SRES', Sanjivani College of Engineering, Kopargaon (An Autonomous Institute affiliated to SPPU, Pune)

Staff Profile

| Personal Information | | | | |
|---|---|------------------------------------|--------------|-------|
| Name of Teaching Staff: LAXMIKANT SHANKARRAO DHAMANDE | | | | |
| Designation: Associate Professor | | | | |
| Department : Mechanical Engineering | | | | |
| Date of joining : 24/11/2003 | | | | |
| E Mail ID : | dhamandel | axmikantmech | @sanjivani.o | rg.in |
| Contact No: | | 940431942 | 27 | |
| Education Details | | | | |
| Qualification | Specialization with Class or Grade | Univer | rsity | Year |
| UG | B.E. Mechanical, First Class with Distinction | Dr. B. A. M. U Aurangabad | Univ. | 2000 |
| PG | Design Engineering | S. P. Pune Un Pune | iversity, | 2007 |
| Ph.D | Mechanical Engineering | S. P. Pune University, Pune2019 | | 2019 |
| Total experience in years: | | | | |
| Teaching: | Teaching:18 years | | | |
| Industry: 2.5 years | | | | |
| Research and Publications | | | | |

- 1. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, "Compound Gear-Bearing Fault Feature Extraction Using Statistical Features Based on Time-Frequency Method", Measurement, 125 (2018) 63-77.
- 2. Sachin D. Dere, Laxmikant Dhamande, "Rotor bearing system FEA analysis for misalignment", IJARIIE, 3(4), (2017),2102-2112. (ISSN-2395-4396).
- 3. J. S. Mahajan, <u>L. S. Dhamande</u>, "Review: Design of Passive Composite Isolation System For Machine Foundaion", International Journal of Advance Engineering and Research Development, 4(5), (2017),1111-1114.

- 4. J. S. Mahajan, <u>L.S.Dhamande</u>, "Design of Passive Composite Isolation System For Machine Foundaion", International Research Journal of Engineering and Technology,4(5), (2017), 3270-3276.
- 5. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, "Detection of combined gear bearing fault in single stage spur gear box using Artificial Neural Nework", Procedia Engineering 144 (2016), 759-766. doi:10.1016/j.proeng.2016.05.082
- 6. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, "Bearing Fault Diagnosis Based on Statistical Feature Extraction in Time and Frequency Domain and Neural Network, International Journal of Vehicle structures and systems", 8(4), (2016), 229-240. doi:10.4273/ijvss.8.4.09.
- 7. Vikram Vakte, <u>Laxmikant Dhamande</u>, "Simulation of helical spring used in tractor seat application", International Journal of Modern Trends in Engineering and Reasearch, 2(7), (2015),1958-1962.
- 8. V. P. Bhaurkar, A. G. Thakur, <u>L. S. Dhamande</u>, "Identification and determination of cracks in beams using vibration analysis and FEA approach", International Engineering Research Journal, 2, (2015), 531-534.
- 9. Vikram Talekar, <u>L. S. Dhamande</u>, "Condition Monitoring of Deep Groove Ball Bearing using FFT Analyzer", International Journal of Engineering Research & Technology (IJERT), 4(4), (2015), 215-222.
- 10. <u>L. S. Dhamande</u>, A. C. Pawar and V. J Suryawanshi, "Detection of Fault in Gear Box System using Vibration Analysis Method", International Journal of Current Engineering and Technology, 4(6), (2014), 3985-3989.
- 11. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, "An Overview of Fault Detection Methods for Transmission System Components using Vibration Analysis", International Journal of Emerging Engineering Research and Technology, 2(4), (2014), 360-368.
- Vaibhav J Suryawanshi and <u>L. S. Dhamande</u>, "Vibration Based Condition Assessment of Rotating cracked shaft using changes in critical speed and RMS Velocity response functions", International Journal of Current Engineering and Technology, 3, (2014), 170-174.
- 13. <u>L. S. Dhamande</u> and R. V. Bhaskar, "Damage Detection in Aluminium Honeycomb Structure using Vibration Analysis", International Journal of Current Engineering and Technology, 4(5), (2014), 3374-3379.
- L. S. Dhamande, Dr. H. N. Kudal, "An Overview Of Fault Detection Methods For Transmission System Components Using Vibration Analysis", International Journal of Advanced Technology in Engineering and Science, 01(11), (2013), 09-16
- 15. Sonam M. Gujrathi, <u>L. S. Dhamande</u> and P. M. Patare, "Wear Studies on Polytetra fluroethylene (PTFE) Composites: Taguchi Approach", Bonfring International Journal of Industrial Engineering and Management Science, 3(2), (2013), 47-51.
- Abhinay V. Dube, <u>L. S. Dhamande</u>, P. G. Kulkarni, "Vibration Based Condition Assessment of Rolling element Bearings with Localized Defects", International Journal of Scientific & Technology Research, 2(4), (2013), 149-155.

Papers presented in conferences:

A. National Conference

- Laxmikant S. Dhamande, Mangesh B. Chaudhari, "Condition monitoring of gearbox system for detecting multi-component defects using wavelet de-noising", National Conference on Emerging Trends in Mechanical Engineering (NCETME-2019) held at VIT, Pune, 7 Feb. – 08 Feb. 2019.
- 2. L.S.Dhamande, "An optimization of cutting parameters to prevent chatter vibration via Tauguchi based Response Surface Methodology" is presented and published in the proceedings of National Conference on Sustainnable Development in Mechanical Engineering, held at Zeal college of Engineering and Research, Pune (MS), on 16-17 February 2018.
- 3. S. U Turkane, L.S.Dhamande, "Design optimization and analysis of rollers used for manufacturing of Honda active rim" is presented and Published in the proceedings of National Conference on Advanced Technology and Innovations in Mechanical Engineering, held at SAE Konthwa, Pune (MS), on 22-24 Jan 2015.
- 4. V. J. Suryawanshi, L. S. Dhamande, "Crack detection technique in rotary shaft" is presented and Published in the proceedings of National Conference on Recent Trends in mechanical Engineering, held at SRES College of Engineering, Kopargaon (MS), on 25th March 2013.
- 5. A. V. Dube, L. S. Dhamande, "Vibration Based condition assessment of rolling element Bearings in Time-frequency domain" is presented and Published in the proceedings of National Conference on Recent Trends in mechanical Engineering, held at SRES College of Engineering, Kopargaon (MS), on 25th March 2013.
- 6. L. S. Dhamande, "An overview of Condition Monitoring methods for detection of damage in different Transmission system components" is presented and Published in the proceedings of National Conference on "Emerging Trends in Engineering and Technology, held at SRES College of Engineering, Kopargaon (MS), on 24-26 March 2012.
- 7. L. S. Dhamande, "Analytical, Numerical and Experimental study of hydrostatic journal bearing for test bench of grinding machine" is presented at regional research conference for Pune university college teachers Innovation-2009,Innovation -2010 and Innovation-2012 orgnised by University Of Pune, Pune during 21 -23 March 2012.
- 8. S. V. Bhaskar, L. S .Dhamande, "Tribological behavior of low friction surface coating materials" is presented and Published in the proceedings of National Conference on "Advances in Mechanical Engineering" held at Vasavi College of Engineering Imbrahimbagh, Hyderabad (AP.), on 18-19 November 2010
- 9. L. S. Dhamande, "Analytical and experimental study of hydrostatic journal bearings behavior for grinding machine "is presented and Published in the proceedings of National Conference on "Advances in Mechanical Engineering" held at Vasavi College of

Engineering Imbrahimbagh, Hyderabad (AP.), on 18-19 November 2010.

- 10. A. T. Talware, L. S .Dhamande, "Analytical and experimental investigation on forced convection solar drier" is presented and Published in the proceedings of National Conference on "Advances in Mechanical Engineering" held at Vasavi College of Engineering Imbrahimbagh, Hyderabad (AP.), on 18-19 November 2010.
- L. S. Dhamande, "Analysis of Crashworthiness of Bus body structure using FEM." is presented and Published in the proceedings of National Conference on "Innovations in Mechanical Engineering" held at J.T.Mahajan College of Engineering Faizpur, Jalgaon. (Mh.), during 29-30 March 2007.
- L. S .Dhamande, "Recent Applications of CAD/CAM" is presented and published in Proceedings of National Conference YANTRA'00, held at Belgaum, Karnataka during 19-20 May 2000.

B. International Conference

- Laxmikant S. Dhamande, Mangesh B. Chaudhari, "Vibration Reduction in Ambulance Using Modified Stretcher With Vibration Absorber", International Conference on Vibration Engineering and Technology of Machinery (VETOMAC-2021) at BMS College of Engineering, Bengaluru, 16 – 18 Dec. 2021.
- Vyankatesh Prabhakar Bhaurkar, Ajaykumar Thakur, <u>Laxmikant S. Dhamande</u>, Harshal P. Varade, "Modal Analysis of Healthy and Damaged 60 Kg Type Rail - A Step Towards Crack Detection in Indian Rail", International Conference on Vibration Engineering and Technology of Machinery (VETOMAC-2021) at BMS College of Engineering, Bengaluru, 16 – 18 Dec. 2021.
- 3. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, "Detection of multiple defects in rolling contact bearing using wavelet multi-resolution analysis", International Conference on Vibration problems (ICOVP-2017) held at IIT Guwahati, 29 Nov. 02 Dec. 2017.
- 4. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, "Effective gear teeth defect identification using multi-domain feature extraction" International Conference On Advances in Thermal System, Materials and Design Engineering (ATSMDE-2017) at VJTI,Mumbai, 21-22 Dec. 2017.
- 5. <u>Laxmikant S. Dhamande</u>, Mangesh B. Chaudhari, 'Bearing Fault Diagnosis Based on Statistical Feature Extraction in Time and Frequency Domain and Neural Network', International Conference on Mechanical Engineering Design (ICMED-2016) at SSN, CoE, Chennai, 25-26 April 2016.
- 6. <u>Laxmikant S .Dhamande</u>, Mangesh B. Chaudhari, "Detection of combined gear bearing fault in single stage spur gear box using artificial neural nework" 12th International conference on vibration problems (ICOVP-2015) held at IIT Guwahati, 14-17,Dec, 2015.
- 7. A. Pawar, <u>L. S. Dhamande</u>, "Faults detection methods in a Gear System-A Review" International Conference On Design, Manufacturing and Mechatronics (ICDMM-2014), held at Trinity College of Engg., Pune during 9-10, Jan,2014.
- 8. V. J. Suryawanshi, <u>L. S. Dhamande</u>, S. V. Bhaskar, "Vibration Based Condition Assessment of Rotating cracked shaft using changes in critical speed and RMS Velocity response function" International Conference On Design, Manufacturing and Mechatronics

(ICDMM-2014), held at Trinity College of Engg., Pune during 9-10, Jan, 2014.

- V. P. Bhaurkar, <u>L. S. Dhamande</u>, A. G. Thakur, "A Review of methods for determining location and severity of multiple cracks" Proceedings of International Conference on Advances in Mechanical Engineering-13 (ICAME'2013) held at Govt. College of Engg., Pune during 20-31 May, 2013.
- S. M. Gujrathi, <u>L. S. Dhamande</u>, "Analysis of PTFE Composites as Bearing Material" Proceedings of International Conference on Recent Trends in Engineering and Technology-2013(ICRTET'2013) during 22-23 Feb. 2013.
- L. S. Dhamande, P. S. Shinde "Non-linear finite element analysis approach to a vehicle structure crashworthiness" Proceedings of International Conference on Total Engineering, Analysis & Manufacturing Technologies (TEAM-TECH 2008), held at Indian Institute of Science, Bangalore during 22-24 September 2008.
- 12. P. S. Shinde, <u>L. S. Dhamande</u>, "Modal analysis on passive suspension system for cars using quarter car, half car & full car model simulations" Proceedings of International Conference on Total Engineering, Analysis & Manufacturing Technologies (TEAM-TECH 2008), held at Indian Institute of Science, Bangalore, Karnataka.
- 13. S. V. Bhaskar, <u>L. S. Dhamande</u>, "Theoretical and experimental analysis of motor cycle chassis (800cc) frame using fem and FFT analyzer" Proceedings of TEAM-TECH 2008, held at Indian Institute of Science, Bangalore, Karnataka.

| Research Profile URL | | | | |
|--|--|---|--|--|
| Google Scholar | https://scholar.goo AAJ&hl=en | https://scholar.google.com/citations?user=3j6VEc8AA AAJ&hl=en | | |
| Scopus | https://www.scopu 7190747593 | https://www.scopus.com/authid/detail.uri?authorId=5 7190747593 | | |
| Orcid | | | | |
| | Other Research | Details | | |
| Ph D Guide ?Give field & University: | - | | | |
| Ph Ds/ Projects Guided | - | | | |
| Books Published | - | | | |
| IPRs/Patents | - | | | |
| Professional Memberships: | ISTE, IE | | | |
| Interaction with professional institutions | - | | | |
| | Consultancy Activities | | | |
| Duration | aration Title of Activity Issued Organization Amount | | | |

| | | Grants fetch | ed | | |
|---|------------|--|--------------|------------------------------------|------------------------------------|
| Duration | | Title | Issued Organ | nization | Amount |
| 2016-17 | monitoring | orkshop on "Condition of rotating machinery ation analysis" | BCUD, SPPU, | Pune | 60000=00 |
| | | Awards | | | |
| | | Please write/typ | e Here | | |
| | FACULTY I | DEVELOPMENT PROG | RAMMES ATT | ENDED | |
| Name of the Fl Workshop | DP / | Organization | | Duration | Month- Year |
| FDP:"Machinery Monitoring | Condition | Zakir Husain College of Technology, Delhi (ATA | 0 0 | 5 Days 10/01/2022 to 14/01/2022 | |
| FDP: Industrial A of Machine Learn Artificial Intellige | ing and | Manipal University Jaipur. (AICTE Training and Learning (ATAL) Academy) 06/09/2021 to 10 | | 05 days 1 to 10/09/2021 | |
| FDP: Design Thir Product Developr | - | National Institute of Technology Arunachal Pradesh. (ATAL) | | 23/08/202 | 05 days 1 to 27/08/2021 |
| FDP: Damage To New Design Strat | | Veermata Jijabai Technological Institute, Mumbai (ATAL) | | 05-07 | 05 days -2021 to 09-07- 2021 |
| National Level W 'Intelligent condit monitoring using Intelligence | tion | Sardar Patel College of Engineering, Mumbai 19th Octob | | 1 Day h October 2021 | |
| Strategies to impr activities in Engir Institutes | | Sanjivani College of Engineering | | 5 Da | uys,27/09/2021- 01/10/2021 |
| Three days online Level Faculty Dev Program on 'Elec | velopment | Maratha Vidya Prasarak Samaj's3 Days, 06-0Karmaveer Adv. Baburao Ganpatrao | | 06-08/05/2021 | |

| Vehicles: Present Status and Future Prospects' | Thakare College of Engineering, Nashik | |
|---|---|-----------------------|
| One week FDP on Recent Advancement in AI & Robotics | Dr D Y Patil School of Engineering and Technology, Pune | 5 days, 25-29/04/2021 |
| Webinar on "National Education Policy 2020 with special reference to HEI's" | Dept. of MBA, Sanjivani College of Engineering, Kopargaon | 1 day, 10/04/2021 |
| Webinar on "Articulating Course Outcomes, Program Outcomes and Mappings" | Mastersoft ERP Solutions Pvt. Ltd, Nagpur | 1 day, 20/03/2021 |
| One week STTP on "Noise and Vibration Control of Industrial Rotory Machines" | Annasaheb Dange College of Engineering and Technology, Ashta | 5 Days,15-20/03/2021 |
| One day online webinar on "Outcome Based Education and Accreditation" | NBA, DTE, and COE, Pune | 1 day, 27/11/2020 |
| Three days online w orkshop on "Rotor and Bearing Systems (RBS-2020" | SRM Institute of Science and Technology, Kattankulathur, Tamilnadu | 3 Days, 24-26/11/2020 |
| Three days online workshop on "Metallurgical Failure Analysis of Engineering Components" | Indus Institute of Technology and Engineering, Indus University, Ahmedabad,Gujrat | 3 Days,28-30/10/2020 |
| FacultyDevelopmentProgramme(Webinar)"ICTtoolsforOnlineTeaching" | Sanjivani College of Engineering, Dept. of MBA, Kopargaon | 1 Day, 26/5/2020 |
| Faculty Awareness (Webinar)Programon"NBAAccreditation Process" | SNJB's Late Sau. Kantabai Bhavarlalji Jain COE,Chandwad | 1 Day, 18/5/2020 |

| Online w orkshop on Smart Use of ICT Using WordPress (Blog Creation) | SNJB's Late Sau. Kar Jain, COE, Chandwad | ntabai Bhavarla | lji 1 | Day, 11/05/20 |
|---|---|-----------------|--------------------|----------------|
| IOT Mechanical Engineering Perspective And Case Studies (webinar) | AVCOE, Sangamner | | 1 Da | ay, 15/05/2020 |
| Webinar on "Implementing OBE with effectively defining and Mapping CO, PO and PSO" | Department of Mechanical Engineering, Sanjivani College of Engineering, Kopargaon | | ıg, | 25/05/2020 |
| Webinaron"GeniusCode-ScienceofPEAKPerformance | Department of Product AISSMS COE Pune | tion Engineerin | ıg, | 26/05/2020 |
| FACULTY DEVELOPMENT PROGRAMMES ORGANIZED | | | | |
| Name of the FDP / Workshop | Organization | Duration | Month- Year | Capacity |
| FDP on "Research Opportunities in Vibration Engineering" | SRES's Sanjivani College of Engineering | 6 Days | 24- 29/01/2022 | 56 |
| Webinar on "Industrial Design Practices-An Overview" | SRES's Sanjivani College of Engineering | 1 Day | 07/01/2022 | 74 |
| Webinar on "Automotive Seating Systems" | SRES's Sanjivani College of Engineering | 1 Day | 16/10/2022 | 60 |
| Webinar on "Outcome Based Education" by Dr. U. S. Malik | SRES's Sanjivani College of Engineering | 1 Day | 7, Aug. 2020 | 100 |
| Three day workshop on "Implementation of Outcome Based Education in context of | SRES's Sanjivani College of Engineering | 3 Days | 17-19 July 2020 | 30 |

| NBA" | | | | |
|---|---|--------|--|----|
| Three day capsule course on Use of excel in Design for Engineering Application. | SRES's Sanjivani College of Engineering | 3 Days | 30 Aug- 01 Sep. 2018 | - |
| Three day Mentor orientation programme for faculty of Sanjivani College of Engineering | SRES's Sanjivani College of Engineering | 3 Days | 8 th -10 th June 2017 | - |
| One day State level workshop on Condition monitoring of Rotating Machinery using Vibration Analysis. | SRES's Sanjivani College of Engineering | 1 Day | 6 th Octo. 2016 | - |
| Tech-Fest-2016 | SRES's Sanjivani College of Engineering | 2 Days | 9-10,Sep. 2016 | - |
| One day workshop on Condition monitoring of machine components using FFT Analyser. | SRES's Sanjivani College of Engineering | 1 Day | 31 st July 2015 | - |
| One day workshop on Use of Excel in Engineering Applications | SRES's Sanjivani College of Engineering | 1 Day | 10 th March 2015 | 30 |
| A Two days National level workshop on 'Design of Machine Elements with standard practices used in design office.' | SRES's Sanjivani College of Engineering | 2 Days | 02 nd -03 rd January 2015 | 70 |
| One day workshop on Lab Practices of Hydraulics and Pneumatics Practicals. | SRES's Sanjivani College of Engineering | 1 Day | 06 th September 2014 | 30 |
| A Two days National level workshop on 'Condition Monitoring of Machine Elements Using FFT Vibration Analyser' | SRES's Sanjivani College of Engineering | 2 Days | 12 th -13 th July, 2013 | 40 |

| INVITE | INVITED LECTURES IN CONFERENCE/SEMINAR | | | |
|---|---|--|--|--|
| Title of Lecture/ Academic SessionTitle of Conference/ Seminar etc. | | Organized By | | |
| Condition monitoring using Machine Learning | FDP on Research Opportunities in Vibration Engineering | SRES College of Engineering, Kopargaon | | |
| Vibration and Noise Measurement | Expert Lecture: Vibration and Noise Measurement | ZEAL COE and R, Pune | | |
| Design by excel | Webinar on "Design by excel" under FDP product design and novelty | PDPVP,COE, Ahmednagar | | |
| Condition Monitoring using vibration analysis. | STTP Advanced Measurement Techniques | VIT Pune | | |
| Condition Monitoring using vibration analysis. | STTP Advanced Measurement Techniques | VIT Pune | | |
| Vision Mission of Department and Institite, CO + PO Mapping | Three day workshop on "Implementation of Outcome Based Education in context of NBA" | SRES College of Engineering, Kopargaon | | |
| How to write CO and CO- PO mapping | Lecture on how to write CO and CO- PO mapping | SRES College of Engineering, Kopargaon | | |
| Vibration and Noise Measurement. | Expert Lecture: Vibration and Noise Measurement. | M. M. C.O.E. ,Malegaon | | |
| Mechanical Vibration. | Expert Lecture: Mechanical Vibration. | AVCOE, Sangamner | | |
| NBA Guidelines | Workshop on NBA | K. K. Wagh, COE Nashik | | |
| Vibration and Noise Measurement. | Expert Lecture: Vibration and Noise Measurement. | SNJB,COE,Chandwad | | |
| Vibration and Noise Measurement. | Expert Lecture: Vibration and Noise Measurement. | AVCOE, Sangamner | | |

| Condition monitoring of machine components using FFT analyser. | Expert Lecture: Condition monitoring of machine components using FFT analyser. | SRES College of Engineering, Kopargaon | |
|---|---|--|--|
| Use of Excel in Engineering Applications | Expert Lecture: Use of Excel in Engineering Applications | SRES College of Engineering, Kopargaon | |
| Design of Two Stage gear box, Design for assembly and manufacture | Expert Lecture: Design of Two Stage gear box, Design for assembly and manufacture | SRES College of Engineering, Kopargaon | |
| Lab practices of Hydraulic circuits. | Expert Lecture: Lab practices of Hydraulic circuits. | SRES College of Engineering, Kopargaon | |
| Advanced Mechanical Vibration measurement | Expert Lecture: Advanced Mechanical Vibration measurement | S.N.D. College of Engineering & Research centre, Babhulgaon, Tal-Yeola, Dist: Nashik | |
| Design of Bearings and Two stage Gear Box. | Expert Lecture: Design of Bearings and Two stage Gear Box. | Sandip foundation's S.I.T.& R.C., Nashik. | |
| Automobile component Design | Expert Lecture: Automobile component Design | Matoshri Institute of Technology, Dhanore, Tal-Yeola, Dist –Nasik | |
| Industrial fluid Power and its Applications | Expert Lecture : Industrial fluid Power and its Applications | S.N.D.Polytechnic Yeola,Dist: Nashik. | |

| | OTHER Professional URLs |
|-------------------|---|
| Personal Website | https://wordpress.com/view/lsdhamande.wordpress.com |
| Linked In Profile | https://www.linkedin.com/in/dr-laxmikant-dhamande- 29528543/ |
| GitHub URL | |

| YouTube Channel | https://www.youtube.com/channel/UC3LkJlsxOWoYoPlu- cHR9eQ |
|-----------------|--|
| Other | |

Any Other: