

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

Staff Profile

| Personal Information | | | |
|--|------------------------------------|--|------|
| Name of Teaching Staff: Dr. Palekar Shailesh P. | |  | |
| Designation: Associate Professor | | | |
| Department : Department of Mechanical Engg. | | | |
| Date of joining : 23/06/2009 | | | |
| E Mail ID : | | palekarshaileshmech@sanjivani.org.in | |
| Contact No: | | 9922868097 | |
| Education Details | | | |
| Qualification | Specialization with Class or Grade | University | Year |
| UG | Production with Distinction (68%) | SRTMU-Nanded | 1999 |
| PG | M.Tech (CAD/CAM) with Distinction | SGGGSIE &T-Nanded | 2010 |
| Ph.D | Mechanical Engg. | SVNIT-Surat | 2016 |
| Total experience in years: | | | |
| Teaching: | | 23 Yrs. | |
| Industry: | | Nil | |
| Research and Publications | | | |
| <ol style="list-style-type: none"> 1. Palekar Shailesh P. and Achchhe Lal., (2020), Stochastic Fracture Analysis of the Laminated Composite Plates Subjected to Different types of Biaxially Applied Stresses by implementing SXFEM, <i>Iranian Journal of Science and Technology, Transactions of Mechanical Engineering</i>, https://doi.org/10.1007/s40997-021-00434-4. 2. Palekar Shailesh P. and Achchhe Lal., (2020), XFEM for Fracture Analysis of Centrally Cracked Laminated Plates Subjected to Biaxial Loads, <i>Mechanics of Advanced Composite Structures</i>, Accepted Manuscript. (8) 213 – 234. 3. Vaibhav J. Suryawanshi , Amar C. Pawar , Shailesh P. Palekar, Kuldeep A. Rade, (2020), Defect | | | |

detection of composite honeycomb structure by vibration analysis technique, *Materials Today: Proceedings*, **27**, 2731-2735.

4. Achchhe Lal , Khushbu Jain and S P Palekar, (2020), Fracture analysis of center cracked laminated composite plate subjected to bi-axial loading using extended finite element method, *IOP Conference Series: Materials Science and Engineering*, (2020) 01202.
5. Achchhe Lal and Palekar Shailesh P.,(2016), Probabilistic fracture investigation of symmetric angle ply laminated composite plates using displacement correlation method, *Curved and Layered Structures*, **3 (1)**, 47–62.
6. Achchhe Lal and Shailesh P. Palekar, (2017), Stochastic fracture analysis of laminated composite plate with arbitrary cracks using X-FEM”, *International Journal of Mechanics and Materials in Design*, **13**,195–228.
7. Achchhe Lal, Shailesh P. Palekar, Sameer B. Mulani, Rakesh K. Kapania, (2017), Stochastic extended finite element implementation for fracture analysis of laminated composite plate with a central crack, *Aerospace Science and Technology*, **60**, 131–151.

Papers presented in conferences:

1. Shailesh P. Palekar, Achchhe Lal, Rakesh Kapania, Determination of fracture parameters for single notched edge cracks laminated composite plates subjected in-plane mechanical loadings, 4th ICCMS-2012, IIT-Hyderabad, 12-15 Dec.2012.
2. Shailesh P. Palekar, AchchheLal, Probabilistic Fracture Analysis of Symmetrically Angle-Ply Laminated Composite Plates with Single Edge V- Notch, ICTACEM-2014, IIT-Kharagpur, 29-31 Dec.-2014.
3. Shailesh P. Palekar, AchchheLal, Probabilistic Fracture Analysis of Symmetrically Angle-Ply Laminated Composite Plates with elliptical crack subjected to biaxial load, ICCMS-2016, IIT-Mumbai, June 27-1 July 2016.
4. Achchhe Lal, Shailesh P. Palekar, Mixed mode stress intensity factor of edge crack laminated composite plate in hygrothermal environment using XFEM, ICTACEM-2017, IIT-Kharagpur, 28-30 Dec.-2017.
5. Palekar Shailesh P., Achchhe Lal, Patore Prasad M, Joshi Atul A, Bojage Prasad A, Suryawanshi Vaibhav J, Probabilistic Mixed Mode Stress Intensity Factors of Single Edge Cracked Laminated Composite Plates Using Stochastic Extended Finite Element Method, Joint Conference of ICTACEM 2021, APCATS 2021, AJSAE 2021 and AeSI 2021, IIT-Kharagpur, 2021.

| | | | |
|---|---|--|---------------|
| 6. Vaibhav J. Suryawanshi, Shailesh P. Palekar, Prasad M. Patare, Prasad A. Bojage and Atul A. Joshi, Based on Natural Frequencies, Crack Analysis of Fixed Support Fibre Glass Composite Beam, Joint Conference of ICTACEM 2021, APCATS 2021, AJSAE 2021 and AeSI 2021, IIT-Kharagpur, 2021. | | | |
| Author(s), Title of Article, Name of Conference, Place, Month-Year [Download Link] | | | |
| Research Profile URL | | | |
| Google Scholar | https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=rBuQVI4AAAAJ | | |
| Scopus | Id No.- 56912210700 | | |
| Orcid | | | |
| Other Research Details | | | |
| Ph D Guide ?Give field & University: | Fracture analysis of composite plate by using XFEM, Design and Analysis of Composite structures, Stochastic and Deterministic analysis of Structures. | | |
| Ph Ds/ Projects Guided: | Nil | | |
| Books Published | Nil | | |
| IPRs/Patents | Nil | | |
| Professional Memberships: | IEI and ISTE Life Member | | |
| Interaction with professional institutions | ----- | | |
| Consultancy Activities | | | |
| Duration | Title of Activity | Issued Organization | Amount |
| Aug-2019-Mar-2020 | Design and Fabrication of Glass Fiber Chopping Machine | GIZ-MASSIA and NIMA-Amalgamated Industrial Composite Private Ltd. Nashik | 50000.00 |
| Aug-2019-Mar-2020 | Design and Fabrication of Movable Welding Workstation | GIZ-MASSIA and NIMA-Lalit Hydraulics Pvt. Ltd.-Nashik | 25000.00 |
| Grants fetched | | | |
| Duration | Title | Issued Organization | Amount |

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|---|--|--------------------------|------------|----------|
| 2014-2016 | <u>Probabilistic Finite Element Method-Modeling and Fracture Analysis of Single Edge Notched Laminated Composite Plate</u> | BCUD, SPPUniversity-Pune | 80000.00 | |
| Awards | | | | |
| Please write/type Here | | | | |
| FACULTY DEVELOPMENT PROGRAMMES ATTENDED | | | | |
| Name of the FDP / Workshop | Organization | Duration | Month-Year | |
| Machine Automation and Condition Monitoring | VNIT-Nagpur | 15 Days , Dec-2008 | | |
| Effective Research Methodology | SRES COE, Kopargaon | 01 Day, Jan-2010 | | |
| Recent Advances in Composite Materials | SVNIT-Surat | 5 Days, June-2013 | | |
| Finite Element and Analytical Solution for Composite Laminated Plates | SVNIT-Surat | 5 Days, April-2015 | | |
| Advances in Theoretical, Applied, Computational, and Experimental Mechanics | SVNIT-Surat | 5 Days, Oct-2016 | | |
| Fundamentals of Drone Technology for Precision Agriculture | MPKV- Rahuri | 5 Days- April-2020 | | |
| Implementation of Outcome Based Education in context of NBA | SVNIT-Surat | 3 Days- July-2020 | | |
| FACULTY DEVELOPMENT PROGRAMMES ORGANIZED | | | | |
| Name of the FDP / Workshop | Organization | Duration | Month-Year | Capacity |
| Research Areas in Mechanical Engineering | SRES COE, Kopargaon | 5 Days | Oct-2021 | 100 |
| INVITED LECTURES IN CONFERENCE/SEMINAR | | | | |
| Title of Lecture/ Academic Session | Title of Conference/ Seminar etc. | Organized By | | |
| Stochastic Fracture Analysis of Laminated Composite plate by using XFEM | Advances in Theoretical, Applied, Computational, and Experimental Mechanics | SVNIT-Surat | | |
| XEFM Mathematical formulation for Fracture analysis of structures | Finite Element Methods for Engineering Applications | SVNIT-Surat | | |

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|---------------------------------|---|---------------------|
| Fracture Analysis of Structures | <i>Introduction to Finite Element Method and Engineering Applications</i> | SRES COE, Kopargaon |
|---------------------------------|---|---------------------|

| OTHER Professional URLs | |
|-------------------------|---|
| Personal Website | ----- |
| Linked In Profile | https://www.linkedin.com/feed/ |
| GitHub URL | ----- |
| YouTube Channel | https://www.youtube.com/channel/UCYuu0atujuom7dXW8wyEXfg |
| Other | ----- |

Any Other: Nil