

Curriculum Vitae



Dr. Bhushan Tryambak Patil
Professor
Mechanical Engineering Dept
Fr. Conceicao Rodrigues College of
Engineering, Fr. Agnel Ashram, Band Stand, B
andra(W),
Mumbai-400050
bhushan.patil@frcrce.ac.in
bhushantpatil@gmail.com

Brief Summary: -

Highest Qualification-Ph.D. (Technology) in Production Engineering

Total University Approved Teaching Experience: -29 Years (Out of which 10 Years is at Professor level)

Number of research publications in SCI journals / UGC / AICTE approved list of journals=18

No of Ph D students Guided (Completed) =5

No of Ongoing Ph D students=3

Number of IPR (Design Patents) =10

Number of Copyrights=2

Administrative Responsibilities Handled at Institute Level/University Level: -

- i) Handled responsibilities at Fr CRCE-
Head of Department in Mechanical Engineering Department (5 years) and Dean Student's welfare (2 Years) and Dean -Research and Development (6 Years), Member of Governing Council, Member of Executive Committee, Member of College Development Committee, IPR cell coordinator, Member of Internal Quality Assurance Cell, Conference Chair for International Conference ICAC3.)
- ii) Chairman of Indian Institution of Industrial Engineering, Mumbai Chapter for more than 2 Years
- iii) Secretary of Indian Institution of Industrial Engineering, Mumbai Chapter for more than 3 Years
- iv) Worked as Vice Chancellors Nominee for Board of Studies in Mechanical Engineering by University of Mumbai at Autonomous College-Thakur College of Engineering and Technology, Mumbai
- v) Currently working as Vice Chancellors Nominee for Academic Council by University of Mumbai at Autonomous College-Sardar Patel College of Engineering, Mumbai
- vi) Currently Working as Vice Chancellors Nominee for Board of Studies by University of Mumbai at Autonomous College-Pillai College of Engineering, Panvel
- vii) **Other Credentials: -**
 - i) Fellow Member of Indian Institution of Industrial Engineering
 - ii) Recipient of 'Special Award' from Indian Institution of Industrial Engineering for continuous innovative development of Industrial Engineering in its operations and significant encouragement to the industries in India
 - iii) Member of selection committee for selection of candidates for admission to Ph.D. (Technology) program in mechanical engineering at various institutes in Mumbai
 - iv) Member of selection committee for faculty recruitment at various institutes in Mumbai
 - v) Guest faculty to teach a full course on Operations Planning under Uncertainty for post graduate program at NITIE, Mumbai (Which is now known as IIM, Mumbai)

Qualifications:					
Level	Details	Institute/University	Month - Year	Marks (%)	Grade/Division/Other Remarks
Doctorate	Ph.D. (Technology) in Production Engineering	V.J.T.I., Mumbai (Autonomous Institute Affiliated to Mumbai University)	March-2014	-	-
Post Graduation	M.E. (Production With Specialization In Manufacturing Engineering)	Fr.C.R.C.E., Bandra (Mumbai University)	March - 2006	76.81	First Class with Distinction
Graduation	B.E. (Production Engineering)	S.G.G.S. Institute of Engineering & Technology, Nanded (Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)	July - 1996	68.13	First Class with Distinction
12th Class	H.S.S.C.	Amaravati Divisional Board	March - 1992	84.00	First Class with Distinction
10th Class	S.S.C	Nagpur Divisional Board	March - 1990	88.57	First Class with Distinction SSC Merit holder – 25 th in Nagpur Divisional Board

Experience Summary- Total University Approved Teaching Experience: -29 Years (Out of which 10 Years is at Professor level)					
Experience Type	Organization	Designation	Year From - To	Approval Status (University of Mumbai)	Total Experience
Teaching	Lokmanya Tilak College Of Engineering Navi Mumbai	Lecturer	1997-2010	Approved by University of Mumbai	13.0 yrs.
Teaching	Lokmanya Tilak College Of Engineering Navi Mumbai	Assistant Professor	2010-2014	Approved by University of Mumbai	4 Years
Teaching	Fr. Conceicao Rodrigues College of Engineering, Bandra	Assistant Professor	2014-2016	Approved by University of Mumbai	2 yrs
Teaching	Fr. Conceicao Rodrigues College of Engineering, Bandra	Professor	02-05-2016 : Till today	Approved by University of Mumbai	From 02-05-2016 till today

- Approved teacher at University of Mumbai for M.E. degree in Mechanical Engineering
- Approved teacher at University of Mumbai for Ph.D. (Technology) degree in Mechanical Engineering

Guidance to Ph.D. Students: -

- Five Student Completed
- Three Students are pursuing Ph.D.

Guidance to Students at master's Level: -

- 11 students Completed

List of Publications in Journals: -

(Total Number of Publications in research publications in SCI journals / UGC / AICTE approved list of journals =18)

Sr No	Details	Indexing
1	Bhise, D. K., Patil, B. T. , Shaikh, V. A., and Deshmukh, S. P. (2024). Comparative Economic Analysis and Investigation of Micro Lubrication Over Conventional Cooling in Manufacturing. Journal of Engineering, Project, and Production Management, 14(1), 0004. DOI http://doi.org/10.32738/JEPPM-2024-0004	Scopus Indexed/UGC Approved
2	Miriyala, V., Patil, B. T. , Shaikh, V. A., Sudhakar, D. S. S., and Deshmukh, S. (2024). Investigations of Surface Roughness and Temperatures in Vegetable Oil-based n-MQL Turning of AISI 4340 Steel. Journal of Engineering, Project, and Production Management, 14(1), 0003. DOI http://doi.org/10.32738/JEPPM-2024-0003	Scopus Indexed/UGC Approved
3	Singh, D.S, Joshi, K.J & Patil, B. T. Comparative Economic Analysis of Injection-Moulded Component with Conventional and Conformal Cooling Channels. J. Inst. Eng. India Ser. C 103, 307-317 (2022). https://doi.org/10.1007/s40032-021-00778-5	Scopus Indexed/UGC Approved
4	Subramanian, G., Patil, B.T. and Gardas, B.B. (2021), "Evaluation of enablers of cloud technology to boost industry 4.0 adoption in the manufacturing micro, small and medium enterprises", Journal of Modelling in Management, Vol. 16 No. 3, pp. 944-962. https://doi.org/10.1108/JM2-08-2020-0207	SCI/Scopus Indexed/UGC Approved
5	Joshi, K.J., & Patil, B. T. (2022). Automated inspection of spur gears using machine vision approach. International Journal of Computational Vision and Robotics, 13(1), 38-51 https://doi.org/10.1504/IJCVR.2023.127307	Scopus Indexed/UGC Approved
6	Deshmukh S.P., Patil B.T. ,Joshi K.N.,Gaonkar C.,Pallan P.,Bhatkar S.(2022), , A Novel Method for IoT Based Smart Traffic System, Industrial Engineering Journal, June 2022,Vol.XV,Issue 6, pp 11-16 (UGC Approved Journal as per UGC-Care List)	UGC Approved Journal as per UGC-Care List)
7	Joshi, K., & Patil, B.T. (2020). Performance evaluation of various texture analysis techniques for machine vision-based characterization of machined surfaces. International Journal of Computational Vision and Robotics, 10(3), 242-259. https://doi.org/10.1504/IJCVR.2020.107249	Scopus Indexed/UGC Approved
8	Joshi K. N., Patil B. T. (2020) Multivariate statistical process monitoring and control of machining process using principal components-based Hotelling T2 charts: a machine vision approach, <i>International Journal of Productivity and Quality Management</i> , Vol 35, No.1, pp.40-56 https://doi.org/10.1504/IJPQM.2022.120709/doi	Scopus Indexed/UGC Approved
9	Bhise, D.K., Patil, B.T. , Shaikh, V.A., 2021. Air Assisted Atomization Characterization of Biodegradable Fluid Using Microlubrication Technique. MSF 1019, 211-217. https://doi.org/10.4028/www.scientific.net/msf.1019.211	Scopus Indexed/UGC Approved
10	Singraur, D. S., Patil, B. T. , & Shaikh, V. A. (2021). Defect Minimization of an Injection Molded Plastic Component Using Conformal Cooling Channels. Materials Science Forum, 1019, 205-210. https://doi.org/10.4028/www.scientific.net/msf.1019.205	Scopus Indexed/UGC Approved

11	Veerabhadrarao, M., Patil, B. T. , Shaikh, V. A., & Sudhakar, D. S. S. (2021). Contribution of Factors such as Machining Parameters, MQL Nozzle Orientation (Angle & Distance) and MQL Nano-Fluid Type on Surface Finish of Turned Steel Work-Pieces Using DOE Approach. <i>Materials Science Forum</i> , 1019, 181-193. https://doi.org/10.4028/www.scientific.net/msf.1019.181	Scopus Indexed/UGC Approved
12	Joshi, K.N., Patil, B.T. Effect of Illumination Systems on Statistical Texture Parameters Based Clustering and Discrimination of Machined Surfaces Using Machine Vision. <i>MAPAN</i> 34, 197-205 (2019). (by Springer Publications) https://doi.org/10.1007/s12647-018-0279-z	SCI/Scopus Indexed/UGC Approved
13	Joshi K. N., Patil B. T. , A Review of Machine Vision based Evaluation of Surface Roughness using Texture Analysis Techniques, <i>Industrial Engineering Journal</i> , Nov 2018, pp 22-27 (UGC Approved Journal as per UGC-Care List)	UGC Approved Journal as per UGC-Care List
14	Deshmukh, S. P., Deshmukh, P. D., Patil, B. T. , &Thampi, G. T. (2019). Exploring the factors to make e-commerce and m-commerce ubiquitous and pervasive to improve national productivity of India. <i>International Journal of Productivity and Quality Management</i> , 28(4), 457-496. https://doi.org/10.1504/IJPQM.2019.103691	Scopus Indexed/UGC Approved
15	Bhise, Dipali., Patil, B, T. , and Shaikh, V. A., (2019), Micro lubrication: A way to enhance the machining operation, <i>Industrial Engineering Journal</i> . Vol. 12 No. 4, ISSN: 2581-4915.	UGC Approved Journal as per UGC-Care List
16	Patil, Bhushan & Subramanian, Geetha. (2020). An Investigation into Factors Influencing System Quality for MSME with Collaborative Manufacturing, Cloud technologies and Industry 4.0. <i>Industrial Engineering Journal</i> . 13. ISSN: 2581-4915	UGC Approved Journal as per UGC-Care List
17	Singh S., Deepika, Patil B.T. (2019) Advancements in Design And Fabrication of Conformal Cooling Channels for Improvement in Plastic Injection Molding Process, <i>Industrial Engineering Journal</i> (2019), Volume 12 (5),	UGC Approved Journal as per UGC-Care List
18	Patil B.T. , Bhandarkar B.M. ,Narkhede B.E.(2013), "Cloud Computing: Emerging Enterprise Resource Planning Solution for Small and Medium Enterprises", <i>Industrial Engineering Journal</i> ,Vol.6, Issue No.6, June 2013, pp 20-23(ISSN 0970-255)	UGC Approved Journal as per UGC-Care List
19	Narkhede, B. E., Raut, R. D., Patil, B. T. and Mahajan, S. K. (2013), Performance Improvement in Small and Medium-Sized Enterprises Due to Information Systems Implementation. <i>Perf. Improv.</i> , 52: 24-32 https://doi.org/10.1002/pfi.21385	

Conference Publications/Presentations: -

Sr No	Details	Indexing
1	<p>Potadar, O.V., Patil, B.T., Pol, S., Save, J., Bauskar, D.A. (2026). Monte Carlo Simulation for Inventory Decisions Under Demand Uncertainty: A Cost-Profit Perspective. In: Joshi, A., Ragel, R.G., S., K. (eds) ICT: Applications and Social Interfaces. ICTCS 2025. Lecture Notes in Networks and Systems, vol 1875. Springer, Cham.</p> <p>https://doi.org/10.1007/978-3-032-19684-2_16</p> <p><i>(This paper was presented 10th International Conference on Information and Communication Technology for Competitive Strategies. Which was held during December 15-17, 2025 at Jaipur,India)</i></p>	Scopus Indexed
2	<p>S. M. Pol, B. T. Patil and A. J. Lopes, "Investigation of Injection Molding process Parameters in Polymethyl Methacrylate (PMMA) Injection Molding Production: A Simulation and Machine Learning-Based Regression Analysis Approach," 2025 IEEE International Conference on Future Machine Learning and Data Science (FMLDS), Los Angeles, CA, USA, 2025, pp. 445-452,</p> <p>doi: 10.1109/FMLDS67896.2025.00131.</p> <p>https://ieeexplore.ieee.org/document/11446697</p> <p><i>(This paper was presented 2025 IEEE International Conference on Future Machine Learning and Data Science (FMLDS) held during 2-5 Nov. 2025 at Los Angeles,USA organised by IEEE)</i></p>	Scopus Indexed
3	<p>Pol, S.M., Patil, B.T., Lopes, A.J. (2026). Revelation through Principal Component Analysis: Enhancing Decision-Making in Injection Molding Process Parameters Using Simulation Data and Computer-Aided Engineering. In: Choudrie, J., Mahalle, P.N., Perumal, T., Joshi, A. (eds) ICT for Intelligent Systems. ICTIS 2025. Lecture Notes in Networks and Systems, vol 1509. Springer, Singapore.</p> <p>https://doi.org/10.1007/978-981-96-8793-0_17</p> <p><i>(This paper was presented Fifth 9th International Conference on Information and Communication Technologies (ICTIS) which was held during April 04-06, 2025 at Bangkok,Thailand)</i></p>	Scopus Indexed
4	<p>Pol, S.M., Patil, B.T., Lopes, A.J. (2026). Optimizing Injection Molding Process Parameters Using Artificial Intelligence-Based K-Means Clustering: A Simulation Data and Computer-Aided Engineering Approach. In: Choudrie, J., Mahalle, P.N., Perumal, T., Joshi, A. (eds) ICT for Intelligent Systems. ICTIS 2025. Lecture Notes in Networks and Systems, vol 1509. Springer, Singapore.</p> <p>https://doi.org/10.1007/978-981-96-8793-0_16</p> <p><i>(This paper was presented Fifth 9th International Conference on Information and Communication Technologies (ICTIS) which was held during April 04-06, 2025 at Bangkok,Thailand)</i></p>	Scopus Indexed
5	<p>Sonia M. Pol, Bhushan T. Patil, Amit Lopes Investigation of the Impact of Injection Molding Parameters on Defects Using One-Way ANOVA: Analysis of Data Acquired through Computer-Aided Engineering. <i>International Conference on Materials Science and Manufacturing Technology (ICMSMT 2025)</i>.</p>	
6	<p>Meera Kokate, Sonia M. Pol, Bhushan T. Patil, Ketaki N. Joshi, and Amit J. Lopes. Prediction of Residual Stresses in Injection Moulded Helmet Visor using Computer Aided Engineering and Artificial Neural Network (ANN). <i>International Conference on Materials Science and Manufacturing Technology (ICMSMT 2025)</i>.</p>	
7	<p>Sonia M. Pol, Shaunak A. Aital, Ayushi Khatri, Bhushan T. Patil, and Amit J Lopes. Analysis Risk analysis in Healthcare Industry: Leveraging Monte Carlo, Markov chains and Preference Matrix Models. <i>2nd International Conference on Technologies for Energy, Agriculture, and Healthcare (ICTEAH 2025)</i></p>	Scopus Indexed

	www.taylorfrancis.com/chapters/edit/10.1201/9781003773771-14/risk-analysis-healthcare-industry-leveraging-monte-carlo-markov-chains-preference-matrix-models-sonia-pol-shaunak-aital-ayushi-khatri-somnath-pol-bhushan-patil-amit-lopes?context=ubx&refId=db52c9d6-579d-4639-bfe6-3af79e4a8b58	
8	Sonia M. Pol, Shaunak A. Aital, Bhushan T. Patil , and Amit J Lopes. Markov Chain Simulation for Pharmaceutical Medicine Inventory Optimization amidst Pandemic Conditions: Analysing ABC And VED Inventory Policies. 2nd International Conference on Technologies for Energy, Agriculture, and Healthcare (ICTEAH 2025) https://www.taylorfrancis.com/chapters/edit/10.1201/9781003773771-13/markov-chain-simulation-pharmaceutical-medicine-in	Scopus Indexed
9	Pol Sonia M , Aniket Rayte, Bhushan T Patil , Ketaki N Joshi (2024) . Analysis and Optimization of Transportation Logistics for Supply Chain Management of Perishable Goods using Monte Carlo Simulation, 2024 International Conference on Sustainable Technologies in Civil and Environmental Engineering (ICSTCE 2024) E3S Web of Conf., 559 (2024) 04004 https://doi.org/10.1051/e3sconf/202455904004 <i>(This paper was presented at 2024 International Conference on Sustainable technologies in Civil and Environmental Engineering (ICSTCE 2024), which held at Dr. D.Y. Patil Institute of Technology, Pimpri, Pune, Maharashtra, India during 06 - 07, June 2024.)</i>	Scopus Indexed
10	Sonia M. Pol, Bhushan T. Patil , Ketaki Joshi, Amit Lopes.(2024) Selection of Additive Manufacturing Technique by Using Multi Criteria Decision Making Methodology Viz. Analytical Hierarchy Process , Fifth International Conference on Advances in Physical Sciences and Materials (ICAPSM) <i>(This paper was presented in the 2024 Fifth International Conference On Advances In Physical Sciences And Materials (ICAPSM) held at Builders Engineering College, Kangeyam, Tamil Nadu,India During 29-30, August 2024)</i>	
11	Sonia Pol, Shaunak Aital, Siddhi More, Dr. Hemant Khanolkar, Bhushan Patil (2024) Experimentation and analysis of Industrial Chimneys and solar chimney power plant: "A comprehensive literature review" (2024) International Conference on Materials Science and Manufacturing Technology (ICMSMT 2024) <i>(This paper was presented at 2024 International Conference on Materials Science and Manufacturing Technology (ICMSMT 2024), which was held during 03 – 04, May 2024 at Akshaya College of Engineering and Technology, Coimbatore, Tamil Nadu, India during 03 - 04, May 2024.)</i>	
12	Sonia Pol, Shaunak Aital, Siddhi More, Dr. Hemant Khanolkar, Dr. Bhushan Patil (2024) Experimentation and analysis of Industrial Chimneys and solar chimney power plant: "A comprehensive literature review" (2024) International Conference on Materials Science and Manufacturing Technology (ICMSMT 2024) <i>(This paper was presented at 2024 International Conference on Materials Science and Manufacturing Technology (ICMSMT 2024), which was be held during 03 – 04, May 2024 at Akshaya College of Engineering and Technology, Coimbatore, Tamil Nadu, India during 03 - 04, May 2024.)</i>	
13	Janhavi Sachin Shinde, Shubham Dinesh Sawant, Jaydenmario Joseph Fernandes, Aayush Devendra Patil, Dr. Bhushan T. Patil , Sonia Pol, Dr. Hemant Khanolkar. Electrochemical (2024) Additive Manufacturing: A Comprehensive Literature Review, 2024 International Conference on Materials Science and Manufacturing Technology (ICMSMT 2024) <i>(This paper was presented at 2024 International Conference on Materials Science and Manufacturing Technology (ICMSMT 2024), which was be held during 03 – 04, May 2024 at Akshaya College of Engineering and Technology, Coimbatore, Tamil Nadu, India during 03 - 04, May 2024.)</i>	
14	Sonia M. Pol, Bhushan T. Patil , Ketaki Joshi, Amit Lopes. Selection of Additive Manufacturing Technique by Using Multi Criteria Decision Making Methodology Viz. Analytical Hierarchy Process (2024) Fifth International Conference on Advances in Physical Sciences and Materials (ICAPSM) <i>(This paper was presented Fifth International Conference on Advances in Physical Sciences and Materials 2024 (ICAPSM 2024) which was held during August 29–30, 2024.)</i>	

15	Siddhi More, Sonia M. Pol, Dnyaneshwari Shinde, Sameeksha Naik, Bhushan T. Patil . (2024), Experimentation in Injection Molding: Simulation and Parameter Optimization Using Design of Experiment (2024) Fifth International Conference on Advances in Physical Sciences and Materials (ICAPSM) (This paper was presented in the, Fifth International Conference On Advances In Physical Sciences And Materials (ICAPSM) held at Builders Engineering College, Kangeyam, Tamil Nadu, India During 29-30, August 2024)	
16	Joshi K.N., Patil B.T. (2019) A Perspective of Integrated Machine Vision Based-Multivariate Statistical Process Control. In: Vasudevan H., Kottur V., Raina A. (eds) Proceedings of International Conference on Intelligent Manufacturing and Automation. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-13-2490-1_42 <i>(This paper was presented at International Conference on Intelligent Manufacturing and Automation (ICIMA 2018), 2018, Mumbai, India. This Conference was organised by DJ Sanghvi College of Engineering, VileParle, Mumbai, Maharashtra, India Date of Conference- 20 and 21 July 2018)</i>	Scopus Indexed
17	Ketaki Joshi, Bhushan Patil (2020), Prediction of Surface Roughness by Machine Vision using Principal Components based Regression Analysis, Procedia Computer Science, Volume 167, 2020, Pages 382-391, ISSN 1877-0509, https://doi.org/10.1016/j.procs.2020.03.242	Scopus Indexed
18	Bhise, D. K., Patil, B. T. , Shaikh, V. A., & Deshmukh, S. P. (2020). Investigating the microlubrication flow inside the nozzle using computational fluid dynamics. Materials Today: Proceedings, 27, 492-496. https://doi.org/10.1016/j.matpr.2019.11.290 <i>(This paper was presented at First International Conference on Recent Advances in Materials and Manufacturing ICRAMM, Sept 2019, Belagavi, India. This Conference was organised by KLE Dr. KLE MS Sheshgiri College of Engineering & Technology Balgam, Karnataka, India Date of Conference- 13-09-2019-14-09-2019)</i>	Scopus Indexed
19	Pashte, S., Wagle, K., Agrawal, S., Sudhakar, D. S. S., Patil, B.T. & Singraur, D. S. (2020, June). Simulation and optimization for a plastic component. In IOP Conference Series: Materials Science and Engineering (Vol. 872, No. 1, p. 012072). IOP Publishing. doi:10.1088/1757-899X/872/1/012072 https://iopscience.iop.org/article/10.1088/1757-899X/872/1/012072/pdf	Scopus Indexed
20	Prince W Dabreo, Ketaki N Joshi, Bhushan T Patil and Meera B Kokate (2020) Machine vision based interferometry for measurement of flatness error in micro and nano manufacturing. IOP Conf. Series: Materials Science and Engineering, 872 (2020) 012066 https://doi:10.1088/1757-899X/872/1/012066	Scopus Indexed
21	Khatu, R.D., Patil, B.T. , Bhise, D.K. and Vaishnav, H.B., 2022. Design of a fixture for wire-cut EDM: A generic approach. Materials Today: Proceedings, 49, pp.2034-204 https://www.sciencedirect.com/science/article/abs/pii/S2214785321056522?via%3DIihub	Scopus Indexed
22	Meera B. Kokate, Bhushan T. Patil , and Geetha Subramanian (2020) Machine Learning as a Smart Manufacturing Tool. In: Vasudevan H., Kottur V., Raina A. (eds) Proceedings of International Conference on Intelligent Manufacturing and Automation. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-4485-9_37	Scopus Indexed
23	G. Subramanian, B. T. Patil and M. Kokate, "Review of Modern Technologies in Manufacturing Sector," 2019 International Conference on Advances in Computing, Communication and Control (ICAC3), Mumbai, India, 2019, pp. 1-6, doi: 10.1109/ICAC347590.2019.9036835.	Scopus Indexed
24	Joshi K., Patil B.T (2020) Evaluation of Surface Roughness by Machine Vision Using Neural Networks Approach. In: Parwani A., Ramkumar P. (eds) Recent Advances in Mechanical	Scopus Indexed

	Infrastructure. Lecture Notes in Intelligent Transportation and Infrastructure. Springer, Singapore. https://doi.org/10.1007/978-981-32-9971-9_3 (This paper was presented at International Conference on Recent Advances in Mechanical Infrastructure, Ahmedabad, India.This Conference was organised by Institute of Infrastructure, Technology,Research and Management, Ahmedabad, Gujrat, India Date of Conference- 20-21 April 2019)	
25	Joshi K. N., Patil B. T. (2018), Recent Developments in Quality Inspection of Spur Gears using Machine Vision Technology, International Conference on Role of Industrial Engineering in Industry 4.0 Paradigm, organized by IIIIE, Bhubaneshwar in association with SOA, (ICIEIND-2018) <i>(This paper was presented at International Conference on Manufacturing and Industrial Engineering (ICMIE-2017), Aurangabad,Maharashtra, India.This Conference was organised by MGM'sJawaharlal Nehru Engineering College, Aurangabad, Maharashtra, India in association with IIIIE Aurangabad chapter</i> <i>Date of Conference- 14-16 September 2017)</i>	-
26	Joshi K. N., Patil B. T. , (2017),A Review of Machine Vision based Evaluation of Surface Roughness using Texture Analysis Techniques, In International Conference on Manufacturing and Industrial Engineering - 2017, Organized by Indian Institution of Industrial Engineering, (ICMIE-2017) <i>(This paper was presented at International Conference on Manufacturing and Industrial Engineering (ICMIE-2017), Aurangabad, Maharashtra, India.This Conference was organised by MGM'sJawaharlal Nehru Engineering College, Aurangabad, Maharashtra, India in association with IIIIE Aurangabad chapter</i> <i>Date of Conference- 14-16 September 2017)</i>	
27	Rakesh A. Shinde, Bhushan T. Patil , Ketaki N. Joshi, Optimization of Tube Hydroforming Process (without Axial Feed) by Using FEA Simulations,ProcediaTechnology,Volume 23,2016,Pages 398-405,ISSN 2212-0173, https://doi.org/10.1016/j.protcy.2016.03.043 . <i>(This paper was presented at 3rd International Conference on Innovations in Automation and Mechatronics Engineering 2016, ICIAME 2016 05-06 February, 2016 organized by G H Patel College of Engineering & Technology, VallabhVidyanagar 388120)</i>	Scopus Indexed
28	Bhise D.K., Patil B. T. , Shaikh V (2018) A Review of Micro Lubrication for Metal Working Process, International Conference on Role of Industrial Engineering in Industry 4.0 Paradigm, organized by IIIIE, Bhubaneshwar in association with SOA, ICIEIND 2018. <i>(This paper was presented in International Conference on Role of Industrial Engineering in Industry 4.0 Paradigm, organized by IIIIE, Bhubaneshwar</i> <i>Date of Conference- 27-09-2018-30-09-2018)</i>	
29	Deepika Singh Singraur, Dr. Bhushan T. Patil , Yogesh Rampariya(2018), Advancements in Thermoplastic Injection Molding System with Conformally Cooled Channels, International Conference on Role of Industrial Engineering in Industry 4.0 Paradigm, organized by IIIIE, Bhubaneshwar in association with SOA, (ICIEIND- 2018) <i>(This paper was presented in International Conference on Role of Industrial Engineering in Industry 4.0 Paradigm, organized by IIIIE, Bhubaneshwar</i> <i>Date of Conference- 27-09-2018-30-09-2018)</i>	
30	VeeraBhadraRao M., Patil B.T. , Shaikh V.A., Sudhakar D.S.S. (2020) Experimental Performance Evaluation of Mist Cooling Using Biodegradable Coconut Oil in Turning of EN24 Steel in Minimization of Tool Wear, Surface Roughness, and Chip Thickness. In: Parwani A., Ramkumar P. (eds) Recent Advances in Mechanical Infrastructure. Lecture Notes in Intelligent Transportation and Infrastructure. Springer , Singapore doi: https://doi.org/10.1007/978-981-32-9971-9_1	
31	Patil B.T. , NarkhedeB.E.,Mahajan S.K.(2012), "Cloud Computing: Emerging Enterprise Resource Planning Solution for Small and Medium Enterprises",1st International Conference on Best Practices in Supply Chain Management (BPSCM), organized by Siksha 'O' Anusandhan University, Bhubaneswar,22-23 November 2012	

32	Patil B.T. , NarkhedeB.E.,Satao S.M.,D.Chandrababu(2010), "Analysis of Factors Contributing to Successful Implementation of ERP ,"International Conference on Advances in Industrial Engineering Applications,ICAIEA 2010,organized by Anna University,Chennai,6-8 January 2010	
33	Joshi K.N., Patil B. T. , (2018) Machine Vision based Multivariate Statistical Process Monitoring: An Efficient Tool for Quality Control and Management, 3rd National Conference on Industrial Engineering and Technology Management, NCIETM 2018, NITIE	
34	D. S. Singraur , B. T. Patil , Y. Rampariya., (2018) "Advancements in Design And Fabrication of Conformal Cooling Channels for Improvement in Plastic Injection Molding Process", 3rd National Conference on Industrial Engineering and Technology Management, NCIETM 2018, NITIE	
35	Patil B.T. , NarkhedeB.E.,Mahajan S.K.(2010), "Review of Critical Success (CSF) models for Improving the Performance of Enterprise Resource Planning",First National Conference on Product Engineering(NCPE-2010),organized by Shri Guru Gobind Singhji Institute of Engineering &Technology,Nanded, 3-4 December 2010	
36	Patil B.T. , NarkhedeB.E.,Mahajan S.K.(2010), "Factors affecting the Performance of Organization through Enterprise Resource Planning", National Conference and 52 nd convention of Industrial Engineering, organized by Indian Institution of Industrial Engineering and Bhilai Steel Plant ,Bhilai, 26-28 November 2010.	

Book Chapter

Joshi K.N., **Patil B.T.**, Vaishnav H.B. (2020) Principal Components Based Multivariate Statistical Process Monitoring of Machining Process Using Machine Vision Approach. In: Patnaik S. (eds) New Paradigm of Industry 4.0. Studies in Big Data, vol 64. Springer, Cham (**Springer Book Series**) (**Invited by Editor in Chief**)

DOI:https://doi.org/10.1007/978-3-030-25778-1_7

Intellectual Property Rights

Patents/Design Registrations

Sr.No.	Design No.	Application Date	Cbr. No.	Applicant Names	Subject	Status
1	458929-001	15/05/2025	210401	1. Sonia Mahendra Pol 2. Divya Prashant Raut 3. Bhushan Trambyak Patil	Core with Cooling Slot for Thermal Uniformity in Plastic Injection Moulding	Granted
2	458918-001	15/05/2025	210390	1. Sonia Mahendra Pol 2. Divya Prashant Raut 3. Bhushan Trambyak Patil	Mold with Cooling Slot for Thermal Uniformity in Plastic Injection Moulding	Granted
3	379051-001	10-02-2023	201909	1. Sonia Mahendra Pol 2. Dr Bhushan Patil 3. Dr Ketaki Joshi 4. Dr Sujata Deshmukh	Corner set punch for spring back elimination in V sheet metal bending	Granted

5	401316-001	04/12/23	515333	1.Samnwita D.Bagg 2.Dr.Vasim A Shaikh 3.Dr.Bhushan T. Patil 4.Prasad K Sukapure 5.Omkar Walekar 6.Nikhil Tandel 7.Het Shah	Vibration Test Rig	Granted
6	419875-001	13/06/2024	210257	1.Samnwita D.Bagg 2.Dr.Vasim A Shaikh 3.Dr.Bhushan T. Patil 4.Prasad K Sukapure 5.Omkar Walekar	Dynamic Vibration Tester	Granted
7	375204-001	07/12/2022	209459	1. Dr. Ketaki Narendra Joshi 2. Asiya Mohammed Hanif Shaikh 3. Shaun Jose Geevarghese 4. Raghav Omprakash Rawat 5. Ainesh Suresh Shenava 6. Dr. Bhushan Tryambak Patil 7. Dr. Sujata Prashant Deshmukh	Football Throwing	Granted
8	374640-001	25/11/2022	208924	1.Dr. Bhushan Tryambak Patil 2. Janhavi Sachin Shinde 3. Jaydenmario Joseph Fernandes 4. Shubham Dinesh Sawant 5. Aayush Devendra Patil 6. Dr. Sujata Prashant Deshmukh 7. Dr. Ketaki Narendra Joshi	Article for Printing 3D Parts using Electrochemical Deposition	Granted
9	296740	18/08/2017	18458	1. Ketaki Narendra Joshi, 2. Bhushan Tryambak Patil, 3. Hitendra Baboodas Vaishnav,	Article for Image Acquisition and Measurement of Surface and Dimensional Quality	Granted
10	267711	26/11/2014	17730	1.Dr. Bhushan Tryambak Patil 2.Onkar Virupax Potadar 3.Dr. Balkrishna Eknath Narkhede	Projector Image Capturing Device For Measurement Of Geometry Of Gears	Granted

Copyrights						
Sr.No.	Diary No.	Application Date	Class of Work	Applicant Names	Work Title	Status
1	29562/2024-CO/SW	21/09/2024	Computer Software	1.Sonia Pol 2.Omkar Potadar 3.Dr.Bhushan Patil	Program for extracting geometrical parameters for a spur gear	Granted
2	29562/2024-CO/SW	21/09/2024	Computer Software	1.Sonia Pol 2.Dr.Bhushan Patil	Program for Principal Component Analysis and Euclidean Distance for Automated Embryo Quality Assessment in In Vitro Fertilization (IVF) using Images Captured by a Microscopic Robotic Vision System.	Granted
3	SW-20578/2025-CO	02/09/2025	Computer Software	1.Sonia Pol 2.Dr.Bhushan Patil	Program for Configurable Grey Wolf Optimization Framework for Defect Minimization in Plastic Injection Moulding	Granted
4	SW-20579/2025-CO	21/05/2025	Computer Software	1.Sonia Pol 2.Dr.Bhushan Patil	Program for Real-Time Interference Fringe Detection and Curvature-Based Surface classification from video frames in Manufacturing Quality Inspection	Re-Scrutiny
5	SW-20577/2025-CO	21/05/2025	Computer Software	1.Sonia Pol 2.Dr.Bhushan Patil	Program for Customizable Genetic Algorithm Based Optimization Framework for Process Parameter Optimization and Defect Minimization in Plastic Injection Moulding	Re-Scrutiny

Seminar /Workshops/CEP attended/Organized:-

Sr No	Type	Attended/Organized	Title	Offered By	Contribution As	Level	Organized By	Date
1	FDP	Attended	AI-Powered Research Transformation: Tools, Trends & Impact	Khandesh College Education Society's College of Engineering and Management, Jalgaon	Participant	National	Khandesh College Education Society's College of Engineering and Management, Jalgaon	17th Dec. to 21st Dec. 2025 (One week)
2	FDP	Attended	"Recent Advancements in Artificial Intelligence for Thermal Systems and Energy Management"	Dr. D. Y. Patil Institute of Technology, Pimpri, Pune	Participant	National	Dr. D. Y. Patil Institute of Technology, Pimpri, Pune	12th to 18th Dec. 2025 (One Week)
3	FDP	Attended	Fundamentals of Artificial Intelligence	NPTEL-AICTE (By IIT Guwahati)	Participant	National	NPTEL-AICTE (By IIT Guwahati)	July-Oct 2024 (12 Weeks)

4	FDP	Attended	Patent Law for Engineers and Scientists	NPTEL-AICTE (By IIT Madras)	Participant	National	NPTEL-AICTE (By IIT Madras)	July-Oct 2024 (12 Weeks)
5	FDP	Attended	Module 7 - Creative Problem Solving , Innovation and Meaningful R & D	National Initiative for Technical Teachers Training (NITTT):-	Participant	National	National Initiative for Technical Teachers Training (NITTT):-	Aug-Feb 2024
6	FDP	Attended	Module 4 - Module 4 Instructional Planning and Delivery	National Initiative for Technical Teachers Training (NITTT):-	Participant	National	National Initiative for Technical Teachers Training (NITTT):-	Aug-Feb23
7	FDP	Attended	Module 3 - Communication Skills Modes & Knowledge Dissemination	National Initiative for Technical Teachers Training (NITTT):-	Participant	National	National Initiative for Technical Teachers Training (NITTT):-	Aug-Feb23
8	FDP	Attended	Module 2 - Professional Ethics & Sustainability	National Initiative for Technical Teachers Training (NITTT):-	Participant	National	National Initiative for Technical Teachers Training (NITTT):-	Aug-Feb23
9	FDP	Attended	Module 1 - Orientation Towards Technical Education and Curriculum Aspects	National Initiative for Technical Teachers Training (NITTT):-	Participant	National	National Initiative for Technical Teachers Training (NITTT):-	Aug-Feb23
10	FDP	Attended	Global Online Certification Course on Supply Chain Digitization and Management	NITIE,Mumbai	Participant	International	NITIE,Mumbai	16/01/2021 To 21/03/2021 (Online)
11	FDP	Attended	Machine Learning	Fr.CRCE,Bandra	Participant	National	FR.CRCE,Bandra	28th Feb & 22nd March 2019 (FDP 2 days)
12	Seminar	Attended	Elsevier Connect	Elsevier	Participant	National	Elsevier	26 Dec 2018
13	FDP	Attended	Hands on training on Computational Fluid Dynamics using Simulations	Fr.CRCE	Participant	National	FR.CRCE,Bandra	03-02-2017:04-02-2017
14	FDP	Attended	Simulation of Manufacturing System	Fr.CRCE and IIE,Mumbai Chapter	Participant	National	FR.CRCE,Bandra	13-03-2015:14-03-2015
15	FDP	Attended	Project Management Tools and Techniques	VJTI and PMI	Participant	National	VJTI and PMI	22-08-2013:26-08-2013

16	Seminar	Attended	Practice Leaders Forum 2013	NITIE ,Mumbai and POMS,USA	Participant	International	NITIE ,Mumbai and POMS,USA	23-12-2013 :24-12-2013
17	Seminar	Attended	Airships	VJTI,Mumbai	Participant	National	VJTI,Mumbai	30-01-2013 : 30-01-2013
18	STTP	Attended	Introduction to Research Methodologies	IIT,Mumbai	Participant	National	VJTI,Mumbai	25-06-2012 : 04-07-2012
19	Seminar	Attended	Doctoral Consortium	None	Delivered Seminar	National	VJTI,Mumbai	16-03-2012 : 16-03-2012
20	STTP	Attended	Research Methodology:Tools And Techniques	IIT,Roorkee	Participant	International	IIT, Roorkee	12-12-2011 : 16-12-2011
21	Seminar	Attended	MATLAB And Simulink For Engineering Education	Mathworks	Participant	National	ADCC	23-09-2011 : 23-09-2011
22	CEP	Attended	Imagineering Connect	L&T,Mumbai	Participant	National	L&T,Mumbai	02-06-2009 : 20-06-2011
23	CEP	Attended	AUTOCAD 2008	(ADCC Infocad Pvt Ltd)	TRAINEE	Regional	Authorised Training Centre (ADCC Infocad Pvt Ltd)	14-01-2008 : 19-01-2008
24	STTP	Attended	Towards Effective teaching and Stress Management	Datta Meghe College Of Engineering, Navi Mumbai	Participant	National	Datta Meghe College Of Engineering, Navi Mumbai	05-01-2007 : 16-01-2007
25	STTP	Attended	Mechatronics: A Journey Of Automation Technology	Lokmanya Tilak College Of Engineering, Navi Mumbai	Participant	National	Lokmanya Tilak College Of Engineering, Navi Mumbai	18-12-2006 : 22-12-2006
26	Seminar	Organized	SIX SIGMA	None	Resource Person	National	MCT's Rajiv Gandhi Institute Of Technology, Mumbai	08-05-2006 : 12-05-2006
27	STTP	Attended	Project Management	MCT's Rajiv Gandhi Institute of Technology	None	National	MCT's Rajiv Gandhi Institute of Technology ,Mumbai	08-05-2006 : 12-05-2006

Certifications: -

Sr.No.	Certification Details/Title	Offered by	Duration	Other details
1	Patent Law for Engineers and Scientists	NPTEL-AICTE (By IIT Madras)	July-Oct 2024 (12 Weeks)	72/100 (Elite Category)
2	Fundamentals of Artificial Intelligence	NPTEL-AICTE (By IIT Guwahati)	July-Oct 2024 (12 Weeks)	
3	Global Online Certification Course on Supply Chain Digitization and Management	NITIE,Mumbai	16-01-2021 to 21-03-2021 (30 Hours)	Course Instructor-David Simchi (MIT,USA) and Dr.Manoj Tiwari,NITIE,Mumbai

Work as reviewer/Sessions chaired: -

Sr No	Reviewer Type	Title	Journal / Conference Name	Year
1	Session Chair	Conference on Technologies for Future Cities 2023 (CTFC-2023)	Mahatma Education Society's Pillai College of Engineering, New Panvel	6-7 October 2023
2	Session Chair	Sardar Patel International Conference (SPICON-2022)	Sardar Patel College of Engineering, Mumbai	22-23 December 2022
3	Session Chair	Doctoral Consortium event on "Embracing Industry 4.0 Technologies for Sustainable Growth (ICEI 4.0)".	Rajiv Gandhi Institute of Technology, Mumbai	22nd April 2022
4	Session Chair	IEEE Conference on Technologies for Future Cities-2021	Pillai College of Engineering, New Panvel	08-09 October 2021
5	Session Chair	"International Conference on Advances in Design, Manufacturing and Thermal Engineering (ICDMT)"	International Conference on Manufacturing & Industrial Engineering (ICMIE-2017) organised by IIIE Aurangabad Chapter in association MGM's JNEC, Aurangabad	Feb 2018
6	Session Chair	International Conference on Manufacturing & Industrial Engineering (ICMIE-2017)	International Conference on Manufacturing & Industrial Engineering (ICMIE-2017) organised by IIIE Aurangabad Chapter in association MGM's JNEC, Aurangabad	2017
7	Session chair	International conference on Nascent Technologies in Engineering - (ICNTE-2017)	International conference on Nascent Technologies in Engineering - (ICNTE-2017)	28 January 2017 organized by Fr.CRIT,Vashi Navi Mumbai
8	Session chair	International conference on "Advances in Science and Technology - (ICAST-2015)	international conference on "Advances in Science and Technology - (ICAST-2015)	9th December, 2015 organized by SCOE, Navi Mumbai in association with University of Mumbai
9	Reviewer for Journal	Industrial Engineering Journal	Industrial Engineering Journal	Reviewed Many papers till now

Resource Person/Guest Lectures Delivered: -

1. Delivered lecture on Designing Course Structure and Syllabus organized Rajiv Gandhi Institute of Technology, Mumbai (Resource person for FDP) on 5th May 2026
2. Delivered lecture on Mathematics for Research Exploration at Fr. Conceicao Rodrigues College of Engineering on 10 April 2024 organized by Computer Engineering Department (Resource Person for FDP)
3. Delivered lecture on Intellectual Property Rights and IP Management for Start Up at Fr. Conceicao Rodrigues College of Engineering on 7 March 2024 organized by R&D and IPR Cell
4. Delivered Invited Lecture on "Research Methodology" at Pam.V.B.Kolte College of Engineering, Malkapur during FDP organised on 2-6 May 2023
5. Delivered Invited Lecture on "Patenting and IPR" at Xavier institute of Engineering ,Bandra on 30/08/2021
6. Delivered Invited Lecture on "Guidelines for Publishing Research work for PhD Scholars" at St. John College of Engineering and Management, Palghar during FDP on Five Days Online Faculty Development Program (FDP) during 29th June – 03rd July 2020
7. Delivered invited lecture on-Statistical Analysis in Research using Open-Source Software-JAMOVİ at P. R. Pote College of Engineering and Management, Amravati (17 June 2021)
8. Resource person for Ph D Skill development Lab at K J Somaiya College of Engineering, Mumbai
9. Guest faculty to teach a full course on Operations Planning under Uncertainty for post graduate program at NITIE,Mumbai
10. Delivered session on "IPR for students and faculty members" on 10th January 2019 under initiative by MHRD IIC-Fr.CRCE. Talk was majorly focusing on Patents, Designs, Trademarks and other IPR related issues.
11. Invited Lecture on –Introduction to SPSS at Rajiv Gandhi Institute of Technology, Mumbai on 31/03/2019
12. Invited Lecture on –Applications of Statistical Tools in Research at Rajiv Gandhi Institute of Technology, Mumbai on 29/03/2019
13. Delivered Lecture on- Publications in Predatory Journals- Cause of Pollution in Research Culture at Fr CRCE,Bandra (March-2018)
14. Invited Lecture on –Research Methodology at Fr.CRCE,Mumbai (Feb 2018) for Two days FDP on Research Methodology and Statistical Techniques in Research
15. Invited Lecture on –"Approaches for Successful Ph.D. Research Completion in Manufacturing Technology area" at Jondhale College of Engineering,Dombivili (Feb 2018)
16. Delivered Seminar on "Introduction to application of multivariate tools in research using statistics based softwares" at SIES graduate school of Technology ,Nerul,Navi Mumbai
17. Worked as resource person and delivered lecture on "Data Analysis using SPSS" on 30/06/2015 at RGIT, Versova in Faculty Development Program on "Recent Trends in Manufacturing Practices"
18. Delivered lecture on "Research Methodology" at VIVA institute of Technology, Virar on Friday 26th June 2015.

Contribution and Responsibilities handled in Academic Experience:

- Contributed to Syllabus Revision Committee of Mechanical branch at undergraduate and post graduate level for Mumbai University
- Contributed to student's paper Presentation Program as a session Judge to Mumbai University Colleges
- Member of Departmental Advisory Board at Rajiv Gandhi Institute of Technology, Mumbai
- Worked as member of selection committee for selection of candidates for admission to Ph.D. (Technology) program in mechanical engineering at various institutes in Mumbai
- Worked as member of selection committee for faculty recruitment at various institutes in Mumbai
- Subject Expert in selection committee for CAS (Assistant Professor and Professor at KJSCOE,Mumbai)
- Worked as member of committee for selection of teachers at DAV Public School, Airoli

- Member of local inquiry committee for inspection of Engineering colleges in Mumbai for affiliation of UG and PG courses
- Worked as Vice Chancellors Nominee for Board of Studies in Mechanical Engineering by University of Mumbai at Autonomous College-Thakur College of Engineering and Technology, Mumbai
- Working as Vice Chancellors Nominee for Academic Council at Autonomous College-Sardar Patel College of Engineering, Mumbai
- Worked as Vice Chancellors Nominee for Board of Studies in Mechanical Engineering by University of Mumbai at Pillai College of Engineering and Technology, Mumbai

Important Contributions at Fr CRCE,Bandra:-

1. Head of Department (Department of Mechanical Engineering)
2. Dean (Student Welfare)
3. Dean (Research and Development),
4. Member of Governing Council
5. Member of Executive Committee
6. Member of College Development Committee
7. Member of Internal Quality Assurance Cell
8. Conference Chair for International Conference ICAC3
9. Design and Development of API based performance appraisal System
10. Instrumental in bringing necessary approvals for Research Centre
11. Active contribution in NBA and NAAC process
12. Coordinator for IPR cell
13. In Charge for grievance redressal cell

Awards Received: -

1. Awarded as Fellow Member by Indian Institution of Industrial Engineering
2. Honoured with prestigious 'Special Award' from Indian Institution of Industrial Engineering for continuous innovative development of Industrial Engineering in its operations and significant encouragement to the industries in India
3. Received 'Best Paper Presentation Prize for the First Rank' for the research paper jointly authored Ms Ketaki Joshi and presented by them at International Conference on "Role of Industrial Engineering in Industry 4.0 Paradigm (ICIEIND)" organized by IIIE Odisha chapter in collaboration with Siksha 'O' Anusandhan (Deemed to be University), at Institute of Technical Education and Research (ITER) from 27th-30th September 2018
4. Received Best paper award at National Conference organized by NITIE (2018)

Areas of Interest: -

Decision Making in Uncertainty, Metrology, Quality Control, Performance evaluation of Information Systems, Design of Experiments, Mechatronics, Automation, Engineering Graphics, Research Methodologies, Multivariate Data analysis, Machine Vision Systems, Machine Learning, Information Systems in Manufacturing Industries, Enterprise Resource Planning

Software Proficiency: -

- AUTOCAD,
- Hyper form,

- LS-DYNA,
- SPSS,
- AMOS
- MATLAB
- JAMOVI
- JASP

Personal Information: -

Date of Birth- 29/11/1974

Sex-Male

Address for Correspondence-

Professor (Mechanical Engineering Department) ,

Fr.Conceicao Rodrigues College of Engineering, Fr.AgnelAshram, BandStand,Bandra(W),

Mumbai-400050

bhushan.patil@frcrce.ac.in

bhushantpatil@gmail.com

Declaration:-

I hereby declare that the information given above is true & correct to the best of my knowledge & belief

Dr.BhushanTryambak Patil.