

Somaiya Vidyavihar University

Name: Dr. Manoj Janardan Pawar			E-mail:manoj.jp@somaiya.edu		
Contact No: 022-66449528, 9421136691					
Department/Section: Mechanical Engineering					
College: K J Somaiya College of Engineering					
DOJ Somaiya:	Career Experience: 17 Yrs		Industry Experience: ___ Yrs	Teaching Experience: 14 Yrs	
01/01/2018					
Present Academic Designation: Associate Professor			Present Administrative Designation: NA		

Area of research/specialization and Courses Delivered
<p>Research domain/interests/areas</p> <ol style="list-style-type: none"> 1. Tribology 2. Composite Materials 3. Computational Analysis 4. Electric Vehicles <p>Courses Delivered</p> <ol style="list-style-type: none"> 1. Theory of Machines 2. Tribology 3. Automobile Engineering 4. Electric Vehicles 5. Engineering Drawing 6. Automobile Systems and Vehicle Dynamics

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
Details of Recognitions			
<ol style="list-style-type: none"> 1. 2. 			

Education					
Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
Ph.D	Ph.D	Malviya National Institute of Technology, Jaipur	Malviya National Institute of Technology, Jaipur	2017	NA
PG	M.E. Mech-Prod	Shivaji University, Kolhapur	Government College of Engineering, Karad	2012	69.83
UG	B.E. Auto	Shivaji University, Kolhapur	Rajarambapu Institute of Technology, Sakhrale	2004	73.13
Diploma	D.M.E.	M.S.B.T.E., Mumbai	Rajarambapu Institute of Technology, Sakhrale	2001	67.16
NET/SET/Other	--				

Notable Experience Details					
Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	K J Somaiya College of Engineering, Vidyavihar, Mumbai	Associate Professor	01.01.2018	till date	5 years
2.	Kolhapur Institute of Technology's College of Engineering, Kolhapur	Associate Professor	07.08.2016	31.12.2017	1&1/2 years
3.	Malaviya National	Research Scholar	19.07.2013	20.07.2016	3 years

Somaiya Vidyavihar University

	Institute of Technology, Jaipur (Raj.)				
4.	Annasaheb Dange College of Engineering and Technology, Ashta (Maharashtra)	Assistant Professor	23.07.2012	15.07.2013	1 year
5.	Adarsh Institute of Technology and Research Centre, Vita (Maharashtra)	Sr. Lecturer	02.12.2010	21.07.2012	1&1/2 years
6.	Rajendra Mane College of Engineering and Technology, Ambav (Maharashtra)	Lecturer	18.01.2005	01.12.2010	6 years

Research Accomplishments and Projects

No of students pursuing Ph.D as on date: 01		No of students completed Ph.D as on date: 0
No of students completed PG thesis / Project work as on date: 02		No of students / groups completed UG projects as on date:- 20 +
Publications Total:	Number of Peer review Journal papers: 12	Number of Conference papers: 09

Details of Publications:

International Journals

1. **M. J. Pawar**, Vikash Gautam, Ashiwani Kumar, Vikas Kukshal, Computational analysis of aluminium alloy plates against conical-nose steel projectile, Materials Today: Proceedings, 2021, 46(15), 6552-6557. <https://doi.org/10.1016/j.matpr.2021.04.017>.
2. **M. J. Pawar**, A. Patnaik, R. Nagar, Ashiwani Kumar, Experimental and numerical investigation on erosive wear performance of hybrid polymer composites, Materials Today: Proceedings, 2021, 46(6), 4775-4782. <https://doi.org/10.1016/j.matpr.2020.10.973>.
3. A. Kumar, M. Kumar, A. Patnaik, **M. J. Pawar**, Akhileshwar Pandey, Anil Kumar, Vikas Gautam, Optimization of sliding and mechanical performance Ti/Ni metal powder particulate reinforced Al 6061 alloy composite using preference selection index method, Materials Today: Proceedings, 2021, 46(6), 4784-4788. <https://doi.org/10.1016/j.matpr.2020.10.974>.
4. A. Kumar, M. Kumar, V. Kukshal, Akhileshwar Pandey, **M. J. Pawar**, Vikash Gautam, Investigation on mechanical and tribological characterization of Gr filled AA7075 alloy composite using Taguchi method, Materials Today: Proceedings, 2021, 46(15), 6534-6540. <https://doi.org/10.1016/j.matpr.2021.03.734>.
5. S. Bagwe, S. Thale, P. Sawant, **M J Pawar**, Finite element analysis of armor steel and aluminium alloy under the impact of 7.62 mm projectile, Materials Today: Proceedings 2021: 44(6), 4086-4091. <https://doi.org/10.1016/j.matpr.2020.10.447>.
6. **M. J. Pawar**, A. Patnaik, S. K. Biswas, U. Pandel, I. K. Bhat, S. Chatterjee, A. K. Mukhopadhyay, R. Banerjee, B. P. Babu, Comparison of ballistic performances of Al₂O₃ and AlN ceramics. International Journal of Impact Engineering 2016: 98, 42-51.
7. **M. J. Pawar**, Amar Patnaik, Ravindra Nagar, Mechanical and Thermo-Mechanical Analysis Based Numerical Simulation of Granite Powder Filled Polymer Composites for Wind Turbine Blade. Fibers and Polymers 2016: 17, 1078-1089.
8. **M. J. Pawar**, Amar Patnaik, Ravindra Nagar, Numerical Simulation and Experimental Validation of Granite Powder Filled Jute Epoxy Composite for Slurry Jet Erosive Wear, International Polymer Processing, 2016: 31, 37-50.
9. **M. J. Pawar**, Amar Patnaik, Ravindra Nagar, Investigation on Mechanical and Thermo-Mechanical Properties of Granite Powder Filled Treated Jute Fiber Reinforced Epoxy Composite, Polymer Composites 2017: 38 (4), 736-748 (DOI 10.1002/pc.23633).
10. **M.J. Pawar**, Amar Patnaik, Ravindra Nagar, Experimental Investigation and Numerical Simulation of Granite Powder Filled Polymer Composites for Wind Turbine Blade: A Comparative Analysis,

Polymer Composites 2017: 38 (7), 1335-1352 (DOI 10.1002/pc.23700).

11. **M. J. Pawar**, V. S. Jadhav, Finite Elemental Analysis of Influence of Shape and Profile of Cutting Edge of Twist Drill on Drilling Process, International Journal of Engineering and Advanced Technology 2012: 1, 57-61.

National Journals

1.

Conferences

1. Aakash Sharma, Vikash Gautam, Amar Patnaik, **M. J. Pawar**, Ashiwani kumar, Vikas kukshal, Transforming Granite Wastes into High Performance Hybrid Polymer Composites for Environmental Sustainability and its Comparative Optimization using TOPSIS Technique, International Conference on Innovations in Energy Engineering & Cleaner Production *IEECP21*, July 29-30, 2021, Silicon Valley, San Francisco, CA – USA, DOI:<https://dx.doi.org/10.6084/m9.figshare.14737971>
2. **M. J. Pawar**, Amar Patnaik, Ravindra Nagar. Tribo-performance of granite powder filled glass-epoxy composites. An International Conference on Tribology, VJTI, Mumbai, India, 13th -15th December 2018.
3. **M. J. Pawar**, Amar Patnaik, Ravindra Nagar Investigation on Mechanical Properties of Granite Dust Filled Glass Epoxy Composite for Wind Turbine Blade. International Conference on Emerging and Futuristic Trends in Engineering & Technology at Maharaja Agrasen Institute of Technology, Solal, Baddi (HP), May 8-9, 2015
4. **M. J. Pawar**, Ravindra Nagar, Amar Patnaik. Parametric Optimizations for Wind Turbine Blade Applications: A Statistical Analysis. NIT-MTMI International Conference on Emerging Paradigms and Practices in Global Technology, Management & Business Issues. NIT Hamirpur, December 22-24, 2014.
5. D.R. Unune, **M. J. Pawar**, Ride Analysis of Quarter Vehicle Model, International Conference on Industrial Engineering, 2011 at S.V.N.I.T., Surat.
6. **M. J. Pawar**, S. P. Waghmare, S. R. Mahajan, Waste Heat Recovery, National Conference on Advances in Heat and Mass Transfer, Finolex Academy of Management and Technology, Ratnagiri, Maharashtra, 30-31 Oct, 2009.
7. **M. J. Pawar**, R. D. Wategaonkar, Biowaste as source of Renewable Energy, National Conference on Environmental Engineering and Management, T.K.I.E.T., Warananagar, Dist: Kolhapur, Maharashtra, 15-16 Feb, 2008.
8. R. D. Wategaonkar, **M. J. Pawar**, MagnetoRheological Brake, International Conference on Advanced Material and Applications-2007, Shivaji University, Kolhapur, Maharashtra, 15-17 Nov, 2007
9. N. S. Dhole, **M. J. Pawar**, Lean Manufacturing- a case study, ISTE Convention at B.N.I.T., Pusad, Dist: Yavatmal, Maharashtra.

Books/Book Chapters

1. Gautam, V., Sharma, A., Patnaik, A., **Pawar, M. J.**, Kumar, A., Kukshal, V. (2022). Slurry Abrasion Wear Assessment of Hybrid-Reinforced Polymer Composite Using Comparative Taguchi Gray Relational Analysis. In: Kumar, S., Ramkumar, J., Kyratsis, P. (eds) Recent Advances in Manufacturing Modelling and Optimization. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-9952-8_34
2. **M J Pawar**, Amar Patnaik, Vikas Kukshal, Ashiwani Kumar, and Vikash Gautam, Modal Analysis of a Wind Turbine Blade Using a Computational Method. In: Advanced Materials and Manufacturing Process published by CRC Press. (DOI: 10.1201/9781003093213-3)
3. **M J Pawar**, Amar Patnaik, Vikas Kukshal, and Ashiwani Kumar, Microstructural and Tribological Behavior of 5083-TiB₂ Cast Composites Fabricated by a Flux-Assisted Synthesis Technique. In: Advanced Materials and Manufacturing Process published by CRC Press. (DOI: 10.1201/9781003093213-7)
4. Ashiwani Kumar, Amar Patnaik, Mukesh Kumar, Vikas Kukshal, **M J Pawar**, and Vikash Gautam, Analysis of Mechanical and Sliding Wear Performance of AA6061– SiC/Gr/MD Hybrid Alloy Composite Using a PSI Approach for Rotor Applications. In: Advanced Materials and Manufacturing Process published by CRC Press. (DOI: 10.1201/9781003093213-5)

Patents/Copy Rights

Somaiya Vidyavihar University

1.		
2.		
No of Research / consultancy / projects completed: Nil Rs: _____	No of Research / consultancy / projects on-going: Rs: <u>360000</u>	No of Research / consultancy / projects on applied as on date: Rs: <u>Nil</u>
Details of Research / consultancy / projects: Completed 1. 2. On-going 1. Design and development of electric mobility for physically challenged person funded by Somaiya Vidyavihar University for Rs. 360000. 2. Applied 1. 2.		
IPR/ Copyrights 1. 2.		

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered
<p>Attended</p> <ol style="list-style-type: none"> 1. Participated in AICTE Sponsored Online Short Term Training Program on “Hybrid & Electric Vehicle Technologies for Sustainable Mobility (HEVTSM-2021)” organized by Maharaj Vijayaram Gajapathi Raj College of Engineering (A), Vizianagaram, Andhra Pradesh from 28th June to 3rd July 2021. 2. Participated in AICTE-ISTE sponsored Induction/Refresher program on “Sustainable Product Design and Manufacturing (Phase II)” held online Shri Mata Vaishno Devi University, Katara, Himchal Pradesh during May 21-27, 2021. 3. Successfully completed the 5 day course on 'Electric and Hybrid Vehicle Engineering' organized by Haritha TechLogix in collaboration with Dept. of Electrical and Electronics Engineering and the IEEE PES SBC of Rajagiri School of Engineering and Technology, Kochi, held from 3rd - 7th August 2020. 4. Successfully passed 6 days online Proficiency Improvement Programme (oPIP) on “Design & Analysis of ATV using ANSYS Software” jointly organized by The Automotive Research Association of India (ARAI), Pune & ANSYS Software Pvt Ltd, Pune from 30th May to 20th June 2020. 5. Successfully attended one week Faculty Development Programme on “Pedagogy of Scientific Writing, Reporting and Scholarly Networks” Organised by Feroze Gandhi Institute of Engineering and Technology, Raebareli, During June 19-23, 2020. 6. Participated two weeks AICTE sponsored STTP on “materials -processing Characterization and application” at Sri Ramakrishna Engineering College Coimbatore, TN from 25/11/2019 to 8/12/2019. 7. Participated in “9th Summer School in Tribology” organized by Tribology Society of India at Indian Oil Institute of Petroleum Management from 19 – 23 June 2017. 8. Participate in national workshop on “Advanced Functional Materials” at MNIT, Jaipur on 5 Sept 2014. 9. Participated in special workshop on “Advanced Developments in Beam and Plate Theories and Structural Dynamics” at MNIT, Jaipur from 4 – 6 Jan 2014. 10. Participate in one week STC on “Nanotechnology and its applications” at MNIT Jaipur from 7 – 11 Oct 2013. 11. Participated in two days workshop on “Recent Trends in Composites” at Annasahed Dange College of Engineering and Technology, Ashta (Sangli) on 27th and 28th Sept 2016. 12. Participated in two days workshop on “Automotive Testing: Methodology and Instrumentation” at RIT Sakhrale (Sangli) on 15 and 16 Feb 2013. 13. Participated in two week STTP on “Engineering Thermodynamics” conducted by IITB at remote centre RIT, Sakhrale (Sangli) from 11 Dec-21 Dec 2012.

Somaiya Vidyavihar University

14. Participated in one week STTP on “Recent Trends in Precision Mechanical Measurement” at SCOE, Pune (organized under TEQUIP-II) from 26Nov-01 Dec, 2012.
15. Participated in one week STTP on “Recent Trends in Automotive Engineering” at Rajendra Mane Collage of Engineering and Technology, Ambav (Dist: Ratnagiri) during 27-31 Dec, 2011.
16. Participated in ISTE Approved one week STTP on “Finite Elemental Analysis and Their Applications in Science and Engineering” at Annasaheb Dange Collage of Engineering and Technology, Ashta (Dist: Sangali) during 20-24 Dec, 2010.
17. Participated in workshop WIPRO Mission 10X workshop conducted at Sou. Shushila Dhanchand Charitable Trust’s Group of Institutions, Atigre (Dist: Kolhapur) during 13-17 Dec, 2010.
18. Participated in Two day workshop on “Open Source Software Laboratory-UBANTU” at Rajendra Mane Collage of Engineering and Technology, Ambav (Dist: Ratnagiri) during 1 and 15 Feb, 2010.
19. Participated in AICTE sponsored one week STTP on “Knowledge Management: Issues and Challenges” at SVNIT, Surat during 04-08, Jan 2010.
20. Participated in ISTE approved one week STTP on “Nano Technology” at Shri Vitthal Education and Research Institute’s Collage of Engineering, Pandharpur (Dist: Solapur) during 15-19 Dec,2008.
21. Participated in AICTE and ISTE sponsored one week STTP on “Computer Aided Drafting” at Govt. Polytechnic, Amravati during 16-21 June, 2008.
22. Participated in ISTE sponsored one week STTP on “Robotics and its Applications” at Fr. Conceicao Rodrigues Collage of Engineering, Bandra, Mumbai during 26-30 May, 2008
23. Participated in one day workshop on “Quality and Research in Engineering Education” at Rajendra Mane Collage of Engineering and Technology, Ambav (Dist: Ratnagiri) on 07 April, 2008
24. Participated in Three Day Workshop on “Auto CAD-2008” at Gharda Institue of Technology, Lavel, Chiplun (Dist: Ratnagiri) during 17-19 Jan 2008.
25. Participated in five day QIP on “Micro/ Nano Tribology” at IIT, Mumbai during 01-05 Jan, 2007.
26. Participated in TEQIP sponsored two day workshop on “Automotive Emission and Control Technologies”, at Rajarambapu Institute of Technology, Sakharale (Dist: Sangli) during 29 and 30 June, 2006.
27. Participated in DTE sponsored Training program on “Developing Teaching Competencies” at NITTTR, Bhopal, Ext centre Pune during 09-20 May, 2005.

Organized

1. Five day workshop on “Methodology for Effective Teaching Learning Process” at Adarsh Institute of Technology and Research Centre, Vita (Maharashtra) from 4th – 8th July 2011.
2. ISTE approved two days workshop on “Institutional Development through Research” on 1st and 2nd April 2017 in KIT’s College of Engineering Kolhapur.
3. ISTE approved one day workshop on “Research Methodology” on 2nd April 2017 in KIT’s College of Engineering Kolhapur.
4. Three-days Hands on Training on Welding Equipment for technical not teaching staff of K J Somaiya College of Engineering from 24th to 27th Dec 2019.
5. Refresher course on “Euclidean Tensor Algebra for Engineers” from 04/04/2022 to 22/04/2022 (16 hrs.)

Delivered

1. Invited as resource person for summer internship program on “Computational and Experimental Analysis in Industrial Applications in Mechanical Engineering” organized by Mechanical Engineering Department at MNIT Jaipur on 24 June 2017.
2. Delivered guest lecture on “Engineering Tribology” at SSPMCOE, Kankavli in their annual tech fest VIRTUOSIC 2017 on 23rd March 2017.

Notable Key Scholastic Achievements

- | | |
|----|---|
| 1. | Invited as resource person for summer internship program on “Computational and Experimental Analysis in Industrial Applications in Mechanical Engineering” organized by Mechanical Engineering Department at MNIT Jaipur on 24 June 2017. |
|----|---|

Somaiya Vidyavihar University

2.	Appointed as member of Research Advisory Committee for PhD Student XXXXXXXXXXXXX at Mechanical Engineering department in Pillai College of Engineering, New Panvel, Maharashtra
3.	Invited as Engineering Design Event Judge in Electric Category for Formula Bharat (Virtual) 2021-22 . Invited as a judge for 6 th Annual FSEV Concept Challenge (Pi-EV 2022) organized by Formula Bharat .

Notable Positions and Responsibility	
1.	Faculty Advisor- Orion Racing India
2.	

Date: 07/02/2023

**Signature of Faculty Member
Dr. Manoj Janardan Pawar**