A-B titanium alloy (Ti–6al-4v) under dry and compressed Co2 gas cooling environment. AIP Conf. Proc. 2018, 020009. (WoS/Scopus)

2017

27. Baisane, V., Patil, N. G., & Lahane, S. V. (2017). Investigations into Wire Electro-Discharge Machining of A6061/Al2O3p Composites. *Advances in Intelligent Systems Research*, *137*, 94–99.

28. Kulkarni, A., Joshi, G., Patil, N. G., & Sargade, V. G. (2017). Investigation of microstructure and mechanical properties of AlTiCrN, AlCrN coatings deposited by advance sputtering technique. Advances in Intelligent Systems Research, 137, 298–303.

29. Shinde, R. H., Patil, N. G., Raut, D. N., Pawade, R. S., & Brahmankar, P. K. (2017). Experimental investigations into powder-mixed electrical discharge machining

(PMEDM) of HCHCr D2 die steel. Advances in Intelligent Systems Research, 137, 298–303.

2016

30. Agrawal, S., & Patil, N. G. (2016, December). Effects of Karanja oil in water based cutting fluid on surface roughness and tool wear during turning of AISI 1045 steel. ICMMD, BATU, Lonere.
31. Baisane, V., Patil, N. G., & Brahmankar, P. K. (2016, December). Investigations into Wire Electro-discharge Machining of A6061/Al2O3p Composites. ICMMD, BATU, Lonere.
32. Deshmukh, R. V., & Patil, N. G. (2016, December). Modelling of surface roughness using response surface methodology in wire electrical discharge machining of Ti6Al4V alloy. ICMMD, BATU, Lonere.
33. Jadhav, L., Gunjal, S., & Patil, N. G. (2016, December). Application of vegetable-based cutting fluids during turning of AISI 316 SS under minimum quantity lubrication. ICMMD, BATU, Lonere.
34. **Patil, N. G., Brahmankar, P. K., & Thakur, D. G. (2016). On the effects of wire electrode and ceramic volume fraction in wire electrical discharge machining of ceramic particulate reinforced aluminium matrix composites. *Procedia CIRP*, *42*, 286–291. (Scopus, cite score 3.7).**
35. **Patil, N. G., Brahmankar, P. K., & Thakur, D. G. (2016). Semi-empirical modeling of surface finish in wire electrical discharge machining of ceramic particulate reinforced aluminium matrix composites. *Procedia CIRP*, *42*, 280–285. (Scopus, cite score 3.7).**
36. Shinde, R. H., Patil, N. G., & Raut, D. N. (2016, December). Experimental investigations into Powder-Mixed Electrical Discharge Machining (PMEDM) of HCHCr D2 Die Steel. ICMMD, BATU, Lonere.
37. Jadhav S. S., Patil N. G. (2016) A review on drilling of metal matrix composites. International Journal of Current Engineering and Technology, special issue 6.

2015

38. Charthankar, S. B., & Patil, N. G. (2015). Experimental study on the effects of different grinding fluids in cylindrical grinding of Inconel 718. *International Journal of Applied Engineering Research*, *10*(54), 55–61.
39. Karkade, H. K., & Patil, N. G. (2015). Experimental investigations of cutting parameters influence on surface roughness in machining titanium alloy (Ti-6Al-4V) using TiAlN PVD coated carbide inserts under dry environment. *Journal of Applied Physical Science International*, *4*(1), 45–50.

40. Unde, P., Patil, N. G. (2015). Experimental investigations into abrasive waterjet machining of carbon fiber reinforced plastic (CFRP). *Journal of Composites*, *2015*, 9. Wiley online Library.

2014

41. Patil, N. G., Agrawal, S. M., Lahane, S. V., & Brahmankar, P. K. (2014). Experimental investigations into wear characteristics of M2 steel using cottonseed oil. *Procedia Engineering*, *97*, 4–14. (Scopus).

42. Patil, N. G., Asem, A., Pawade, R. S., Thakur, D. G., & Brahmankar, P. K. (2014). Comparative study of high-speed machining of Inconel 718 in dry condition and by using compressed cold carbon dioxide gas as coolant. *Procedia CIRP*, *24*, 86–91. (Scopus, cite score 3.7).

43. Pande, P. P., & Patil, N. G. (2014). Investigations into machining of Inconel 718 by using Adaptive Fuzzy Based Inference System. *International Journal of Engineering Research & Technology*, *3*(Issue), 1981–1987.

2012

44. Choudhary, G. A., & Patil, N. G. (2012). Experimental evaluation of effects of die angle on hardness and surface finish of cold forward extrusion of aluminium. *International Journal of Emerging Technology and Advanced Engineering*, *2*(7), 334–338.

45. Karkade, H. K., & Patil, N. G. (2012, March). Machining of titanium and its alloys - a review. Proceedings of ICAMB-2012, Vellore Institute of Technology.

2010

46. Patil, N. G., & Brahmankar, P. K. (2010). Determination of material removal rate in wire electro-discharge machining of metal matrix composites using dimensional analysis. *The International Journal of Advanced Manufacturing Technology*, *51*, 599–610. (IF 3.5, Science Citation Index Expanded, SCIE, Scopus).

47. Patil, N. G., & Brahmankar, P. K. (2010). On the response surface modelling of wire electrical discharge machining of Al/SiCp metal matrix composites (MMCs). In *Journal of Machining and Forming Technology* (pp. 47–70). NOVA Science Publishers.

48. Patil, N. G., & Brahmankar, P. K. (2010). Some studies into wire electro-discharge machining of alumina particulate-reinforced aluminum matrix

composites. *The International Journal of Advanced Manufacturing Technology*, *48*(5-8), 537–555. (IF 3.5, Science Citation Index Expanded, SCIE, Scopus)

2009

49. Patil, N. G., & Brahmankar, P. K. (2009). Some investigations on the combined effects of ceramic reinforcements and process parameters in WEDM of MMCs. *Journal of Machining and Forming Technology*, *1*(4), 113–128.
50. *Response surface modeling and optimization of electro-discharge machining of Al/Al2O3p*. (2009, November). ASME International Mechanical Engineering Congress and Exposition, Lake Buena Vista, Florida, USA. (Scopus).

2008

51. Some investigations on surface characteristics of WEDM machined metal matrix composites. (2008, December). 23rd AIMTDR, IIT-Madras, Chennai.

2007

52. Patil, N. G., Brahmankar, P. K., & Navale, L. G. (2007, October). On the optimization into wire electro-discharge machining of Al/Al2O3p composites. ASME International Mechanical Engineering Congress and Exposition, Atlanta, GA, USA. (Scopus).

53. Patil, N. G., Brahmankar, P. K., & Navale, L. G. (2007, October). Some investigations into multi-objective optimization of wire electro-discharge machining of Al/SiCp composites. ASME International Manufacturing Science and Engineering Conference, Atlanta, GA, USA. (Scopus).

2006

54. Brahmankar, P. K., Pawde, R. S., & Patil, N. G. (2006, December). An investigation into surface finish in Grinding of metal matrix composites using Taguchi-Grey relational analysis. The 5th International Conference on Materials Processing for Properties and Performance, Institute of Materials (East Asia), Singapore.

55. Patil, N. G., & Brahmankar, P. K. (2006). Some investigations into wire electro-discharge machining of Al/SiCp composites. *International Journal of Machining and Machinability of Materials*, *1*(4), 412–431. (Scopus, cite score: 1.4).

56. Patil, N. G., Brahmankar, P. K., & Dama, Y. (2006, January). Electric discharge machining characteristics of metal matrix composites. International Conference (ICSCI 2006), Hyderabad, India.

57. Patil, N. G., Brahmankar, P. K., & Dama, Y. (2006, May). A study on kerf and cutting rate into WEDM of Al/SiCp composites using Taguchi methods. 7th International Conference on Tooling (Tool -06), Turin, Italy.

58. Patil, N. G., Brahmankar, P. K., & Ghatol, A. A. (2006, December). Multi-objective optimization of wire electro-discharge machining of metal matrix composites using Taguchi-Grey relational analysis. The 5th International Conference on Materials Processing for Properties and Performance, Institute of Materials (East Asia), Singapore.

59. Pawar, L. S., Rao, N. M., & Patil, N. G. (2006, January). Experimental investigations on airlift loop. International Conference (ICSCI 2006), Hyderabad, India.

60. Pawde, R. S., & Patil, N. G. (2006, August). An investigation of surface roughness in grinding of Al-Al2O3 metal matrix composites (MMCs). International conference on materials processing and characterization (AMPC 2006), Chennai.

2005

61. Patil, N. G., Brahmankar, P. K., & Dama, Y. (2005, October). WEDM of metal matrix composites. International meeting on composite materials: Advancing with Composites -2005, Naples, Italy.

62. Patil, N. G., Brahmankar, P. K., & Dama, Y. (2005, October). Wire electric discharge machining of Al/SiCp composites. International conference on composites/Nano Engineering -12 (ICCE-12), Tenerife, Spain.

63. Patil, N. G., Brahmankar, P. K., & Thakur, D. G. (2005, November). Wire electro-discharge machining of Al/SiCp composites. Fourth national conference on Precision Engineering 'COPEN-2005', Jadavpur University, Kolkata.

2004

64. Patil, B. A., & Patil, N. G. (2004, July). Genetic algorithms: search optimization and machine learning. National Conference on Emerging Trends in Mechatronics, MIT Aurangabad.

65. Patil, N. G., Pawar, A. A., & Bagul, J. D. (2004, April). Molecular Nanotechnology: The State-Of-The-Art. National Conference on Advances in Mechanical Engineering, J. D. College Of Engineering and Technology, Yawatmal, Maharashtra.

66. Patil, N. G., Pawar, A. A., & Patil, B. A. (2004, July). Nanorobotics: the-state-of-the-art. National Conference on Emerging Trends in Mechatronics, MIT Aurangabad.

67. Patil, N. G., Pawar, A. A., & Kokate, R. D. (2004, July). Modeling and Simulation. National Conference on Emerging Trends in Mechatronics, MIT Aurangabad.

68. Patil, N. G., Brahmankar, P. K., & Pawar, A. A. (2004, September). Nanomanipulation by SPMs: The State-Of-The-Art. National conference on advances in Mechanical Engineering, PCCE Goa.

69. Patil, N. G., Brahmankar, P. K., Dama, Y., & Sadaiha, M. (2004, January). Molecular manufacturing: The state-of-the-art. National Conference on Advanced Manufacturing and Robotics, CMERI, Durgapur, West Bengal.

70. Pawar, A. A., & Patil, N. G. (2004, December). Effect of Oxycat on emissions like HC, CO, NO on a single cylinder diesel engine with and without sensors. Instrumentation And Control, ISOI and Pune Institute of Engineering and Technology, Pune.

71. Pawar, A. A., & Patil, N. G. (2004, July). Combustion control and sensors. National Conference on Emerging Trends in Mechatronics, MIT Aurangabad.

d) Author of Book Chapters:

1. Contributed one chapter titled "Role of Bio-cutting Fluids Under Minimum Quantity Lubrication: An Experimental Investigation of a Sustainable Machining Technique", Advances in Industrial and Production Engineering, Lecture Notes in Mechanical Engineering, https://doi.org/10.1007/978-981-33-4320-7_63, 2021, Springer Publishers.
2. Contributed one chapter titled "On combined effects of ceramic reinforcements and process parameters in WEDM of MMCs' of the book entitled `Machining and Forming Technology' – vol. 1. ed. J. Paulo Davim –Nova Science Publishers, New York, USA.
3. Contributed one chapter titled "On the Response Surface Modelling of Wire Electrical Discharge Machining of Al/SiCp Metal Matrix Composites (MMCs)' of the book entitled `Machining and Forming Technology' – vol. 2. ed. J. Paulo Davim –Nova Science Publishers, New York, USA.

e) Book

1. Machinability issues in α-β Titanium alloy (Ti-6Al-4V), Lambert Academic Publication, Hemant Karkade, Nilesh Patil

f) Patents

1.Title of the invention: SYSTEM FOR UTILIZATION OF WASTE ETCHANT INPHOTOCHEMICAL MACHINING, **Indian Patent** (Status: Published)

2. Title of the invention: AUTOMOTIVE VEHICLE HEALTH MONITORINGANDDAMAGE DETECTION SYSTEM

USING MICROSTRIP AND NANOSTRIP ANTENA, **Indian Patent(Status: Granted)**

3. Title of the invention: A MICROSTRIP ANTENNA-BASED DYNAMOMETER FOR FORCE MEASUREMENT, **Indian Patent(Status: Granted)**

4. Title of the invention: A MICROREACTOR ARRANGEMENT FOR CONVERSION OF CO2 INTO ETHANOL IN COMBINATION WITH NANOLAYER AND NANOMATERIAL-BASED ELECTRODES AND PROCESS THEREOF, **Indian Patent(Status: Granted)**

5. Title of the invention: AN IMPROVED APPARAUS FOR PREPARING MAGNETIC NONOPARTICLE AND THE PROCESS THEREOF, **Indian Patent** (Status: Published)

g) Reviewer of Peer-Reviewed International Journals:

1. International Journal of Machining and Machinability of Materials, Inderscience, U.K.
2. International Journal of Advanced Manufacturing Technology, Springer, USA.
3. Journal of Engineering Manufacture, Springer, USA.
4. Materials and Manufacturing Processes, Taylor & Francis, UK.
5. Journal of Composite Materials, Sage Publishers, UK.
6. Journal of Machining and Forming Technology, Nova Science, USA.
7. Journal of Manufacturing Research, NOVA Science, USA.
8. Proceedings of Institution of Mechanical Engineers Journal of Engineering Manufacture, Sage Publishers.
9. ASME 2007 International Manufacturing Science and Engineering Conference, Atlanta, GA, USA.
10. Journal of Brazilian Society of Mechanical Engineering, Springer.
11. ISEM –18, April 2016, Tokyo, Japan.
12. ISEM–19, April 2018, Procedia CIRP, Bilbao, Spain.
13. ISEM–20, June 2020, Procedia CIRP, Zurich, Switzerland.

h) Citations:

- More than 1100 citations : i10 index – 22, H index - 18: https://scholar.google.com/citations?user=ukg3hbsAAAAJ&hl=en
- https://www.researchgate.net/profile/Nilesh_G_Patil
- https://orcid.org/0000-0002-4884-4267
- Scopus Author ID: 23095532000Web of Science ResearcherID AAD-4342-2019

i) Guiding M. E. Dissertation:

Sr. No.	Name of the Student	Topic
1.	Mr. P.P. Pande (2011)	Investigations into turning of Inconel-718 using

		design of experiment and Adaptive Neuro-Fuzzy Inference System.
2.	Mr. H. B. Karkade (2012)	Investigations into machining of α-β Titanium alloy (Ti-6Al-4V) using TiAlN coated carbide under dry and compressed CO_2 cooling environment.
3.	Mr. G.A. Chaudhari (2012)	Experimental evaluation of the effects of die geometry on surface finish and hardness in aluminum extrusion.
4.	Mr. S.M. Agrawal (2012)	Experimental investigations into wear characteristics of M2 steel using cottonseed oil.
5.	Ms. S.S. Billur (2013)	On the response surface modeling of cutting temperature and surface roughness in machining of some alloys.
6.	Mr. Ameer Asem (2013)	Comparative study of High-speed turning of Inconel-718 in dry condition and by using compressed cold carbon dioxide gas as a coolant.
7.	Mr. Prasad Unde (2015)	Experimental investigations into Abrasive Water Jet Machining of Carbon Fiber Reinforced Plastics.
8.	Mr. Narendra Bhopale (2015)	Experimental Investigations into Dry Turning of Austempered Ductile Iron using Response Surface Methodology.
9.	Mr. Rajendra Shinde (2015)	Experimental investigations into powder mixed EDM of HCHCr D2 die steel.
10.	Mr. Sajid Husain Shaikh Mohamad (2015)	Some studies on bio-cutting fluids in turning of AISI 316 stainless steel using minimum quantity lubrication.
11.	Ms. Vaishali Baisane (2016)	Investigations into wire electro-discharge machining ceramic particulate reinforced aluminium matrix composites.
12.	Mr. Rupesh V. Deshmukh (2016)	Response Surface Modeling and optimization of wire electro-discharge machining Ti alloys.
13.	Mr. Chanchal Waval (2017)	Investigations into WEDM of WC-Co composites.
14.	Mr. Shrikant Gunjal (2017)	Application of Vegetable-based Cutting Fluids during Hard Turning under Minimum Quantity Lubrication.
15.	Mr. Anand Kakde (2018)	Drilling of MMCs.
16.	Mr. Santosh. Shekokar (2019)	Investigations into abrasive water jet machining of Inconel 625.
17.	Mr. Sandesh Tajne (2019)	Investigation on SS 316L stainless steel in machining with biodegradable oils as cutting

		fluids.
18.	Mr. Vivekanand Koranglekar	The elements of cost of quality to minimize the total cost
19.	Mr. Mangesh Jamkar	Development of microreactor for processing of sugarcane juice
20.	Mr. Rushikesh Chavan	Development of Electromagnetic Microreactor for improved nanoparticle synthesis processes

j) Supervision of Ph.D.:

- Three candidates have successfully defended their Ph.D. Thesis, and they have been awarded the Ph.D.:

Sr. No.	Name of the Research Scholar	Topic
1.	Dr. Sachin Agrawal	Investigating the potential of non-edible vegetable oilin industry applications.
2.	Dr. Abhay Gore	Mathematical modeling and experimental investigations into wire electro-discharge machining of ceramic particulate reinforced metal matrix composites.
3.	Dr. M. N. Farooqui	Modeling and experimental investigations into electro discharge machining of advanced composites.

- One candidateis in the final stage and may complete the same by the end of 2025.

k) Honours, Affiliations, Membership:

- Executive Council Member, Dr. B.A. Technological University, Lonere (M.S)
- Life Member Indian Society for Technical Education (ISTE),
  Member Institution of Engineers IE (I)
- Executive Council Member, the local center of IE(I), 2004-06.

B. <u>Interaction with Outside World</u>:

a) Institutes Visited Abroad:

- University of Tokyo, Japan, 2016.
- National University of Singapore, Singapore Institute of Manufacturing Technology, 2015.
- Korean Institute of Carbon Convergence Technology (KCTECH), South Korea, 2014
- Few Korean Universities in 2024 as part of Sakal Educon

b) Collaboration with industries and institutes: Major Industries/Institutes

Sr. No.	Name of the Industry	Nature of Collaboration
1.	Findability Science, CSN and USA	Projects, Internship etc.
2.	Liebherr appliances Ind (P) ltd., CSN	Projects, Internship etc.
3.	Sanjeev group of Industries, CSN and Spain	Certificate course, Projects, Internship etc.
4.	National Institute of Electronics & Information Technology, Aurangabad	Courses, FDP, SDP
5.	Cosmo Fims Ltd., CSN	Certificate course, Projects, Internship etc.
6.	Galaxy Laboratories Pvt. Ltd.	Material testing
7.	AIC Magic Foundation	Innovation, Incubation support
8.	Maharashtra State Faculty Development Academy	FDP
9.	MKSSS's Dr. B. N. College of Architecture for women, Pune	Curriculum, expert session etc.

b) Invited Talks:

Sr. No.	Topic
1.	Invited speaker for Institution of Engineers (I), Aurangabad local center on "Nanotechnology" 2005.
2.	Delivered lecture talk on "Molecular manufacturing" AICTE Staff development program on "Nanotechnology: Opportunities and Challenges", at Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra, December 2005.
3.	Delivered lecture talk on the "Nanotechnology" STTP program on Nanotechnology: Opportunities and Challenges, at K.K. Wagh College of Engineering, Nashik, January 2007.
4.	Delivered lecture talk on "How to prepare and write a research paper" in a two-day program on 'Research Methodology' at MIT, Aurangabad, 2013.
5.	Delivered lecture talk on "How to prepare for dissertation and research projects" at Maharashtra Institute of Technology, Aurangabad, 2012.
6.	Delivered lecture talk on "Modeling of Manufacturing Processes" DST sponsored STTP program on Modeling and Simulation,at Maharashtra Institute of Technology, Aurangabad, June 2016.
7.	Delivered lecture talk on "Advanced Manufacturing Techniques" DTE sponsored STTP program on Excellence in Manufacturing,at Government Polytechnic, Nashik, August 2016.
8.	Delivered lecture talk on "Machining of MMCs: Challenges and Opportunities" TEQIP III sponsored STTP on Advances in Materials and Mfg. technology', at

	MIT, Aurangabad, March 2019.

C. <u>Major Assignments</u>:

a) Administrative Activities:

- Member Board of Studies, Mechanical Engineering, Dr. BAMU, Aurangabad
- Associate Dean, Dr. B.A. Technological University, Lonere (2018to 2020)
- Headed the institute level committee for AICTE affiliation (Web Portal) 2012-13.
- Headed the institute level committee for university affiliation for 2012-13.
- Headed the institute level committee for TEQIP 2010-11.
- Active participation in ISO and NBA related work.

b) Organization of the Conference:

Sr. No.	Role	Conference
1.	Convener	2nd International Conference on Materials, Manufacturing, and Design Engineering (iCMMD2017) during 11th and 12th December 2017.
2.	Guest Editor	Guest Editor of a special issue of iCMMD2017 published in 'Procedia Manufacturing' by Elsevier.

Personal Details:

Name	: Nilesh Ganpatrao Patil
Nationality	: Indian
Marital Status	: Married
Date of Birth	: 21st July 1972
Languages Known	: English, Hindi, and Marathi.

(Nilesh G. Patil)