MKSSS'S Cummins College of Engineering for Women, Pune Department of Mechanical Engineering

List of Journal Papers (SCI / Scopus)

Academic Year of Publications: 2023-24

- 1. Kedar SA, More GV, Watvisave DS, Shinde HM. A critical review on the various techniques for the thermal performance improvement of solar air heaters. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. 2023 Oct 2;45(4):11819-52.
- 2. Mishra P, Srinivas NC, Singh V. A Comparative Study of Ratcheting Fatigue Behavior of Modified 9Cr–1Mo Steel and Inconel 617 Alloy at Homologous Temperature of 0.42. steel research international. 2024 Apr;95(4):2300281.
- 3. Mishra P, Srinivas NS, Singh V. Pre-ratcheted Tensile Properties of Nickel Base Alloy IN-617 at RT. Transactions of the Indian Institute of Metals. 2024 Apr;77(4):931-9.
- 4. Anerao P, Kulkarni A, Munde Y. A review on exploration of the mechanical characteristics of 3D-printed biocomposites fabricated by fused deposition modelling (FDM). Rapid Prototyping Journal. 2023 Dec 20; 30(3):430-40.
- 5. Shinde HM, Bewoor AK, Kumar R, Elsheikh AH, Singh DV, Shanmugan S, Panchal H, Alrubaie AJ, Jaber MM. Engine oil quality deterioration estimation using an integrated sensory system. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2023 Dec; 237(6):2257-67.
- 6. Gupta V, Mishra P, Mishra D, Ghosh P. Analysis of Heat Flux Quenching of a SS-316L Rod Using Nanofluids. Heat Transfer Engineering. 2024 Jan 2:1-11.
- 7. More G. V. Kedar S. A., Watvisave D. S., Bhosale A. A., Shinde H. M. AI based Solar Thermal Energy Utilisation in India. International Journal of Intelligent Systems and Applications in Engineering, 2024 March, 12, (18s):166-172.
- **8.** Mithul Naidu, Ajit Bhosale, Mahesh Gaikwad, Sachin Salunkhe, Robert Čep and Emad bouel Nasr Tribological Investigations of Hemp Reinforced NAO Brake Friction Polymer Composites with Varying Percentage of Resin Loading Frontiers in Materials. 2024 February, 12.
- 9. Sonali Sabale, Deepak Watvisave, Ravikant Nanwatkar, Ajit Bhosale, Shridhar Kedar, Shekhar Chavan Investigations of Mechanical Properties and Maximum Load Capacities under Abuse Testing of Lithium Ion Battery. Journal of Electrical Systems, 2024 February, 20, (2), 2467-2483.

Academic Year of Publications: 2022-23

- 1. Limkar B, Vaidya V, Chandekar G. Explicit Novel Nonlinear Regression Method to Find Radial Natural Frequencies of Hemispherical Resonator. Journal of Vibration Engineering & Technologies. 2023 Jul;11(5):2419-28.
- 2. Shinde AS, Siva I, Munde Y, Sultan MT, Hua LS, Shahar FS. Numerical modelling of drilling of fiber reinforced polymer matrix composite: A review. Journal of Materials Research and Technology. 2022 Sep 1;20:3561-78.
- 3. Shinde A, Siva I, Munde Y, Sankar I, Sultan MT, Mustapha F, Shahar FS, Najeeb MI. The impacts of graphene dosage on the friction and wear performance of a graphene-reinforced silicone rubber nano composite. Journal of Materials Research and Technology. 2022 Nov 1; 21:1570-80.

- 4. Shinde AS, Siva I, Munde Y, Sankar I, Sivakumar D. Assessment of friction and wear as a function of the pressure applied to the CNT-filled silicone rubber nanocomposite pins. International Journal of Surface Science and Engineering. 2023;17(1):58-71.
- 5. Naidu M, Bhosale A, Munde Y, Salunkhe S, Hussein HM. Wear and friction analysis of brake pad material using natural hemp fibers. Polymers. 2022 Dec 30;15(1):188.
- 6. Prabhune S, Munde Y, Shinde A, Siva I. Appraising the acoustic performance and related factors of natural fiber: A review. Journal of Natural Fibers. 2022 Nov 28;19(16):13475-94.
- 7. Shinde A, Siva I, Munde Y, Sankar I, Sultan MT, Shahar FS, Gaff M, Hui D. Appraising the dielectric properties and the effectiveness of electromagnetic shielding of graphene reinforced silicone rubber nanocomposite. Nanotechnology Reviews. 2023 Jun 17;12(1):20220558.
- 8. Awadhani LV, Bewoor A. Behavior of Composite Bolted Joint Under Tension-Shear and Compression-Shear Load Cases. ratio. 2023;10(2):1-.
- 9. Khare A, Bewoor A, Kulkarni V. A New Approach to Artefact Material Selection for Interim Checks of CMMs that uses MADM Tools. MAPAN. 2023 Mar;38(1):193-202.

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- 1. S. S. Patil, A. K. Bewoor, and R. B. Patil, "Availability Analysis of a Steam Boiler in Textile Process Industries Using Failure and Repair Data: A Case Study," ASCE-ASME J Risk and Uncert in Engrg Sys Part B Mech Engrg, vol. 7, no. 2, May 2021.
- 2. R. B. Patil, M. Arezki Mellal, A. K. Bewoor, and S. Al-Dahidi, "Reliability, Maintainability, and Availability Analysis of a Computerized Numerical Control Machine Tool Using Markov Chains," Acta Polytechnica Hungarica, vol. 18, no. 6, pp. 45–70, 2021.
- 3. B. Limkar and G. Chandekar, "Dynamic analysis of Sitar: A comparative study of operational and experimental modal analysis," Journal of Vibration and Control, p. 107754632110421, Jan. 2022.
- 4. S. Avinash, S. Irulappasamy, C. P. Selvan, M. Sultan, L. S. Hua, and Y. Munde, "Abrasive Machining Characteristics and Prediction Model for Sisal/Polyester Sandwich Composite," Journal of Natural Fibers, pp. 1–17, Sep. 2021.
- 5. A. Shinde, I. Siva, Y. Munde, V. Deore, M. T. Hameed Sultan, A. U. Md Shah, and F. Mustapha, "Testing of Silicon Rubber/Montmorillonite Nanocomposite for Mechanical and Tribological Performance," Nanomaterials, vol. 11, no. 11, p.1-14, Nov. 2021.
- 6. G. V. More, Y. V. Hanumantha Rao, S. A. Kedar, and S. H. Gawande, "Biodiesel production from DK oils using Taguchi L9 techniques: characterization and thermogravimetric study of combustion characteristics," Journal of Thermal Analysis and Calorimetry, vol. 147, no. 12, pp. 7043–7062, Aug. 2021.
- 7. N. R. Kolhalkar, V. L. Krishnan, A. A. Pandit, R. G. Somkuwar, and J. A. Shaaikh, "Design and performance evaluation of a novel end-effector with integrated gripper cum cutter for harvesting greenhouse produce," International Journal of Advanced Technology and Engineering Exploration, vol. 8, no. 84, Nov. 2021.
- 8. M. Naidu, A. Bhosale, Y. Munde, and I. Siva, "Tribological performance of hemp fibre reinforced phenolic composites: a brake pad material," International Journal of Surface Science and Engineering, vol. 16, no. 1, p. 52, 2022
- 9. N. R. Kolhalkar, V. L. Krishnan, R. G. Somkuwar, and A. A. Pandit, "Design of IoT-based Mechatronic Module for Real-Time Yield Monitoring During Harvesting of Greenhouse Produce and Vineyards," International Review of Mechanical Engineering (IREME), vol. 16, no. 1, p. 48, Jan. 2022

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- 1. H. P. Jagtap, A. K. Bewoor, R. Kumar, M. H. Ahmadi, and L. Chen, "Performance analysis and availability optimization to improve maintenance schedule for the turbo-generator subsystem of a thermal power plant using particle swarm optimization," Reliability Engineering & System Safety, vol. 204, p. 107130, Dec. 2020.
- 2. H. Pingulkar, A. Mache, Y. Munde, and I. Siva, "Synergy of Interlaminar Glass Fiber Hybridization on Mechanical and Dynamic Characteristics of Jute and Flax Fabric Reinforced Epoxy Composites," Journal of Natural Fibers, pp. 1–16, Dec. 2020.
- 3. A. Sharma, Y. Munde, and V. Kushvaha, "Representative volume element based micromechanical modelling of rod shaped glass filled epoxy composites," SN Applied Sciences, vol. 3, no. 2, Jan. 2021.
- 4. Mithul Naidu, Dipak Bacche, Ajit Bhosale, "Influence of Temperature on the Plant Fiber Reinforced Brake Pad Materials: A Review," "Solid State Technology, vol.63, no.6, pp.2388-2404, Oct 2020
- 5. Mithul Naidu, Dipak Bacche, Hrishikesh Avhad, Siddhesh Akolkar, Shubham Dhage, Ajit Bhosale, "An Insight on the Influence of Fiber Content on Plant Fiber Reinforced Brake Pads," International Journal of Future Generation Communication and Networking, vol.13 no.2, pp 1070-1082, July 2020
- 6. S A Kedar G.Murali A.K.Bewoor, "Effective hybrid solar groundwater desalination in rural areas," International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, Vol.12 no.3, March 2021
- 7. S. Kedar, G. Murali, and A. K. Bewoor, "Mathematical Modelling and Analysis of Hybrid Solar Desalination System Using Evacuated Tube Collector (ETC) and Compound Parabolic Concentrator (CPC)," Mathematical Modelling of Engineering Problems, vol. 8, no. 1, pp. 45–51, Feb. 2021.
- 8. S. A. Kedar, A. K. Bewoor, G. Murali, R. Kumar, M. Sadeghzadeh, and A. Issakhov, "Effect of Reflecting Material on CPC to Improve the Performance of Hybrid Groundwater Solar Desalination System," International Journal of Photoenergy, vol. 2021, pp. 1–13, Apr. 2021.
- 9. B. S. Limkar and G. S. Chandekar, "Structural dynamic analysis of a musical instrument: tibetan singing bowl," Journal of Mathematics and Music, pp. 1–16, Jan. 2021.

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- 1. H. Jagtap, A. Bewoor, R. Kumar, M. H. Ahmadi, and G. Lorenzini, "Markov-based performance evaluation and availability optimization of the boiler–furnace system in coal-fired thermal power plant using PSO," Energy Reports, vol. 6, pp. 1124–1134, Nov. 2020.
- 2. H. P. Jagtap, A. K. Bewoor, and R. Kumar, "Failure analysis of induced draft fan used in a thermal power plant using coordinated condition monitoring approach: A case study," Engineering Failure Analysis, vol. 111, p. 104442, Apr. 2020.
- 3. S. S. Patil and A. K. Bewoor, "Reliability analysis of a steam boiler system by expert judgment method and best-fit failure model method: a new approach," International Journal of Quality & Reliability Management, vol. 38, no. 1, pp. 389–409, May 2020.
- 4. H. P. Jagtap, A. Bewoor, and R. Kumar, "Thermal Power Plant Condenser Fault Diagnosis Using Coordinated Condition Monitoring Approach," Instrumentation Mesure Métrologie, vol. 18, no. 3, pp. 223–235, Aug. 2019.
- 5. Abhishek D Patange, AK Bewoor, SP Deshmukh, SS Mulik, SS Pardeshi, R Jegadeeshwaran, "Improving Program Outcome Attainments using Project Based Learning approach for: UG

- Course-Mechatronics," Journal of Engineering Education Transformations Vol.33, No.1, pp. 1-8, Nov. 2019
- 6. P. Chaware and C. M. Sewatkar, "Flow Transitions for Flow Through a Pipe With a Twisted Tape Insert," Journal of Fluids Engineering, vol. 141, no. 11, May 2019.
- 7. D. J. R, V. Arumugaprabu, and Y. S. Munde, "Constitutive models to predict the mechanical performance of sansevieria cylindrica reinforced vinyl ester composite," Materials Research Express, vol. 6, no. 9, p. 095310, Jul. 2019.
- 8. S. A. Kedar, K. A. Raj, and A. K. Bewoor, "Performance analysis of hybrid solar desalination system using ETC and CPC," SN Applied Sciences, vol. 1, no. 9, Aug. 2019.
- 9. N. R. Kolhalkar* and D. V. L. Krishnan, "Mechatronics System Design for Weed Management and Soil Condition Monitoring Within the Rows of Vineyards," International Journal of Innovative Technology and Exploring Engineering, vol. 4, no. 9, pp. 3080–3094, Feb. 2020.
- 10. H. M. Shinde and A. K. Bewoor, "Evaluating petrol engine oil deterioration through oxidation and nitration parameters by low-cost IR sensor," Applied Petrochemical Research, vol. 10, no. 2, pp. 83–94, Jun. 2020.
- 11. Harish M. Shinde, Anand K. Bewoor, "Viscosity Assessment for Quantifying Engine Oil Deterioration Using New Cost-effective and Handy Fluid Property Sensor," International Journal of Advanced Science and Technology, Vol. 29, No.7, 8649-8659, June 2020
- 12. G. Kalusuraman, I. Siva, Y. Munde, C. P. Selvan, S. A. Kumar, and S. C. Amico, "Dynamic-mechanical properties as a function of luffa fibre content and adhesion in a polyester composite," Polymer Testing, vol. 87, p. 106538, Jul. 2020
- 13. S. G. Dambhare, S. S. Kore, F. Z. Pathan, and M. Vahadane, "Diesel engine performance and emission characteristic enhancement using TOPSIS," International Journal of Advanced Technology and Engineering Exploration, vol. 6, no. 54, pp. 126–132, May 2019.

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- 2. M. V. Kulkarni and R. B. Ingle, "Validation of set up for experimental analysis of reactive muffler for the determination of transmission loss: Part 1," Noise & Vibration Worldwide, vol. 49, no. 6, pp. 237–240, Jun. 2018.
- 3. M. V. Kulkarni and R. B. Ingle, "Attenuation analysis and acoustic pressure levels for double expansion chamber reactive muffler: Part 2," Noise & Vibration Worldwide, vol. 49, no. 6, pp. 241–245, Jun. 2018.
- 4. Sham Kulkarni, AK Bewoor, "Analysis of Distributed Defect On Outer Ring Of Ball Bearing Under Radial Load: A Theoretical And Experimental Approach," Journal of Engineering Science and Technology, vol.13 no.11, pp. 3764-3780, Nov. 2018
- 5. Y. S. Munde, R. B. Ingle, and I. Siva, "Vibration damping and acoustic characteristics of sisal fibre–reinforced polypropylene composite," Noise & Vibration Worldwide, vol. 50, no. 1, pp. 13–21, Nov. 2018.
- 6. Y. S. Munde, R. B. Ingle, and I. Siva, "Effect of sisal fiber loading on mechanical, morphological and thermal properties of extruded polypropylene composites," Materials Research Express, vol. 6, no. 8, p. 085307, May 2019.
- 7. Y. S. Munde, R. B. Ingle, and I. Siva, "A comprehensive review on the vibration and damping characteristics of vegetable fiber-reinforced composites," Journal of Reinforced Plastics and Composites, vol. 38, no. 17, pp. 822–832, May 2019.

8. S. Kedar, A. R. Kumaravel, and A. K. Bewoor, "Experimental Investigation of Solar Desalination System Using Evacuated Tube Collector," International Journal of Heat and Technology, vol. 37, no. 2, pp. 527–532, Jun. 2019.

Academic Year of Publications: 2017-18

- 1. P. Chaware and C. Sewatkar, "Effects of tangential and radial velocity on the heat transfer for flow through pipe with twisted tape insert-turbulent flow," International Journal of Heat and Technology, vol. 35, no. 4, pp. 811–820, Dec. 2017.
- 2. S. Kulkarni, A. Bewoor, and R. Ingle, "Vibration signature analysis of distributed defects in ball bearing using wavelet decomposition technique," Noise & Vibration Worldwide, vol. 48, no. 1–2, pp. 7–18, Jan. 2017.
- 3. Y. S. Munde, R. B. Ingle, and I. Siva, "Investigation to appraise the vibration and damping characteristics of coir fibre reinforced polypropylene composites," Advances in Materials and Processing Technologies, vol. 4, no. 4, pp. 639–650, Jun. 2018.
- 4. A. Bewoor and S. Kulkarni, "Interoperability of international standards, condition monitoring methods and research models for bearing fault: an integrated approach," Procedia Manufacturing, vol. 22, pp. 982–989, 2018.
- 5. K. B. Gavali, A K Bewoor, Debabrata Barik, "Job Shop Scheduling with the Aid of Hybrid Social Spider Optimization and Gray Wolf Optimization with Industrial Scheduling Case Study," International Journal of Mechanical Engineering and Technology, vol.8 no.10, pp-274-284, Oct-2017
- 6. K. B. Gavali, A K Bewoor Debabrata Barik, Performance Enhancement in Job Shop Scheduling with the Aid of Hybrid Social Spider Optimization and Gray Wolf Optimization, International Journal of Applied Engineering Research, vol.12, no.21, 530-540, 2017

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- 1. S. Kulkarni, A. Bewoor, and R. Ingle, "The theoretical modeling and experimental validation for distributed defect on inner race of ball bearing under radial load," Noise & Vibration Worldwide, vol. 47, no. 5–6, pp. 67–79, May 2016.
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Academic Year of Publications: 2015-16

- 1. Dr. A. K. Bewoor, "Vibration based condition assessment of ball bearing with distributed defects," Journal of Measurements in Engineering, vol.4 no.2, pp. 87-94, June-2016
- 2. "Dr. A. K. Bewoor, ""Methodology for identification of critical equipments in thermal power plant using criticality analysis,"" Discovery Engineering, vol.4 no.12, pp. 291-298, May-2016".
- 3. R. Ramprasath, S. Jayabal, S. K. Sundaram, G. Bharathiraja, and Y. S. Munde, "Investigation on Impact Behavior of Rice Husk Impregnated Coir-Vinyl Ester Composites," Macromolecular Symposia, vol. 361, no. 1, pp. 123–128, Mar. 2016.

Academic Year of Publications: 2014-15

- 1. R. Ingle, J. M. Jadhav, V. S. Manvi, M. A. Sawant, and V. D. Talekar, "Experimental Investigation of a Double Expansion Chamber Reactive Muffler for Stationary Diesel Engine," Noise & Vibration Worldwide, vol. 45, no. 9, pp. 12–17, Oct. 2014
- 2. G. S. Chandekar and A. D. Kelkar, "Experimental and Numerical Investigations of Textile Hybrid Composites Subjected to Low Velocity Impact Loadings," The Scientific World Journal, vol. 2014, pp. 1–14, 2014

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- 1. A. A. Bhosale, K. Joshi, T. Karadkar, K. Mangidkar, and P. Mundhe, "Analysis of Lubricating Oil Deterioration in Four-Wheeler," Applied Mechanics and Materials, vol. 446–447, pp. 558–561, Nov. 2013
- 2. N. R. Patil, S. R. Gaikwad, R. A. Navale, and D. S. Sonawane, "Design, Manufacturing and Performance Analysis of Spiral Coil Pump," Applied Mechanics and Materials, vol. 446–447, pp. 549–552, Nov. 2013
- 3. S. A. Kedar, G. Deshpande, A. Bhusawalkar, M. Yawalkar, and K. Sarmah, "Lateral Transfer Device for Hospital Stretcher," Applied Mechanics and Materials, vol. 446–447, pp. 1330–1333, Nov. 2013

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Academic Year of Publications: 2023-24

- 1. Anerao P, Kulkarni A, Munde Y, Shinde A, Das O. Biochar reinforced PLA composite for fused deposition modelling (FDM): a parametric study on mechanical performance. Composites Part C: Open Access. 2023 Oct 1;12:100406.
- 2. Nanwatkar RK, Watvisave DS. ELECTRICAL AND THERMAL INVESTIGATIONS OF A HYBRID ENERGY STORAGE SYSTEM. Journal of Research Administration. 2023 Nov 17;5(2):1891-909.
- 3. Nanwatkar R, Watvisave D, Bagde A. Simulation and experimental analysis of lithium-ion battery and supercapacitor hybridisation for EV. InRecent Advances in Material, Manufacturing, and Machine Learning 2024 Jun 17 (pp. 244-257). CRC Press.
- 4. Munde Y, Panigrahi A, Chandekar G, Shinde A, Siva I. Identifying the Influence of Stacking Sequence on Mechanical and Vibration Properties of Bamboo/Glass-Epoxy Composites. In Macromolecular Symposia 2023 Dec (Vol. 412, No. 1, p. 2200170).
- 5. Takle B, Munde Y, Shinde A, Deore V, Irulappasamy S. Sliding Wear Behavior of Pineapple Leaf/Glass Fiber Reinforced Polyester Composites. In Macromolecular Symposia 2023 Dec (Vol. 412, No. 1, p. 2200161).

Academic Year of Publications: 2022-23

- 1. Bewoor A, Kadam H, Agavekar R, Bhore P. Effective Use of Various Active Learning Techniques for the Course Automation and Control Engineering. Journal of Engineering Education Transformations. 2022 Dec 22;36(Special Issue 1).
- 2. Moharir M, Agavekar R, Bhore P, Kadam H, Bewoor A. Effective Implementation of Peer Review as an Active Learning Technique to Attain Course Outcome: A Case Study. Journal of Engineering Education Transformations. 2022 Dec 22;36(Special Issue 1).
- 3. Pavan R, Prashant A, Ameen T, Yashwant M, Shinde A, Siva I. Numerical simulation of low-velocity impact test on PALF/Epoxy bio-composite laminates. Materials Physics & Mechanics. 2022 Nov 1;50(1).
- 4. Chaware P, Agavekar R. BodhiTree—An Effective Learning Management System for Implementing Active Learning Strategies. Journal of Engineering Education Transformations. 2022 Dec 25;36(Special Issue 1).
- 5. Agavekar R, Bhore P, Kadam H, Moharir M. Effective Application of One Minute Paper and Muddiest Point Technique to Enhance Students\'Active Engagement: A Case Study. Journal of Engineering Education Transformations. 2023 Jan 3;36(3).

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1. Ramakant Nanwatkar, D. S. Watvisave, "Analysis and Simulation of Hybrid Energy Storage System for Electric Vehicle," International Journal of Innovative Research inTechnology, vol.8 no.2, July 2020

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1. Beena S. Limkar, Gautam S. Chandekar, "Extraction of Modal Parameters Using Experimental & Operational Modal Analysis for Overhanging Machine Component," International Journal of Scientific & Engineering Research, vol.9 no.6, Junw-2018

Academic Year of Publications: 2016-17

- 1. Dr. A. K. Bewoor, "Employability Skill Matrix for Engineering Graduates of Tier-II Institutes," Journal of Engineering Education Transformations, vol.30. no.3, Jan-2017
- 2. Dr. D. S. Watwisave, "Simulation of Interaction of Strong Shocks with Gas Bubbles using the Direct Simulation Monte Carlo Method," APS Division of Fluid Dynamics Meeting Abstracts, Nov-2016

Academic Year of Publications: 2015-16

 Prof. Mandar Vahadne, "Optimization of Heat Transfer through Rectangular Duct," International Research Journal of Engineering and Technology (IRJET), vol.2 no.4, July-2015

Academic Year of Publications: 2014-15

- 1. G. S. Chandekar and A. D. Kelkar, "Experimental and Numerical Investigations of Textile Hybrid Composites Subjected to Low Velocity Impact Loadings," The Scientific World Journal, vol. 2014, pp. 1–14, 2014
- 2. A. A. Bhosale and K. K. Sundaram, "Nondestructive Method for Ripening Prediction of Papaya," Procedia Technology, vol. 19, pp. 623–630, 2015
- 3. A. A. Bhosale and K. K. Sundaram, "Firmness Prediction of the Apple Using Capacitance Measurement," Procedia Technology, vol. 12, pp. 163–167, 2014
- 4. T. T. Wani, "Development and Performance Analysis of Multi Evaporative System," International Journal of EDR, vol.2 no.2, June 2014

List of Conference Papers (Scopus)

Academic Year of Publications: 2023-24

- 1. Munde Y, Shinde A, Anerao P, Siva I. Identifying the effect of stacking sequence on water absorption, mechanical and fracture properties of flax/glass hybrid composites. InInternational Symposium on Lightweight and Sustainable Polymeric Materials 2023 Feb 17 (pp. 249-264). Singapore: Springer Nature Singapore.
- 2. Pidge A, Salve A, Mache A, Kulkarni A, Munde Y. Effect on Vibration Characteristics of Fiber Metal Laminates Reinforced with Jute/glass Fibers. InBiennial International Conference on Future Learning Aspects of Mechanical Engineering 2022 Aug 3 (pp. 105-116). Singapore: Springer Nature Singapore.
- 3. Bewoor AK, Shinde HM, Bhosale AA, Patil PP, Kaliappan S, Socrates S. Ergonomic analysis and improvement for ease of work of post engine testing activities by using RULA and REBA techniques. InAIP Conference Proceedings 2023 Sep 8 (Vol. 2800, No. 1). AIP Publishing.
- 4. Bewoor AK, Patil N, Kaliappan S, Patil PP, Raju R, Ramanathan P, Kulkarni VA. Sustainability assessment of tungsten inert gas welding process using grey relational analysis. InAIP Conference Proceedings 2023 Sep 8 (Vol. 2800, No. 1). AIP Publishing.
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- 7. Mali V, Bhosale A. Effect of Foam Thickness on Two-Wheeler Seat in View of Seat Height Adjustment and Vibration Damping. InInternational Conference Interdisciplinarity in Engineering 2023 Oct 5 (pp. 91-99). Cham: Springer Nature Switzerland.
- 8. Mitali Gore, Ajit Bhosale, Mithul Naidu Impact of Organic Ingredients on the Frictional Performance of NAO Brake Pad InInternational Conference Interdisciplinarity in Engineering 2023 Oct 5 (pp. 54-68). Cham: Springer Nature Switzerland.
- 9. Poonam Bhore, Rujuta Agavekar, Himani Kadam, Mrunal Moharir, An analysis of Flliped Classoom Model for the course 'Analysis and Synthesis of Mechanisms', T4E International conference on Technology for Education 2023 Nov.

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1. Dias E, Chalse H, Mutha S, Mundhe Y, Ambhore N, Kulkarni A, Mache A. Review on synthetic/natural fibers polymer composite filled with nanoclay and their mechanical performance. Materials Today: Proceedings. 2023 Jan 1;77:916-25.

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- 1. A. Shinde, I. Siva, and Y. Munde, "Micromechanical simulation of silicon rubber reinforced with MMT nanoclay," Materials Today: Proceedings, vol. 62, pp. 957–961, 2022
- 2. M. Kirve, Y. Munde, A. Shinde, and I. Siva, "Evaluation of mechanical properties of bamboo epoxy bio-composite filled with Montmorillonite Nanoclay," Materials Today: Proceedings, vol. 62, pp. 806–810, 2022

3. Patil, N.R., Waghole, D.R. & Bewoor, A.K., 2022. Effects of MoS2-Based Biodegradable Cutting Fluids in MQL During Turning of Stainless Steel. Innovations in Mechanical Engineering, pp.319–328

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- 1. J. Joglekar, Y. S. Munde, A. L. Jadhav, D. S. Bhutada, S. Radhakrishnan, and M. B. Kulkarni, "Studies on effective utilization of Citrus Maxima fibers based PVC composites," Materials Today: Proceedings, vol. 42, pp. 578–583, 2021.
- 2. A. Sonawane, A. Deshpande, S. Chinchanikar, and Y. Munde, "Dry sliding wear characteristics of carbon filled polytetrafluoroethylene (PTFE) composite against Aluminium 6061 alloy," Materials Today: Proceedings, vol. 44, pp. 3888–3893, 2021.
- 3. H. Pingulkar, A. Mache, Y. Munde, and I. Siva, "A comprehensive review on drop weight impact characteristics of bast natural fiber reinforced polymer composites," Materials Today: Proceedings, vol. 44, pp. 3872–3880, 2021.
- 4. N. R. Patil, D. R. Waghole, and A. K. Bewoor, "Effects of MoS2-Based Biodegradable Cutting Fluids in MQL During Turning of Stainless Steel," Innovations in Mechanical Engineering, pp. 319–328, 2022.
- 5. H. P. Jagtap, A. K. Bewoor, R. B. Patil, A. C. Dawale, D. P. Kamble, and S. B. Sawant, "An integrated approach for interoperability of standards, condition monitoring methods, and research models used in the power generation sector," IOP Conference Series: Materials Science and Engineering, vol. 1166, no. 1, p. 012010, Jul. 2021
- 6. B. Limkar and G. Chandekar, "Dynamic Analysis of Psychoacoustic Parameters to Evaluate Sound Quality of an Indian String Instrument Sitar," Technology Innovation in Mechanical Engineering, pp. 83–90, 2022.
- 7. Anand Bewoor, Sagar Sapkal, Pratiksha Dhaygude, "Mapping Lean Six Sigma with 8D Problem Solving Methodology to Improve Productivity and Safety: A Case Study," 4th Intl. Conf. on Innovations in Mechanical Engineering (ICIME -2021) GNK, Hyderabad, Feb 2021

Academic Year of Publications: 2019-20

- 1. N. R. Kolhalkar and V. L. Krishnan, "Mechatronics system for diagnosis and treatment of major diseases in grape vineyards based on image processing," Materials Today: Proceedings, vol. 23, pp. 549–556, 2020.
- 2. C. Pon Selvan, I. Siva, A. Shinde, and S. C. Amico, "Tribological investigation on nanographene and curauá filled three-phase polymer composites," Materials Today: Proceedings, vol. 28, pp. 172–176, 2020.
- 3. T. Premkumar, I. Siva, Y. Munde, S. Rajesh, and S. C. Amico, "Basalt fiber hybridization effects on the thermal degradation properties of curauá fiber composites," Materials Today: Proceedings, vol. 28, pp. 258–260, 2020.

Academic Year of Publications: 2018-19

1. S. A. Kedar, K. Arul Raj, and A. K. Bewoor, "Design and Analysis of Solar Desalination System Using Compound Parabolic Concentrator," IOP Conference Series: Materials Science and Engineering, vol. 455, p. 012063, Dec. 2018.

Academic Year of Publications: 2017-18

- 1. A. A. Panchwadkar, P. J. Awasare, and R. B. Ingle, "Experimental and Numerical analysis of Metallic Bellow for Acoustic Performance," IOP Conference Series: Materials Science and Engineering, vol. 225, p. 012216, Aug. 2017.
- 2. L. V. Awadhani and A. Bewoor, "Behavior of single lap composite bolted joint under traction loading: Experimental investigation," 2018.
- 3. Shinde, H. & Bewoor, A., "Capacitive sensor for engine oil deterioration measurement," International Conference on Design, Materials & Manufacture (IcDeM-2018), NITK Surathkal. Jan-2018
- 4. S. A. Kedar, K. A. Raj, and A. K. Bewoor, "Thermal analysis of solar desalination system using evacuated tube collector," 2018.

Academic Year of Publications: 2016-17

- 1. H. P. Jagtap and A. K. Bewoor, "Development of an Algorithm for Identification and Confirmation of Fault in Thermal Power Plant Equipment Using Condition Monitoring Technique," Procedia Engineering, vol. 181, pp. 690–697, 2017.
- 2. L. V. Awadhani and A. K. Bewoor, "Analytical and experimental investigation of Effect of geometric parameters on the failure modes in a single lap single bolted metal to GFRP composite bolted joints subjected to axial tensile loading," Materials Today: Proceedings, vol. 4, no. 8, pp. 7345–7350, 2017.
- 3. H. Shinde and A. Bewoor, "Analyzing the relationship between the deterioration of engine oil in terms of change in viscosity, conductivity and transmittance," 2017 International Conference on Advances in Mechanical, Industrial, Automation and Management Systems (AMIAMS), Feb. 2017.
- 4. H. P. Jagtap and A. K. Bewoor, "Use of Analytic Hierarchy Process Methodology for Criticality Analysis of Thermal Power Plant Equipments," Materials Today: Proceedings, vol. 4, no. 2, pp. 1927–1936, 2017.
- 5. S. A. Kedar, P. Sonawale, P. Valve, P. Khujat, and P. Talekar, "Thermal Analysis of Parabolic Solar Cooker with Back Reflection," Materials Today: Proceedings, vol. 4, no. 8, pp. 8035–8039, 2017
- 6. P.S. Chaware, "Large Eddy Simulation of Flow through a Pipe with Twisted Tape Insert," 20th Australasian Fluid Mechanics ConferencePerth, Australia, Dec-2016

Academic Year of Publications: 2015-16

1. H. P. Jagtap and A. K. Bewoor, "Use of Analytic Hierarchy Process Methodology for Criticality Analysis of Thermal Power Plant Equipments," Materials Today: Proceedings, vol. 4, no. 2, pp. 1927–1936, 2017.

Academic Year of Publications: 2014-15

1. R. B. Ingle, "Investigation of effect of skew on natural frequency for a Marine Blade in water Using FEM," International Conference on Computational and Experimental Marine Hydrodynamics (MARHY 2014) IIT Madras, Chennai, Dec-2014

List of Conference Papers (Non-Scopus)

Academic Year of Publications: 2022-23

- 1. Shridhar Kedar, Himani Kadam, 'Renewable energy sources: new pedagogy technique research based application- oriented case study presentation', MATHED-2022, International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering Conference NIT Hamirpur, 15-17 Feb.2023
- 2. Deepak Watvisave, Shridhar Kedar, Pravin Mane, 'Theoretical analysis of water consumption pattern in Pune city, India', MATHED-2022, International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering Conference NIT Hamirpur, 15-17 Feb.2023
- 3. Amit D.Kachare, Sumedh S. Ingle, Shridhar A.Kedar, 'Corrosion Resistant Heat Exchanger for Distillation Plant: A Review ', 1st International Conference on SCI/TECH and Engineering (ICSTE-2023) NIT Manipur, 17-18 Feb.2023
- 4. Kolhalkar Nilesh, Jagadale Dhanshri, 'Standardization A step towards standard parts classi-fication and maintenance of product and process', MATHED-2022, International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering Conference NIT Hamirpur, 15-17 Feb.2023
- 5. Nilesh Kolhalkar, Anvi Shah, Janvi Shinde, Neha Kulkarni, Pragalbha Kurane, 'A comprehensive review on state-of-the-art technolo-gies for welding of Lithium- ion battery module', MATHED-2022, International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering Conference NIT Hamirpur, 15-17 Feb. 2023
- 6. Nilesh Kolhalkar, Rohini Sangle, Shreya Vijith, Prajakta Joshi, Shavari Kulkarni, 'Development of Gripper and Setup of Selective Spraying for Precision Agriculture', MATHED-2022, International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering Conference NIT Hamirpur, 15-17 Feb. 2023

Academic Year of Publications: 2021-22

- 1. P. Y. Choudhari, P. Talan, P. Chaware, and P. Gaikwad, "Electromechanical Fuel Control Actuator Issues in Genset Application," 2021 IEEE India Council International Subsections Conference (INDISCON), Aug. 2021.N
- 2. ivedita Daimiwal, Revati Shriram, Harish Shinde, Radhika Kulkarni, Apeksha Galewad, "Oil Quality Analysis Using Image Processing," XVIII Control Instrumentation Systems Conference (CISCON 2021), Nov. 2021
- 3. Anand K. Bewoor, Harish M. Shinde, Ajit A. Bhosale, Pravin P Patil, S. Kaliappan and S. Socrates, "Ergonomic analysis and improvement for ease of work of post engine testing activities by using RULA and REBA techniques", International Conference on Materials for Emerging Technologies (ICMET-21), 18-19 February, 2022
- 4. Maneetkumar Dhanvijay, Vinay Kulkarni, Nitin Patil, Anand Bewoor, "Development of PLC Based System for Lift Gate Slam Platform", International Conference on Materials for Emerging Technologies (ICMET-21), 18-19 February 2022

Academic Year of Publications: 2020-21

- 1. Parag Chaware, C. M. Sewatkar, "Laminar to Chaotic Transitions for Flow Through a Pipe with Twisted Tape Insert," 8th International and 47th National Conference on Fluid Mechanics and Fluid Power, Dec 2020
- 2. Beena S. Limkar, Gautam S. Chandekar, "Study of Sitar Bridge Transmissibility in the Perspective of Sitar Quality," International Conference on Mathematical, Physics, and Dynamics (ACADEMICS CONFERENCE NETWORK), Dec 2020
- 3. Pooja C. Sonawane, Anand K. Bewoor, "Understanding Company's Readiness to Establish APQP as A Standard QMS Procedure," Proceedings of National E-Conference on "Recent Trends in Mechanical Engineering, Nov 2020
- 4. Anand K. Bewoor, Mitali U. Kharul, Saloni G. Gosavi, Tanvi J. Kuray, "Application of 7-Step Problem-Solving Methodology for Defect Elimination: A Case Study in an Automotive Industry," Recent Advances in Manufacturing (RAM-2021), June 2021
- 5. S.R. Bajare, A.K. Bewoor, H.P. Jagtap, "Use of Analytic Hierarchy Process Methodology for Analyzing Existing Motorcycle Helmet design concepts," Recent Advances in Manufacturing (RAM-2021), June 2021

Academic Year of Publications: 2019-20

- 1. A. Gejji, S. Shukla, S. Pimparkar, T. Pattharwala, and A. Bewoor, "Using a Support Vector Machine for building a Quality Prediction Model for Center-less Honing process," Procedia Manufacturing, vol. 46, pp. 600–607, 2020.
- 2. P. Tambolkar, A. Ponkshe, V. Mulay, and A. Bewoor, "Use of Taguchi DOE for CFD Simulation to maximize the Reusability of Working Fluids of Centrifugal Filter," Procedia Manufacturing, vol. 46, pp. 608–614, 2020.

Academic Year of Publications: 2018-19

- 1. P. Chaware and C. M. Sewatkar, "Flow Reversal in a Pipe with Twisted Tape Insert," Journal of Fluids Engineering, vol. 141, no. 11, May 2019.
- 2. P. Chaware and C. M. Sewatkar, "Flow Transitions for Flow Through a Pipe With a Twisted Tape Insert," Journal of Fluids Engineering, vol. 141, no. 11, May 2019.
- 3. Yashwant S Munde, Ravindra B Ingle, I Siva, Avinash S Shinde, "Micromechanical Modeling of Sisal/Polylactic acid (PLA) Biodegradable Composite," 15th International Conferenceon Polymer Science and Technology, IISER and CSIR-NCL Pune, Dec 2018
- 4. Avinash S Shinde, I Siva, Yashwant S Munde, "AWJM Performance Measurement of Sandwich Composites," 15th International Conferenceon Polymer Science and Technology, IISER and CSIR-NCL Pune, Dec-2018

Academic Year of Publications: 2017-18

- 1. Y S. Munde, Ravindra B. Ingle, "Vibration Damping Characteristics of Coir Fiber Reinforced Polypropylene Composite," 20th International Conference on Advances in Materials & Processing Technologies (AMPT) at VIT University Chennai, Dec-2017
- 2. Parag Chaware, C.M. Sewatkar, "Numerical Analysis of flow through pipe with twisted tape insert," 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTC-2017) at BITS Hyderabad, Dec-2017
- 3. N.R.Kolhalkar, V.L.Krishnan, "Use of Mechatronics and Robotics for Technology enhanced agricultural Task," International Conference on Agriculture and Human Development in India (ICAHD-2017), Sept-2017

4. D S Watvisave, "Computational Performance Of Dsmc And Lbm Codes On A Raspberry Pi Cluster," 30th Parallel CFD Conf. USA, May 2018

Academic Year of Publications: 2016-17

- 1. P.S. Chawar,"Effect of tangential velocity on heat transfer in a pipe with twisted tape insert," 6th International & 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016), Dec-2016
- 2. V. A. Mali, "Assessment of cutting forces and temperature in bone drilling," 6th International & 27th National Conference on All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), Dec-2016

Academic Year of Publications: 2015-16

- 1. G. S. Chandekar, "Modal Analysis using MATLAB." MATLAB EXPO India 2016 Conference, April-2016
- 2. S.A. Kedar, "Solar Desalination System Using Evacuated Tube Collector & Compound Parabolic Concentrator-Theoretical Approach," National Conference on Advancements in Electrical Engineering and Energy Sciences (AEEES-2016) at NIT Hamidpur (H.P.), pp. 60-62, May-2016

Academic Year of Publications: 2014-15

- 1. P.S. Chaware, "Effect of Reynolds Number on Flow and Heat Transfer Characteristics of Pipe flow with Twisted Tape Inserts," 5th International Conference & 41th National on Fluid Mechanics & Fluid Power IIT, Kanpur, Dec-2014
- 2. N.R.Patil, M.A.Vahadne, "Fault diagnosis identification of antifriction bearing using CWT," International Conference on Recent Advances in Mechanical Engineering (ICRAME) 2015 Pune, Feb-2015
- 3. S.A. Kedar, "Effect of Hard water on the performance of solar Water Heater Tank," International Conference on Environment and Energy, JNTU, Hyderabad, Dec-2014

Academic Year of Publications: 2013-14

1. P.S. Chaware, "Selection of Wall function for the flow in tube with twisted tape insert," 40thNational Conference on Fluid Mechanics, Hamirpur, HP, Dec-2013

List of Book Chapters

Academic Year of Publications: 2023-24

1. Mishra P, Srinivas NS, Sastry GV, Singh V. Ratcheting Fatigue Behaviour of Advanced Structural Materials. In The International Conference on Metallurgical Engineering and Centenary Celebration 2023 Oct 15 (pp. 311-322). Singapore: Springer Nature Singapore.

Academic Year of Publications: 2022-23

NIL

Academic Year of Publications: 2021-22

- 1. Y. Munde, A. Panigrahi, A. Shinde, and I. Siva, "Bamboo fibers, their composites and applications," Plant Fibers, their Composites, and Applications, pp. 131–160, 2022
- 2. Shikalgar S, Desai P, Munde Y, Radhakrishnan S, Kulkarni M. Analysis of Various Parameters on Polymer Matrix Composites. In: Polymer-Based Composites: Design, Manufacturing, and Applications. CRC Press; 2021. p. 97–114.
- 3. Deorukhkar OA, Radhakrishnan S, Munde YS, Kulkarni MB. Polymer Nanocomposites. In: Polymer-Based Composites: Design, Manufacturing, and Applications. CRC Press; 2021. p. 73–95.

Academic Year of Publications: 2020-21

- 1. H. P. Jagtap, A. K. Bewoor, F. Pathan, and R. Kumar, "Application of Particle Swarm Optimization Method to Availability Optimization of Thermal Power Plants," Nature-Inspired Optimization in Advanced Manufacturing Processes and Systems, pp. 97–112, Dec. 2020.
- 2. I. Siva, A. Shinde, I. Sankar, C. P. Selvan, and M. T. H. Sultan, "Post Impact Behavior and Compression After Impact Properties of Polymers and Their Composites—A Review," Composites Science and Technology, pp. 47–55, 2021.

Academic Year of Publications: 2019-20

- 1. H. P. Jagtap and A. K. Bewoor, "Markov Probabilistic Approach-Based Availability Simulation Modeling and Performance Evaluation of Coal Supply System of Thermal Power Plant," Lecture Notes in Mechanical Engineering, pp. 813–824, Aug. 2019.
- 2. H. Jagtap, A. Bewoor, R. Kumar, M. H. Ahmadi, and D. K. Rajak, "Reliability Analysis Using Condition Monitoring Approach in Thermal Power Plants," Reliability Management and Engineering, pp. 113–132, Jun. 2020.
- 3. R. Kumar, H. P. Jagtap, D. K. Rajak, and A. K. Bewoor, "Traditional and Non-Traditional Optimization Techniques to Enhance Reliability in Process Industries," Advances in Computational Intelligence and Robotics, pp. 67–80, 2020.
- 4. Y. S. Munde, R. B. Ingle, A. S. Shinde, and S. Irulappasamy, "Micromechanical Modelling and Evaluation of Pineapple Leaves Fibre (PALF) Composites Through Representative Volume Element Method," Green Energy and Technology, pp. 249–264, 2020.