


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

Staff Profile

Personal Information			
Name of Teaching Staff: (Dr.) Sandip R. Thorat			
Designation: Assistant Professor			
Department : Mechanical Engineering			
Date of joining : 9 th July, 2010			
E Mail ID :	thoratsandipmech@sanjivani.org.in		
Contact No:	(+91) 9970067018		
Education Details			
Qualification	Specialization with Class or Grade	University	Year
UG	Mechanical Engineering	Pune University	2008
PG	Design Engineering	Savitribai Phule Pune University	2013
Ph.D.	Mechanical Engineering	Savitribai Phule Pune University	2022
Total experience in years:			
Teaching:	16 years		
Industry:	-		
Research and Publications			
<p>Year 2025</p> <p>1) B.A. Tingare, S.R. Deshmukh, R.A. Kapgate, S.R. Thorat, P. William, S.D. Jondhale, V.D. Dabh, Quality Control Model for Electrospun Nanofibers through Image Analysis, <i>Journal of Nano- and Electronic Physics</i>, Vol. 17 No 2, 02027(6pp) (2025) 10.21272/jnep.17(2).02027</p> <p>2) Vaibhav D. Dabhade¹, Bhagyashree Ashok Tingare, Sandip R. Thorat, R.A. Kapgate, Tarun Dhar Diwan, Laxmikant S Dhamande, P. William, Forecasting Dielectric Behavior of Nano-Epoxy Materials through AI-based Electronic Properties. <i>Journal of Nano- and Electronic Physics</i> Vol. 17 No 3, 03023(5pp) (2025) 10.21272/jnep.17(3).03023</p>			

Year 2024

- 5) S.R. Thorat , V.M. Tidake, P.M. Patore, P.B. Khatkale, A.A. Khatri, P.M. Yawalkar, S.S. Ingle, Size-Dependent Physical Properties of Metallic Films: Analysis of Thermal and Mechanical Characteristics in the Nanoscale Regime *Journal of Nano and Electronic Physics*, Vol. **16** No 3, 03014(5pp) (2024), DOI: 10.21272/jnep.16(3).03014 (Scopus Indexed)
- 6) Dr. M.V. Kulkarni, Dr. P. William, Dr. Pravin B. Khatkale, Dr. Sandip R. Thorat and Dr. Santosh Kumar Sharma, Apurv Varma. An Innovative AI-Integrated Approach for Identifying the Tensile Robustness of Polymeric Materials. *Journal of Polymer and Composites, Volume 13, issue-1, 2025*, DOI: 10.37591/JoPC (Web of Sciences)
- 7) M.V. Kulkarni, Dr. P. William ,Dr. Pravin B. Khatkale, Harshal P. Varade and Sandip R. Thorat. Developing an AI-Based Novel Forecasting Framework for Surface Irregularity in Metal Matrix Materials , *Journal of Polymer and Composites, Volume 12, issue-5, 2024*, DOI: 10.37591/JoPC (Web of Sciences)

Year 2023

- 8) Sonal C. Bhangale, Harshal P. Varade, Dr. Sandip R. Thorat, Dharmendra Kumar Roy, Dr. P. William and Apurv Verma. Air Quality Hotspot Monitoring with Trajectories of IoT in Smart City Implementation. *Proceedings - 3rd International Conference on Pervasive Computing and Social Networking, ICPCSN , (IEEE) 2023, Pp. 1274-1279.*
DOI- 10.1109/ICPCSN58827.2023.00214. (Scopus Indexed)
- 9) Harshal P. Varade, Sonal C. Bhangale , Dr. Sandip R. Thorat, Pravin B. Khatkale, Dr. Santosh Kumar Sharma and Dr. P. William. Framework of Air Pollution Assessment in Smart Cities using IoT with Machine Learning Approach. *Proceedings of the nd International Conference on Applied Artificial Intelligence and Computing, ICAAIC , (IEEE) 2023, Pp.1436-1441, DOI- 10.1109/ICAAIC56838.2023.10140834.* (Scopus Indexed)

Year 2022

- 10) S.R.Thorat, A.G.Thakur ,*Preliminary Investigations of Low Plasticity Burnishing Process on Mechanical Properties of Aluminum Alloy, Recent Advances in Manufacturing Processes and Systems (Springer),2022, pp 803-815.*
https://doi.org/10.1007/978-981-16-7787-8_64 (Scopus Indexed)

Year 2019

- 11) S.R.Thorat, A.G.Thakur, Analysis of Surface Roughness and Wear Resistance in Low Plasticity Burnishing Process using Multi-objective Optimization Technique, *Materials Today: Proceedings (ELSEVIER)*, 2019,41, Pp.1082-1088
doi.org/10.1016/j.matpr.2020.07.543 (Scopus Indexed)

Year 2018

- 11) S.R.Thorat, A.G.Thakur, Optimization Of Burnishing Parameters By Taguchi Based GRA Method Of AA6061 Aluminum Alloy, *Materials Today: Proceedings (ELSEVIER)*, 5, 2, 2018, Pp.7394-7403 ,
doi.org/10.1016/j.matpr.2017.11.410 (Scopus Indexed)

Year 2015

- 12) S. R. Thorat , K.C. Bhosale, H.P. Varade, FE Analysis and Experimental Validation of Residual Stresses in Arc Welding, *Journal of Experimental & Applied Mechanics (STM Journals)*, ISSN:2230-9845 (online), ISSN: 2321-516X (print) , Volume 6, Issue 1, April 2015
- 13) H.P. Varade , K.C. Bhosale, S. R. Thorat , P.W. Ingle, Use of Fuzzy Logic Method for the Optimization of the Wear Parameters of Aluminum Alloy, *Trends in Mechanical Engineering & Technology (STM Journals)*, ISSN: 2231-1793(online), ISSN: 2347-9965(print) , Volume 5, Issue 1 , April 2015

Book Chapters:

Sr. No.	Name of Author	Title of Book Chapter	Title of Book	Publisher	Page No.
1	P. William, Vishal M. Tidake, Sandip R. Thorat, Apurv Verma	Future of Digital Work Force in Robotic Process Automation	Robotic Process Automation	Wiley	297-314

Research Profile URL	
Google Scholar	https://scholar.google.com/citations?user=mlkLg6QAAAAJ&hl=en
Scopus	Scopus Author ID: 57201737595 https://www.scopus.com/authid/detail.uri?authorId=57201737595
Orcid	https://orcid.org/0000-0002-8445-8646
publons	--
Other Research Details	
Ph D Guide ?Give field & University:	PhD Guide: No

	University: --
Ph Ds/ Projects Guided:	---
Books Published	<ol style="list-style-type: none"> 1. Sustainable Smart Industry 4.0 Future Assessment- Scientific International Publishing House (SIPH)- July 2024 2. An Introduction to Nano science and Nanotechnology- Alpha International Publications- October 2023

IPRs/Patents	<p>Patent Granted: 5</p> <ol style="list-style-type: none"> 1. Nanotechnology and the Future of Additive Manufacturing using 3D Printing Certificate No: 202321011814 Design No.: Date of Issue: 9/06/2023 2. Framework using IOT and Image Processing Anti-Theft Systems for Vehicles Certificate No: 202321009821 Design No.: Date of Issue: 9/06/2023 3. Changable Brush Certificate No: 416436-001 Design No.: Date of Issue: 1/08/2024 4. Sugarcane De-trashing Tool Certificate No: 436848-001 Design No.: Date of Issue: 24/01/2025 5. Two wheeler sensor integration Certificate No: 439051-001 Design No.: Date of Issue: 18/02/2025 6. Encoder's Gear Box for Multiple Direction Certificate No: 438580-001 Design No.: Date of Issue: 7. Built-In Mouse Pad Storage 435617-001 Date of Issue:
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Professional Memberships:	✓ Member of Institute of Engineers India ✓ Life Member of Indian Society of Technical Education (ISTE)		
Interaction with professional institutions	--		
Consultancy Activities			
Duration	Title of Activity	Issued Organization	Amount
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Grants fetched			
Duration	Title	Issued Organization	Amount
2019-2021	Investigations of Influence of Burnishing Process on Surface Properties of Aluminum Alloy	ASPIRE, SPPU Pune	Rs. 3, 00,000/-
Awards			
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FACULTY DEVELOPMENT PROGRAMMES ATTENDED

Name of the FDP / Workshop	Organization	Duration	Month-Year
Smart Manufacturing Xperience: Navigating the future of industry 4.0	ATAL-AICTE	01 week 27/1/2025 - 01/2/2025	Jan 2025
Innovative AI Tools for research Excellence : A Hands on STTP for Effective writing and Data Visualization	Sanjivani College of Engineeirng, Kopargaon	01 Week 16/12/2024 - 21/12/2024	Dec 2024
Material Characterization and Optimization	CVR College of Engineering , Ibrahimpatnam	01 Week 24/09/2024-28/09/2024	Sept 2024
Advanced Artificial Intelligence(AI) Techniques & Matlab Integration	Sanjivani College of Engineeirng, Kopargaon	01 Week 21/10/2024 to 26/10/2024	Oct 2024
Recent Developments in Materials and Manufacturing Processes	AICTE and ISTE	Two Week January 15-27,2024	Jan. 2024
Inculcating Universal Human Values in Technical Education	AICTE	Three Days August 12-14,2023	August 2023
Recent Advancements in Manufacturing Technologies: Industrial Approach	Padmabhushan Vasantdada Patil Institute of Technomogy, Pune	One Week March 13-17,2023.	March 2023
Research Opportunities in Vibration Engineering	Sanjivani College of Engineeirng, Kopargaon	One Week January 24-29, 2022	Jan 2022

Innovation , Entrepreneurship and its Relevance in Industry 4.0	Terna Engineering College, Mumbai,	One Week May 25- 29 ,	May 2020
Patenting for Innovations	Sanjivani College of Engineeirng, Kopargaon	One Week May 25- 29, 2020	One Week
Ultra High Precision Machine Tools- Design and Characterization	Indian Institute of Technology (IIT) MADRAS	One Week March 05- 10 , 2018.	March 2018
Condition Monitoring of Rotating Machinery using Vibration Analysis	Sanjivani College of Engineeirng, Kopargaon	One Day Oct 6 , 2016	Oct 2016
Research Methodology	SRES's College of Engineering , Kopargaon	Two days May 09 -10, 2016	May 2016
Finite Element Methods for Engineering Applications (FEM- FEA 2016)	SRES's College of Engineering , Kopargaon	Two days February 22- 23, 2016.	Feb 2016
Design of Experiments and Optimization Techniques (DOE_OT)	SRES's College of Engineering , Kopargaon	One Week June 01-05, 2015.	June 2015
Manufacturing excellence.... path to global competitiveness of indian manufacturing inc	Amrutvahini College of Engineering, Sangamner	Two Week April 21 –May 02, 2015	April 2015
Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT)	Sardar Vallabhbhai National Institute of Technology (SVNIT) , Surat	One Week December 01- 05 , 2014	Dec 2014
Applications of Neural Network, Fuzzy Logic and Genetic Algorithm in Engineering	SRES's College of Engineering , Kopargaon	Two Days April 08- 09, 2014.	April 2014
Design of Experiments (DoE) in Engineering and Technology	AJMVPS , College of Engineering , Nepti, Ahmednagar	Two Days Dec. 5-6, 2013.	Dec 2013

Condition Monitoring of Machine Elements using FFT Vibration Analyzer	SRES's College of Engineering , Kopargaon	Two Days July 12-13, 2013.	July 2013	
FACULTY DEVELOPMENT PROGRAMMES ORGANIZED				
Name of the FDP / Workshop	Organization	Duration	Month-Year	Capacity
Use of Excel in Engineering Applications	Dept. Of Mechanical Engineering SCOE	3 days	December 2018	45 (Faculty)
INVITED LECTURES IN CONFERENCE/SEMINAR				
Title of Lecture/ Academic Session	Title of Conference/ Seminar etc.		Organized By	
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OTHER Professional URLs	
Personal Website	-
Linked In Profile	-
GitHub URL	-
YouTube Channel	
Other	-

Any Other: