

## BIO-DATA



1.	<b>Name</b>		DR. VISHAL GANPATRAO SALUNKHE			
2.	<b>Designation</b>		Associate Professor			
3.	<b>Residential Address</b>		Trombay, Mumbai. 400088			
4.	<b>Date of birth</b>		24 <sup>th</sup> June 1990			
5.	<b>Total Experience</b>		11 yrs			
	<b>Teaching</b>		11 yrs			
6.	<b>Qualifications</b>					
	<b>Exam Passed</b>	<b>Year</b>	<b>Institution/ University</b>	<b>Branch/Specialization</b>		
	PhD	2022	Shivaji University, Kolhapur	Mechanical Engineering		
	M.E.	2015	ADCET, Shivaji University, Kolhapur	Mechanical- Design Engineering		
	B.E.	2012	Govt. College of Engg. Karad, Shivaji University, Kolhapur	Mechanical Engineering		
7.	<b>Employment Record</b>					
	<b>Institution</b>	<b>Year (From To)</b>	<b>Designation</b>			
	Fr. C. Rodrigues Institute of Technology, Vashi	01/08/2025- Till Date	Associate Professor			
	Fr. C. Rodrigues Institute of Technology, Vashi	14/12/2022 to 31/07/2025	Assistant Professor			
	ADCET, Ashta	16/06/2014 to 13/12/2022	Assistant Professor			
8.	<b>Undergraduate / Postgraduate Teaching Experience and Subjects Taught</b>					
	<b>Subjects Taught at UG level</b>					
	<b>Sr.No.</b>	<b>Name of Subject</b>	<b>Semester</b>			
	1.	Kinematics of Machines	III			
	2.	Material Science & Metallurgy	III			
	3.	Applied Hydraulics & Pneumatics	VI			
	4.	Metal Cutting & Tool Design	VII			
	5.	Manufacturing Technology	VIII			
	6.	Smart Materials	VII			

	7.	Machinery Diagnostics				VII				
	8.	Composite Materials				VIII				
<b>Subjects Taught at PG level</b>										
	Sr.No.	Name of Subject				Semester				
	1.	Composite Materials				I				
<b>9.</b>	<b>Research Experience</b>									
<b>10.</b>	<b>Research Funding / Consultancy Services:</b>									
	Sr.No.	Name of the Company	Address	Product	Consulting Service	Consulting Fees				
	1.	TATA Power	Trombay	--	Vibration	--				
	2.	Excellent Engineering Solutions	Rabale	--	FEA Analysis	--				
	3.	Excellent Engineering Solutions	Rabale	--	Design Optimization	--				
	<b>Research Grants:</b>									
	Sr. No.	Name of Funding Organization	Type of Grant	Amount (Rs.)	Year	Name of Research Project				
	1.	Shivaji University, Kolhapur	Research Initiation Scheme	80,000/-	2017-19	Mathematical and Experimental Studies of Dynamic Characteristics of Rolling Element Bearing Using Dimensional Analysis and Support Vector Machines				
	2.	FCRIT	ILRF	2,00,000/-	2024 - 25	Fault Diagnosis of Gearbox and Roller Element Bearing Using Dimension Analysis and Support Vector Machines with Motor Load Variation				
	<b>Technical Collaboration / Lab Funding with Industries</b>									
	Sr. No.	Name of the Funding Organization	Type of Support	Amount (Rs.)	Year					
<b>11.</b>	<b>Professional Societies Fellowship / Membership:</b>									
	<b>1. Council of Vibration Specialists -(SML-2200198)</b>									

	<p><b>2. Tribology Society of India -TSI (LM # 6167)</b></p> <p><b>3. Indian Society for Technical Education –ISTE (LM 103060)</b></p> <p><b>4. Life Membership of Institution of Engineers IEI –(AM3174231)</b></p>																																													
<b>12.</b>	<b>Achievements / Awards / Position</b> <ul style="list-style-type: none"> <li>Received 2<sup>nd</sup> rank of PhD PET Entrance Exam Shivaji University, Kolhapur June 2018.</li> <li>Received 2<sup>nd</sup> rank for M.E. Design Engineering in Shivaji University, Kolhapur June 2015.</li> </ul>																																													
<b>13.</b>	<b>Projects guided in UG/PG level : 12 UG/02 PG</b>																																													
<b>14.</b>	<b>Short Term Training Programmes attended :</b> <table border="1"> <thead> <tr> <th><b>Sr. No.</b></th><th><b>Theme/Title of the STTP/ Workshop/ Seminars</b></th><th><b>Date &amp; Duration</b></th></tr> </thead> <tbody> <tr> <td>1.</td><td>One week STTP on “Mechanics of Fibrous Composites” held at ADCET, Ashta.</td><td>23<sup>rd</sup> -27<sup>th</sup> June 2014</td></tr> <tr> <td>2.</td><td>One week STTP on “MATLAB Based Numerical Methods for Engineers” held at ADCET, Ashta.</td><td>24<sup>th</sup> – 28<sup>th</sup> Nov 2014</td></tr> <tr> <td>3.</td><td>One week STTP on “Recent Trends In Design, Failure Analysis &amp; Maintenance of Bearing” held at JJMCOE, Jaysinpur.</td><td>22<sup>nd</sup> – 26<sup>th</sup> June 2015</td></tr> <tr> <td>4.</td><td>One Day workshop on “Teaching Methodology for Third Year Mechanical &amp; Automation Engineering Revised Syllabus”, ADCET, Ashta.</td><td>24<sup>th</sup> August 2015</td></tr> <tr> <td>5.</td><td>Intellectual Property Rights (IPR), ADCET, Ashta.</td><td>15<sup>th</sup> Oct 2015</td></tr> <tr> <td>6.</td><td>FDP on “Vibration Measurement and Analysis” under lead college activity of Shivaji University, Kolhapur.</td><td>31<sup>st</sup> Oct -1<sup>st</sup> Nov 2015</td></tr> <tr> <td>7.</td><td>One week STTP on “Applied Mathematical Modeling &amp; Soft Computing Tools For The Analysis of Vibrations in Rotating Machineries” held at ADCET, Ashta</td><td>21<sup>st</sup> – 25<sup>th</sup> Dec 2015</td></tr> <tr> <td>8.</td><td>One day “E – Resource Awareness Workshop organized by Springer at ADCET, Ashta.</td><td>4<sup>th</sup> Dec 2015</td></tr> <tr> <td>9.</td><td>One week STTP on “Optimization for Engineering Design” Centre for Continuing Education held at IIT, Madras.</td><td>26<sup>th</sup> Sep-1<sup>st</sup> Oct 2016</td></tr> <tr> <td>10.</td><td>One week STTP on “Tribology in Design” Centre for Continuing Education held at IIT, Madras.</td><td>7<sup>th</sup> Nov – 12<sup>th</sup> Nov 2016</td></tr> <tr> <td>11.</td><td>One week STTP on “Introduction to PLC &amp; SCADA Programming” held at ADCET, Ashta.</td><td>13<sup>th</sup> -18<sup>th</sup> Feb 2017</td></tr> <tr> <td>12.</td><td>One week STTP on “E-Mobility and Innovations in Sheet Metal Forming”, Quality Improvement program held at IIT, Bombay.</td><td>3<sup>rd</sup> -7<sup>th</sup> Oct 2017</td></tr> <tr> <td>13.</td><td>One week STTP on “Vibro-acoustics”, Quality Improvement program held at IIT, Bombay.</td><td>4<sup>th</sup> -8<sup>th</sup> Dec 2017</td></tr> <tr> <td>14.</td><td>One Day Faculty Development Program on teaching Methodology for the course Noise &amp; Vibration” held at</td><td>17<sup>th</sup> March 2018</td></tr> </tbody> </table>	<b>Sr. No.</b>	<b>Theme/Title of the STTP/ Workshop/ Seminars</b>	<b>Date &amp; Duration</b>	1.	One week STTP on “Mechanics of Fibrous Composites” held at ADCET, Ashta.	23 <sup>rd</sup> -27 <sup>th</sup> June 2014	2.	One week STTP on “MATLAB Based Numerical Methods for Engineers” held at ADCET, Ashta.	24 <sup>th</sup> – 28 <sup>th</sup> Nov 2014	3.	One week STTP on “Recent Trends In Design, Failure Analysis & Maintenance of Bearing” held at JJMCOE, Jaysinpur.	22 <sup>nd</sup> – 26 <sup>th</sup> June 2015	4.	One Day workshop on “Teaching Methodology for Third Year Mechanical & Automation Engineering Revised Syllabus”, ADCET, Ashta.	24 <sup>th</sup> August 2015	5.	Intellectual Property Rights (IPR), ADCET, Ashta.	15 <sup>th</sup> Oct 2015	6.	FDP on “Vibration Measurement and Analysis” under lead college activity of Shivaji University, Kolhapur.	31 <sup>st</sup> Oct -1 <sup>st</sup> Nov 2015	7.	One week STTP on “Applied Mathematical Modeling & Soft Computing Tools For The Analysis of Vibrations in Rotating Machineries” held at ADCET, Ashta	21 <sup>st</sup> – 25 <sup>th</sup> Dec 2015	8.	One day “E – Resource Awareness Workshop organized by Springer at ADCET, Ashta.	4 <sup>th</sup> Dec 2015	9.	One week STTP on “Optimization for Engineering Design” Centre for Continuing Education held at IIT, Madras.	26 <sup>th</sup> Sep-1 <sup>st</sup> Oct 2016	10.	One week STTP on “Tribology in Design” Centre for Continuing Education held at IIT, Madras.	7 <sup>th</sup> Nov – 12 <sup>th</sup> Nov 2016	11.	One week STTP on “Introduction to PLC & SCADA Programming” held at ADCET, Ashta.	13 <sup>th</sup> -18 <sup>th</sup> Feb 2017	12.	One week STTP on “E-Mobility and Innovations in Sheet Metal Forming”, Quality Improvement program held at IIT, Bombay.	3 <sup>rd</sup> -7 <sup>th</sup> Oct 2017	13.	One week STTP on “Vibro-acoustics”, Quality Improvement program held at IIT, Bombay.	4 <sup>th</sup> -8 <sup>th</sup> Dec 2017	14.	One Day Faculty Development Program on teaching Methodology for the course Noise & Vibration” held at	17 <sup>th</sup> March 2018
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15.	One week STTP on “Machining Dynamics”, Quality Improvement program held at IIT, Kanpur.	15 <sup>th</sup> -19 <sup>th</sup> Oct. 2018
16.	Three Day course on “Research and Development in Condition Monitoring of Rotating Machines”, IIT Indore.	10 <sup>th</sup> -12 <sup>th</sup> Dec. 2018
17.	One week virtual STTP on “Structural Dynamics” organized by IIT, Kharagpur.	12 <sup>th</sup> -18 <sup>th</sup> Oct. 2020
18.	Five days webinar series “Researches in Surface Engineering for Reliable Tribology” organized by Department of Mechanical Engineering, GIMT Guwahati, sponsored by the collaborative research Scheme of Assam Science and Technology University (ASTU), under TEQIP-III.	1 <sup>st</sup> -5 <sup>th</sup> Sept. 2020
19.	AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence and Machine Learning Applications in Biomedical Engineering" at University BDT College of Engineering	21 <sup>st</sup> -25 <sup>th</sup> Sept. 2021
20.	AICTE Training And Learning (ATAL) Academy Online FDP on "3D Printing & Design" at Bharati Vidyapeeth College of Engineering Khargar, Navi-Mumbai.	14 <sup>th</sup> -18 <sup>th</sup> Sept. 2021
21.	One week STTP on “Recent Advances Tribology and Surface Engineering”: series 3 of 4 – Introduction to Special Topics like Nanotribology, Biotribology, Space Tribology, Biomimetics and Tribology in Industry at Saintgits College of Engg. Kottayam, Kerala.	12 <sup>th</sup> -17 <sup>th</sup> Oct. 2021
22.	One week STTP on “Recent Advances Tribology and Surface Engineering”: series 4 of 4 – Surface Characterization and Treatments in Tribology at Saintgits College of Engg. Kottayam, Kerala.	23 <sup>rd</sup> -28 <sup>th</sup> Nov. 2021
23.	One week STTP on “Recent Advances Tribology and Surface Engineering”: series 2 of 4 – Tribology of Machine Components and applied tribology, during 14-19 September 2020 at Saintgits College of Engg. Kottayam, Kerala.	14 <sup>th</sup> - 19 <sup>th</sup> Sept. 2021
24.	One week Online Faculty Development Programme on “Intellectual Property Rights” organized by E&ICT Academy IIT Guwahati held in association with Annasaheb Dange College of B Pharmacy(ADCBP) and Annasaheb Dange College of Engineering and Technology(ADCET).	25 <sup>th</sup> -30 <sup>th</sup> Oct. 2021
25.	One week Faculty Development Programme on “Advance Maintenance Practices and Vibration Diagnostics” organized by Council of Vibration Specialists Mumbai in association with Fr. C. Rodrigues Institute of Technology, Vashi, Navi-Mumbai.	26 <sup>th</sup> June - 1 <sup>st</sup> July 2023
26.	AICTE Training And Learning (ATAL) Academy FDP on Digital Twin-Based Predictive Maintenance	4 <sup>th</sup> -9 <sup>th</sup> Dec. 2023

		Approach for Industry 4.0 Using Machine Learning Techniques at Veermata Jijabai Technological Institute, Matunga, Mumbai	
27.	One week STTP on “Pedagogical Strategies for Effective Teaching Learning” held at FCRIT, Vashi	18 <sup>th</sup> -23 <sup>rd</sup> Dec. 2023	
28.	One Day Research Facility Training Programme under SERB-DST Project titled ‘Detection of Damage in Insulated Pipes using Linear Characteristics of Ultrasonic guided Waves’ held at IIT, Bombay	3 <sup>rd</sup> May 2024	
29.	One Week ISTE STTP on “Research Funding, Publications, and IPR: A Journey from Fundamentals to Advanced Methodologies”, held at DJSCE, Vile Parle, Mumbai	10 <sup>th</sup> -14 <sup>th</sup> June 2024	
30.	One week 16 <sup>th</sup> Summer School in Tribology, held at CSIR-IIP, Dehradun	24 <sup>th</sup> -28 <sup>th</sup> June 2024	
31.	One Week faculty development program (Hybrid Mode) on Outcome Based Education (OBE 2024) (Evaluation, Implementation, and Faculty Development) Organized by the Department of Mechanical Engineering at SLIET Longowal.	21 <sup>st</sup> -25 <sup>th</sup> Oct 2024	
32.	5-day online short-term course on “Advances in Vibration Engineering (AVE-2024)” organized by MNNIT, Allahabad, Department of Mechanical Engineering	2 <sup>nd</sup> -6 <sup>th</sup> Dec 2024.	
33.	Two-week online Faculty Development Programme (FDP) on Advances in Mechanical Engineering, organized by the Department of Mechanical Engineering, Prasad V Potluri Siddhartha Institute of Technology, Kanura	2 <sup>nd</sup> -13 <sup>th</sup> Dec. 2024.	
34.	3 Days Workshop under AICTE-Vibrant Advocacy for Advancement and Nurturing of Indian Languages (VAAN) on Digital Foundries: Integration of IoT, Robotics & Automation in Marathi language at SHVSM'S Tatyasaheb Kore Institute of Engineering and Technology, Warnanagar, Kolhapur	18 <sup>th</sup> -20 <sup>th</sup> Aug. 2025	
35.	8-Day (Online) NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme of University Grants Commission organized by Malaviya Mission Teacher Training Centre, National Institute of Technology Warangal	18 <sup>th</sup> -26 <sup>th</sup> Aug. 2025	
36.	One Week Faculty Development Programme (online) on Emerging Quantum and AI Technologies for Engineering Innovation” organized by Department of AI and ML in association with AIMR Society and Shri Indu College of Engineering and Technology, Sheriguda, Ibrahimpatan, Telgana.	24 <sup>th</sup> -29 <sup>th</sup> Nov. 2025	
15.	<b>List of Journal Papers Published</b>		
	1. More, I. D., Jadhav, P. S., Salunkhe, V. G., Desavale, R. G., and Desavale, S. R., “Benchmarking Deep Learning Architectures for Bearing Surface Defect		

Diagnosis: A Comparative Study of IAO, VMD, and Deep Hybrid Kernel ELM," *Part C: Journal of Mechanical Engineering Science (SAGE)*, (Accepted)

2. Salunkhe, V. G., Khot, S. M., Malgol A., Desavale, R.G., Empirical Feature-Based Fault Diagnosis of Rolling Bearings with Coupled Defects Using Improved OAA-MCSVM *ASME. ASME J Nondestructive Evaluation* (Accepted)
3. Mali, A. R., Salunkhe, V. G., Khot, S. M., Shinde, P. V., Yelve, N. P., and Desavale, R. G. (October 30, 2025). "Optimized Multiclass Support Vector Machines Using Empirical Features for Compound Fault Diagnosis in Roller Element Bearings." *ASME. J. Tribol.* August 2026; 148(8): 081103. <https://doi.org/10.1115/1.4070000>
4. Maghrabi, S.H.S., Salunkhe, V.G., Khot, S.M. et al. Integrated Study of Liquid Storage Tank Dynamics Under Seismic Conditions: Experimental and Simulation Models. *J. Vib. Eng. Technol.* 13, 445 (2025). <https://doi.org/10.1007/s42417-025-02012-3>
5. Patil, S.S., Salunkhe, V.G., Jadhav, P.S., Khot, S.M., Desavale, S.R., Desavale, R.G., "A Novel Bearing Faults Diagnosis of Rotor-Bearing Systems Based on Vibration Responses and Convolutional Neural Network," *Elsevier, Mechanical Systems and Signal Processing*, Vol. 236, 113055, 2025. [doi.org/10.1016/j.ymssp.2025.113055](https://doi.org/10.1016/j.ymssp.2025.113055).
6. Salunkhe, V. G., Salodkar, Y., Mohite, A., Lad, H., Patil, S., Khot, S.M, Desavale, R. G., and Jagadeesha, T. (June 19, 2025). "Fault Evolution Characteristics Analysis of Spur Gear Based on Dimensional Technique and Support Vector Machine." *ASME. ASME J Nondestructive Evaluation*. doi: <https://doi.org/10.1115/1.4068995>
7. Khan, Y., Khot, S. M, and Salunkhe, V. G. (June 5, 2025). "Genetic Algorithm-Driven Optimization of Piezoelectric Patch Placement for Active Vibration Control in Plate Structures with Opposite Edges Simply Supported." *ASME. ASME J Nondestructive Evaluation*. doi: <https://doi.org/10.1115/1.4068855>
8. Khan, Y., Khot, S. M, and Salunkhe, V. G. (June 5, 2025). "Optimized Placement of Piezoelectric Patches for Active Vibration Control in Rectangular Plates Using Genetic Algorithms." *ASME. ASME J Nondestructive Evaluation*. doi: <https://doi.org/10.1115/1.4068854>
9. Patil, S. S., Salunkhe, V. G., Jadhav, P. S., Desavale, S. R., Shinde, V. V., and Desavale, R. G. (June 26, 2025). "Intelligent Fault Diagnosis Based on the EAO-VMD in Dual-Rotor Cylindrical Roller Bearings." *ASME. J. Tribol.* January 2026; 148(1): 014302. <https://doi.org/10.1115/1.4068831>
10. Salunkhe, V. G., Khot, S. M, Yelve, N., Desavale, R. G., and Raut, A. S. (May

5, 2025). "Vibration Dynamic Analysis of the Bearing Parameters in the Steam Turbine in Sugar Refining Bearing Systems." *ASME. J. Tribol.* doi: <https://doi.org/10.1115/1.4068559>

11. Salunkhe, V. G., Khot, S. M., Desavale, R. G., Yelve, N. P., Rolling Element Bearing Fault Diagnosis by the Implementation of Elman Neural Networks with Long Short-Term Memory Strategy," *ASME. J. Tribol.* <https://doi.org/10.1115/1.4067382>

12. Salunkhe, V. G., Khot, S., Jadhav, P. S., Yelve, N., and Kumbhar, M. B. (September 19, 2024). "Experimental Investigation Using Robust Deep VMD-ICA and 1D-CNN for Condition Monitoring of Roller Element Bearing." *ASME. J. Comput. Inf. Sci. Eng.* doi: <https://doi.org/10.1115/1.4066595>

13. Salunkhe, V. G., Khot, S. M., Desavale, R. G., Yelve, N. P., and Jadhav, P. S. (June 7, 2024). "An Integrated Dimension Theory and Modulation Signal Bispectrum Technique for Analyzing Bearing Fault in Industrial Fibrizer." *ASME. ASME J Nondestructive Evaluation.* August 2024; 7(3): 031006. <https://doi.org/10.1115/1.406554>

14. Mali, A. R., Shinde, P. V., Patil, A. P., Salunkhe, V. G., Desavale, R. G., and Jadhav, P. S. (September 13, 2024). "A Novel Method for Bearing Fault Diagnosis Based on Novel Feature Sets with Machine Learning Technique." *ASME. J. Tribol.* February 2025; 147(2): 024301. <https://doi.org/10.1115/1.4066306>

15. Raut, A. S., Khot, S. M., and Salunkhe, V. G., 2024, "Experimental Analysis of Spur Gear Pair With Geometrical and Operating Parameters." *ASME. ASME J Nondestructive Evaluation.* 7(3): 031005. <https://doi.org/10.1115/1.4065507>

16. Salunkhe, V. G., Desavale, R. G., Khot, S. M., and Yelve, N. P., 2024, "Identification of Bearing Clearance in Sugar Centrifuge Using Dimension Theory and Support Vector Machine on Vibration Measurement." *ASME. ASME J Nondestructive Evaluation.* Vol.7(2): pp.021003. <https://doi.org/10.1115/1.4064613>

17. Jadhav, P. S., Salunkhe, V. G., Desavale, R. G., Khot, S., Shinde, P. V., Jadhav, P. M., and Gadyanavar, P. R., 2024, "Identification and Fault Diagnosis of Rolling Element Bearings Using Dimension Theory and Machine Learning Techniques." *ASME. J. Tribol.* doi: <https://doi.org/10.1115/1.4065335>

18. Salunkhe, V. G., Khot, S. M., Desavale, R. G., and Yelve, N. P., 2023, "Unbalance Bearing Fault Identification Using Highly Accurate Hilbert–Huang Transform Approach." *ASME J Nondestructive Evaluation.* <https://doi.org/10.1115/1.4062929>

19. Salunkhe V.G., Desavale R.G., Khot S.M., Yelve N.P., 2023, "A Novel Incipient Fault Detection Technique for Roller Bearing Using Deep Independent Component Analysis and Variational Modal

20. Raut A.S., Khot S.M., Salunkhe V.G., 2023, “Optimization of Geometrical Features of Spur Gear Pair Teeth for Minimization of Vibration Generation”, **Springer, Journal of Vibration Engineering & Technologies.**  
<https://doi.org/10.1007/s42417-023-00857-0>

21. Salunkhe V.G., Desavale R.G., Kumbhar S.G., 2021, “Vibration Analysis of Rolling Bearing Using Finite Element Method And Dimension Analysis ”, **ASME, Journal of Tribology.** <https://doi.org/10.1115/1.4053262>

22. Salunkhe V.G., Desavale R.G., T. Jagadeesha., 2021, “Experimental Frequency-Domain Vibration Based Fault Diagnosis of Roller Element Bearings using Support Vector Machine”, **ASME, ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering.** <https://doi.org/10.1115/1.4048770>.

23. Salunkhe V.G., Desavale R.G., 2021, “An Intelligent Prediction for Detecting Bearing Vibration Characteristics using Machine Learning Model”, **ASME. Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems.** <https://doi.org/10.1115/1.4049938>.

24. M.B. Kumbhar, V.G. Salunkhe, A.V. Borgaonkar, T. Jagadeesha., 2020 “Mathematical Modelling and Experimental Evaluation of an Air Spring-Air Damper Dynamic VibrationAbsorber” **Springer, Journal of Vibration Engineering & Technologies**, 020-00263-w, <https://doi.org/10.1007/s42417>.

25. Salunkhe V.G., Desavale R.G., T. Jagadeesha., 2021, “A Numerical Model for Fault Diagnosis in Deep Groove Ball Bearing Using Dimension Theory”, **Elsevier, Journal of Material Today Proceedings**, Vol. 47, Part 11, 2021, pp.3077-3080. <https://doi.org/10.1016/j.matpr.2021.06.072>

26. Salunkhe V.G., Pawar D. N., Kathavate V. S., 2020, “ Micromechanics Based Models for the Effective Evaluations of Elastic Properties of Polymer Matrix Composites”, **Elsevier, Journal of Material Today Proceedings**, Vol. 21, Part 2, 2020, pp.1298-1302. <https://doi.org/10.1016/j.matpr.2020.01.166>

27. Borgaonkar A.V., Salunkhe V.G., Kumbhar M.B., Koli A.R., Potdar S.B., “Theoretical and experimental investigation of effect of boundary conditions on SEA parameters for idealised subsystems”, **Elsevier, Journal of Material Today Proceedings**, Vol. 11, Part 1, 2020, pp.198-104. [10.1016/j.matpr.2020.06.267](https://doi.org/10.1016/j.matpr.2020.06.267)

28. Borgaonkar A.V., Salunkhe V.G., Mandale M.B., Potdar S.B., “Experimental investigations of different fiber orientations on damping loss factor of fiberglass composite specimens, **Elsevier, Journal of Material Today Proceedings**, Vol. 26, Part 2, 2020, pp.256-260. <https://doi.org/10.1016/j.matpr.2019.11.208>

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**List of Papers Published in National and International Conferences**

1. Raut, A. S., Khot, S. M., Salunkhe, V. G. (2023). "Application of Finite Element Method for Analyzing the Influence of Geometrical Parameters of Spur Gear Pair on Dynamic Behavior," *INVEST 22, held at Fr. C. Rodrigues Institute of Technology (FCRIT)*, Vashi, December 9–10, 2022.
2. Salunkhe, V. G., Vaze, G., Lad, H. (2024). "Spur Gear Fault Detection Based on Empirical Model and Soft Computing Techniques," Structural Integrity Conference and Exhibition 2024, held at Visvesvaraya National Institute of Technology (NIT Nagpur), October 22–24, 2024.
3. Salunkhe, V. G., Vaze, G., Gogate, V., "Ballistic Impact Analysis of Carbon Fibre E-glass Sandwiched Composite," *Structural Integrity Conference and Exhibition 2024*, Visvesvaraya National Institute of Technology (VNIT), Nagpur, India, October 22-24, 2024. <https://doi.org/10.1016/j.prostr.2025.08.053>
4. Salunkhe V.G., Desavale R.G., T. Jagadeesha., 2021, "A Numerical Model for Fault Diagnosis in Deep Groove Ball Bearing Using Dimension Theory", *International Conference on Advances in Mechanical Engineering and Nanotechnology (ICAMEN) 2021* held at Manipal University Jaipur, India during March 18-19, 2021.
5. Salunkhe V.G., Desavale R.G., 2021, "A Novel Support Vector Machine Based Fault Identification Approach For Roller Element Bearing" *VETOMAC - XVI 16th International Conference on Vibration Engineering and Technology of Machinery*, 16-18th Dec. 2021 BMS COE Bangalore, India.
6. Salunkhe V.G., Desavale R.G., 2021, "Experimental Mathematical Model for Diagnosis of Vibrations Generated in Defective Rolling Element Bearings"

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8. Salunkhe V.G., Patil P.B, Patil P.S., 2017," Experimental Investigation of Static & Dynamic loading conditions for Glare Material," **International Conference on Advances in Thermal Systems, Materials & Design Engineering**, 21<sup>st</sup>-22nd December 2017, VJTI, Mumbai. <http://dx.doi.org/10.2139/ssrn.3101692>.
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11. Salunkhe V.G., Desavale R.G., Mali A.R., "Dynamic Modeling of Taper Roller Bearings with Surface Defects using Matrix Method". **1<sup>st</sup> International and 18<sup>th</sup> ISME Conference** February 23<sup>rd</sup> – 25<sup>th</sup>, 2017, NIT Warangal, Warangal.
12. Salunkhe V.G., Kumbhar M.B., "Dynamitic Vibration Absorbers using Pendulum Structures" **1<sup>st</sup> International and 18<sup>th</sup> ISME Conference** February 23<sup>rd</sup> – 25<sup>th</sup>, 2017, NIT Warangal, Warangal.
13. Salunkhe V.G., Desavale R.G., Mali A.R., "Experimental Mathematical Model for Diagnosis of Vibrations Generated in Defective rolling Element Bearings", **1<sup>st</sup> International and 18<sup>th</sup> ISME Conference** February 23<sup>rd</sup> – 25<sup>th</sup>, 2017, NIT Warangal, Warangal.
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16. Salunkhe V.G., Rakesh J. R., T. Jagadeesha., 2017, "Effect of Residual Stress on Life of Stabilising Bar using Finite Element Fatigue Analysis" **7<sup>th</sup> International & 28<sup>th</sup> All India Manufacturing Technology, Design and Research Conference** (AIMTDR 2018), Anna University Chennai, 3<sup>th</sup> –

	<p>15<sup>th</sup> December 2018.</p> <p>17. Salunkhe V.G., Rakesh J. R., T. Jagadeesha., 2017, "Life prediction of Crankshaft using Finite Element Fatigue Analysis" <i>7<sup>th</sup> International &amp; 28<sup>th</sup> All India Manufacturing Technology, Design and Research Conference</i> (AIMTDR 2018), Anna University Chennai, 3<sup>th</sup> – 15<sup>th</sup> December 2018.</p> <p>18. Salunkhe V.G., Amith Kumar. G., Rakesh J. R., T. Jagadeesha., 2017, "Design and Finite element analysis of external fixator used in Orthopaedics" <i>International Conference on Emerging Trends in Mechanical Engineering</i> (ICETME 2018), St Joseph Engineering College – Mangaluru, Karnataka, India, 10<sup>th</sup> – 11<sup>th</sup> August 2018. Anna University Chennai, 3<sup>th</sup> – 15<sup>th</sup> December 2018. <a href="https://doi.org/10.1063/1.5092920">https://doi.org/10.1063/1.5092920</a>.</p>
17.	<p><b>Patents/Books/Reports/General articles etc.</b></p> <p><b>Patents :-</b></p> <ul style="list-style-type: none"> <li>• Patent application no: 2021102312. A system for dynamic vibration absorber and method of operation.</li> </ul> <p><b>Books :-</b></p> <ul style="list-style-type: none"> <li>• Performance Investigation of Adsorption Refrigeration System: Performance Investigation of Adsorption Refrigeration System Using Activated Carbon- NH3 (Lambert Publication).</li> <li>• Modification of Rice Mill (Lambert Publication).</li> </ul> <p><b>Book Chapter :-</b></p> <ol style="list-style-type: none"> <li>1. Salunkhe V.G., T. Jagadeesha., 2020., "Investigation of Crack Detection Technique in a Rotating Shaft by Using Vibration Measurement", <i>Springer, Advances in Industrial Automation and Smart Manufacturing</i>. <a href="https://doi.org/10.1007/978-981-15-4739-3_54">https://doi.org/10.1007/978-981-15-4739-3_54</a></li> <li>2. Salunkhe V.G., T. Jagadeesha., 2020., Experimental Evaluation of Cutting Process Parameters in Cryogenic Machining of Duplex Stainless Steel", <i>Springer, Advances in Industrial Automation and Smart Manufacturing</i>. <a href="https://doi.org/10.1007/978-981-15-4739-3_44">https://doi.org/10.1007/978-981-15-4739-3_44</a></li> <li>3. M. B. Kumbhar, P. E. Lokhande, U. S. Chavan, V.G. Salunkhe., 2021 "A Global Scenario of Sustainable Technologies and Progress in a Biodiesel Production", <i>Wiley- Scrivener, Biodiesel Technology and Application</i>. <a href="https://doi.org/10.1002/9781119724957.ch7">https://doi.org/10.1002/9781119724957.ch7</a></li> <li>4. Salunkhe V.G., T. Jagadeesha., 2021., "Simulation and optimization of materials used for prosthetic leg for above-knee amputees using MR fluid", <i>Springer</i> <a href="https://www.sciencedirect.com/science/article/pii/S2214785321009597">https://www.sciencedirect.com/science/article/pii/S2214785321009597</a>.</li> <li>5. Salunkhe V.G., T. Jagadeesha., 2021., "Theoretical and experimental</li> </ol>

	<p>investigation of effect of boundary conditions on SEA parameters for idealised subsystems”, <i>Springer</i> <a href="https://www.sciencedirect.com/science/article/pii/S2214785320347350">https://www.sciencedirect.com/science/article/pii/S2214785320347350</a>.</p> <p>6. Raut A.S., Khot S.M., Salunkhe V.G., 2023, “Application of Finite Element Method for Analyzing the Influence of Geometrical Parameters of Spur Gear Pair on Dynamic Behavior”, <i>Vibration Engineering: Modeling, Simulation, Experimentation, and Applications</i>, CRC Press, Taylor and Francis <a href="https://doi.org/10.1201/9781003402695">https://doi.org/10.1201/9781003402695</a></p>
18.	<p><b>Invited Lectures in FDP/ STTP :</b></p> <ul style="list-style-type: none"> <li>Invited lecture on “Fault Diagnosis in Rolling Element Bearing” in One week STTP on "Condition Monitoring of Rotating Machines" organized by Mechanical Engineering Department, ADCET, Ashta, on 15<sup>th</sup> April 2020.</li> <li>Invited lecture on “Research Article Publication- An Insights” in Five Days STTP on “Tools and Methods of Research and Publications” organized by Mechanical Engineering Department, FCRIT, Vashi, on 02<sup>nd</sup> Jan. 2024.</li> </ul>
19.	<p><b>International Conference Technical Program Committee Member / Reviewer :</b></p> <p><b>Reviewer of International Journal</b></p> <ul style="list-style-type: none"> <li>ISA Transactions, Elsevier</li> <li>Alexandria Engineering Journal, Elsevier</li> <li>Journal of Non-destructive Evaluation, Diagnostics and Prognostics of Engineering Systems (JNDE), ASME</li> <li>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering , ASME</li> <li>Journal of Tribology, ASME</li> <li>Machines MDPI</li> <li>JVE International (Vibromechanika)</li> <li>Journal of Vibroengineering (JVE)</li> <li>Mechanical Systems and Signal Processing, Elsevier</li> <li>Measurement, Elsevier</li> </ul>