

**MET's Institute of Engineering,
Bhujbal Knowledge City, Nashik
Department of Mechanical Engineering
Research Centre (Mechanical Engineering)**

List of Publications

Name of Research Scholar: Shubham R. Suryawanshi

Name of Research Supervisor: Dr. J. T. Pattiwar

1. S. R. Suryawanshi, J. T. Pattiwar, "Experimental Study on an Influence of Bearing Geometry and TiO₂ Nanoparticle Additives on the Performance Characteristics of Fluid Film Lubricated Journal Bearing", *Tribology in Industry*, vol. 41, no. 02, pp. 220-236, 2019.
2. S. R. Suryawanshi, J. T. Pattiwar, "Tribological Performance of Commercial Mobil Grade Lubricants Operating with Titanium Dioxide Nanoparticle Additives", *Industrial lubrication and Tribology*, vol. 71, no. 02, pp. 188-198, 2019.
3. S. R. Suryawanshi, J. T. Pattiwar, "Effect of TiO₂ Nanoparticles Blended with Lubricating Oil on the Tribological Performance of the Journal Bearing", *Tribology in Industry*, vol. 40, no. 03, pp. 370-391, 2018.
4. S. R. Suryawanshi, J. T. Pattiwar, "An Overview on Theoretical Analysis of Hydrodynamic Journal Bearing Considering Thermal Effects", *International Journal of Machine Design and Manufacturing*, vol. 01, no. 02, pp. 45-57, 2016.
5. S. R. Suryawanshi, J. T. Pattiwar, "Study on Influence of Whirl Instability on the Performance of hydrodynamic Journal Bearing", *International Journal of Recent Researches in Science, Engineering & Technology*, vol. 3, no. 12, 2015.
6. S. R. Suryawanshi, J. T. Pattiwar, "A Technical Review on Design and Thermal Behavior of Non-circular Hydrodynamic Journal Bearing using CFD Technique",

Spvryan's International Journal of Engineering Sciences & Technology (SEST), vol. 2, no. 4, pp. 1-5, 2015.

7. S. R. Suryawanshi, J. T. Pattiwar, "Performance Analysis of Hydrodynamic Journal Bearing using CFD Approach", *An International Conference on Tribology (TRIBOINDIA 2018)*", held at V.J.T.I., Mumbai between 13th to 15th Dec. 2018.
8. S. R. Suryawanshi, "Performance and Comparative Analysis of Non-Circular Hydrodynamic Journal Bearing Using Various Grades of Oils", *Innovation-2017 Regional Research Conference*, held at Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College, Nashik on 28th Nov. 2017.
9. S. R. Suryawanshi, J. T. Pattiwar, "An Effect of Bearing Geometry on Performance of Hydrodynamic Journal Bearing", *International Conference on "Recent Trends in Mechanical Engineering (ICRTME-16)"*", held at MET's IOE, Nashik between 29th to 30th Dec. 2016.
10. S. R. Suryawanshi, J. T. Pattiwar, "Performance Analysis of Hydrodynamic Journal Bearing for Thermal Effects", *National Tribology Conference (NTC 2016)*, held at I.I.T., Varanasi (B.H.U) between 8th to 10th Dec. 2016.
11. S. R. Suryawanshi, J. T. Pattiwar, "A Study on Theoretical Approach to analyze the Performance of Hydrodynamic Journal Bearing for Thermal Effects", *National Conference on "Recent Advances in Manufacturing"* held at S.V.N.I.T., Surat between 12th to 14th May 2016.
12. S. R. Suryawanshi, J. T. Pattiwar, "Evaluation of Performance of Hydrodynamic Journal Bearing Considering the Whirl Instability", *National Conference on "Advanced Technology and Innovations in Mechanical Engineering"* held at Sinhgad Academy of Engineering, Kondhwa, Pune between 22nd to 24th January 2015.
13. S. R. Suryawanshi, J. T. Pattiwar, "A Technical Review on Thermo-hydrodynamic Analysis of Non-Circular Journal Bearing Considering Various Viscous Fluids", *National Conference on "Advanced Technology and Innovations in Mechanical Engineering"* held at Sinhgad Academy of Engineering, Kondhwa, Pune between 22nd to 24th January 2015.
14. S. R. Suryawanshi, J. T. Pattiwar, "Design & Thermo-hydrodynamic Analysis of Elliptical Journal Bearing using CFD Technique", *National Level Doctoral Consortium for Research Scholar in "Mechanical, Industrial, Information Technology & Computer Engineering"* held at MET's Institute of Engineering, BKC, Nashik between 05th to 07th January, 2015

Name of Research Scholar: Harshal A. Chavan

Name of Research Supervisor: Dr. V. P. Wani

1. Chavan, H. and Wani, V. (2018), "Design of combination tool for an automotive component with process optimization in metal forming", *International Journal on Interactive Design and Manufacturing (IJIDeM)*, doi:10.1007/s12008-018-0466-8.
2. Chavan, H. and Wani, V. "Evaluation of forming parameters affecting the grooving process for automotive connecting rod: an experimental and statistical approach", *International Journal of Productivity and Quality Management*. (Paper accepted on 19 May, 2018).
3. Chavan, H. and Wani, V. "Design and analysis of progressive tool for an automobile component", *Journal of Physics: Conference Series*. (Paper accepted on 29 Jan, 2019).
4. Chavan, H. and Wani, V. "A Review on optimization and analysis of various sheet metalforming processes", *Journal of Manufacturing Technology & Research*. (Paper accepted on 02 March, 2019)
5. Chavan, H. and Wani, V. "Design and analysis of progressive tool for an automobile component", in *2nd International Conference on New Frontiers in Engineering, Science & Technology NFEST-2019*. Department of Mechanical Engineering, NIT Kurukshetra, 2019.
6. Chavan, H. and Wani, V. "Assessment of forming parameters influencing grooving process of connecting rod: A comprehensive experimental and statistical study.", in *4th International Conference on Production and Industrial Engineering, CPIE-2016*, Department of Industrial & Production Engineering, NIT Jalandhar., 2016, pp. 1-10.
7. Chavan, H. and Wani, V. "An Experimental and Statistical method to optimize the Grooving Process Parameters", in *ICRTME-2016*, Department of Mechanical Engineering, MET's IOE, Nashik, 2016.
8. Chavan, H. and Wani, V. "A Critical Review on Optimization of Sheet Metal Forming processes", in *ISDSI international conference*, GIM, Goa., 2016.

9. Chavan, H. and Wani, V. “A Review on Optimization and Analysis of various Sheet Metal Forming processes”, paper selected at *international science and Technology conference (ISTEC), Doha, Ad Dawhah, Katar. ISSN 2146- 7382., 2014.*

Name of Research Scholar: Tushar Y. Badgujar

Name of Research Supervisor: Dr. V. P. Wani

1. Badgujar, T. Y., Wani, V. P., Prediction of burr height formation in sheet metal trimming processes using acoustic signals and an artificial neural network, *International Journal of Mechatronics and Manufacturing Systems* (accepted on 17th October 2022).
2. Badgujar, T. Y., Wani, V. P., Wavelet transform and mel-frequency cepstral coefficient-based feature extraction of the sheet metal trimming process to study burr formation, *International Journal of Mechatronics and Manufacturing Systems*, Vol. 15, No. 1, 2022, pp. 20-36.
3. Badgujar T. Y., Bhavsar K. R., Wani V. P., “Acoustic Based Condition Monitoring of Stamping Process : A Review,” in *International Conference on Recent Trend in Mechanical Engineering for Sustainable Growth ICRTME-2016*, 2016, pp. 1–5.
4. Badgujar, T. Y., Wani, V. P. (2016). Optimization of Stamping Process Parameters for Material Thinning With Design of Experiment Approach. *IV International Conference on Production and Industrial Engineering, CPIE-2016*, 1–9.
5. Badgujar, T. Y., Wani, V. P. (2017). Stamping Process Parameter Optimization with Multiple Regression Analysis Approach. *Materials Today: Proceedings*, 5(2), 4498–4507. <https://doi.org/10.1016/j.matpr.2017.12.019>
6. T. Y. Badgujar, V. P. Wani, “Performance Study of Stamping Process Using Condition Monitoring: A Review,” in *Proceedings of International Conference on Intelligent Manufacturing and Automation, Lecture Notes in Mechanical Engineering*, 2019, pp. 521–529.
7. T. Y. Badgujar, R. N. Chandore, V. P. Wani, “Detection of Punch Wear in Stamping Process Using Acoustic Emission,” in: Shanker K., Shankar R., Sindhwani R. (eds) *Advances in Industrial and Production Engineering. Lecture Notes in Mechanical Engineering*. Springer, Singapore, 2019, pp. 563–572.

Name of Research Scholar: Raghavendra R. Barshikar

Name of Research Supervisor: Dr. P. R. Baviskar

1. R. R. Barshikar, P. R. Baviskar, "Evaluation of Performance of Vibration Signatures for Condition Monitoring of Worm Gearbox by Using ANN", *International Journal on Interactive Design and Manufacturing*, <https://doi.org/10.1007/s12008-023-01268-x>
2. R. R. Barshikar, P. R. Baviskar, "Experimental Investigation for Fault Diagnosis of a Single Stage Worm Gearbox Using Response Surface Methodology", *Nigerian Journal of Technological Development*, Vol. 20, Issue 02, 2022, pp. 11-22.
3. R. R. Barshikar, P. R. Baviskar, "Fault Diagnosis of a Worm Gearbox by Using Denoise Vibration Signature- A Review", *4th International Conference on Advances in Mechanical Engineering (ICAME 2022)*, SRM Institute of Science and Technology.
4. R. R. Barshikar, P. R. Baviskar, "Need of Fault Detection of Worm Gearbox", *3rd International Conference on Emerging Trends in Engineering and Technology (ICETET)*, SIEM, Nashik.

Name of Research Scholar: Yuvraj B. Choudhary

Name of Research Supervisor: Dr. V. P. Wani

5. Yuvraj B. Chaudhary, Vijay P. Wani, “Review on Role of Advance Modern Manufacturing Technology in Micro Small and Medium Enterprises (MSMEs),”, *International Journal of Engineering Research and Technology*, Vol. 05, Issue 02, 2017, pp. 29-31.

Name of Research Scholar: Ulhaskumar V. Patil

Name of Research Supervisor: Dr. V. P. Wani

1. U. V. Patil and V. P. Wani, “Study of Theory of Constraints in the Context of production Planning and Control” is accepted and presented in the International Conference on Physical Science and Technology (ICPST-2022), by Institute for Engineering Research and Publication (IFERP).
2. U. V. Patil and V. P. Wani, “production Planning Process Improvement using Theory of Constraints” is accepted and presented in the International Conference on Physical Science and Technology (ICPST-2022), by Institute for Engineering Research and Publication (IFERP).

Name of Research Scholar: Sharad K. Nirgude

Name of Research Supervisor: Dr. S. D. Kalpande

1. S. K. Nirgude and S. D. Kalpande, Parametric optimization of friction stir welding of AA 6101 T-64 and pure Cu using response surface methodology, *International Journal on Interactive Design and Manufacturing (IJIDeM)*, <https://doi.org/10.1007/s12008-023-01207-w>

Name of Research Scholar: Amol P. Vadnere

Name of Research Supervisor: Dr. S. D. Kalpande

1. A. P. Vadnere, S. D. Kalpande, "A review on effects of process parameters in milling challenging materials under nanofluid-based MQL conditions", *Industrial Lubrication and Tribology*, Vol. 75 No. 4, pp. 361-371, 2023. <https://doi.org/10.1108/ILT-01-2023-0010>
2. A P Vadnere, S D Kalpande, "Potential of Nanofluid based Minimum Quantity Lubrication in machining difficult-to-cut materials: A review on the perception of Sustainable Manufacturing", Second International Conference on "Recent Advances in Materials, Manufacturing, and Machine Learning 2023", Yashwantrao Chavan College of Engineering, Nagpur, 2-4 Feb. 2023.