

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

**Staff Profile**

<b>Personal Information</b>			
<b>Name of Teaching Staff:</b> Mr. Vaibhav Jagan Suryawanshi			
<b>Designation:</b> Assistant Professor			
<b>Department:</b> Mechanical Engineering			
<b>Date of joining :</b> 5 <sup>th</sup> July, 2013			
<b>E Mail ID :</b>	<a href="mailto:suryawanshivaibhavmech@sanjivani.org.in">suryawanshivaibhavmech@sanjivani.org.in</a>		
<b>Contact No:</b>	<b>(+91) 9028195328</b>		
<b>Education Details</b>			
<b>Qualification</b>	<b>Specialization with Class or Grade</b>	<b>University</b>	<b>Year</b>
UG	Mechanical Engineering Grade:-Distinction	SPPU Pune University	2010
PG	Design Engineering Grade:-Distinction (8.05 CGPA)	SPPU Pune University	2014
Ph.D.	Mechanical Engineering	Pursuing	
<b>Total experience in years:</b>			
<b>Teaching:</b>	<b>12 years</b>		
<b>Industry:</b>	<b>2 years</b>		
<b>Research and Publications</b>			

- 1) Experimental analysis of particle damping performance in gearbox vibration using data analytical tool: Tableau. *AIP Conference Proceedings*, 2943(1), 020020.  
<https://doi.org/10.1063/5.0113813>(SCOPUS Indexed)
- 2) Effect of parametric analysis on gearbox vibration using particle damping method. *The New Arch*, 8(2), 1414–1423. <https://doi.org/10.35784/na.3304> (SCOPUS Indexed)
- 3) Crack analysis of fixed support fibre glass composite beam based on natural frequencies. *International Review of Mechanical Engineering (IREME)*, 11(ICMESCoE-2017), 505–512.  
<https://doi.org/10.15866/ireme.v11i8.13813>
- 4) Based on natural frequencies, crack analysis of fixed support fibre glass composite beam. *Aerospace and Associated Technology*, 175–180. (SCOPUS Indexed)
- 5) 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*, 170–174(SCOPUS Indexed)
- 6) Defect detection of composite honeycomb structure by vibration analysis technique. *Materials Today: Proceedings*, 27, 2731–2735.  
<https://doi.org/10.1016/j.matpr.2019.09.188>(SCOPUS Indexed)
- 7) Detection of fault in gearbox system using vibration analysis method. *International Journal of Current Engineering and Technology*, 39854(6), 119–122.

#### Research Profile URL

<b>Google Scholar</b>	<a href="https://scholar.google.com/citations?user=2o1dKXgAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=2o1dKXgAAAAJ&amp;hl=en</a>
<b>Scopus</b>	<a href="https://www.scopus.com/authid/detail.uri?authorId=57199168335">https://www.scopus.com/authid/detail.uri?authorId=57199168335</a>

#### Certification:-

1. *Certified Internal Auditor.*

2. *SAP MM Certified.*

[https://www.credly.com/badges/7765ff16-b49e-4ffb-bfc5-ace7e9dbca89/public\\_url](https://www.credly.com/badges/7765ff16-b49e-4ffb-bfc5-ace7e9dbca89/public_url)

3. *Power-BI certification from skill nation*

IPRs/Patents	<p><b>Patent Granted: 35+</b></p> <p><b>01 Suspension Test Analyzer</b>  Design No: 388063-001  Date of Issue: 15/11/2023</p> <p><b>02 Tricycle Rickshaw</b>  Design No: 396355-001  Date of Issue: 29/09/2023</p> <p><b>03 Automated Brick Making Machine</b>  Design No: 401678-001  Date of Issue: 16/01/2025</p> <p><b>04 Cargo Bicycle with Suspension Mounted on Rear Shaft</b>  Design No: 398593-001  Date of Issue: 15/10/2024</p> <p><b>05 Foldable Cargo Bicycle</b>  Design No: 398670-001  Date of Issue: 21/02/2024</p> <p><b>06 Grilled Trolley Cargo Bicycle</b>  Design No: 396338-001  Date of Issue: 15/02/2024</p> <p><b>07 Three Seater Cargo Bicycle</b>  Design No: 396335-001  Date of Issue: 02/05/2024</p> <p><b>08 Adjustable Trailer Hitch</b>  Design No: 401680-001  Date of Issue: 12/02/2024</p> <p><b>09 Agricultural MechaTool</b>  Design No: 402060-001  Date of Issue: 04/03/2024</p> <p><b>10 Hitch Set for Agricultural Tractors</b>  Design No: 404509-001  Date of Issue: 15/10/2024</p> <p><b>11 Hammerguard</b>  Design No: 439877-001  Date of Issue: 27/02/2025</p> <p><b>12 The Spray Pilot</b>  Design No: 404510-001  Date of Issue: 22/03/2024</p>
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**13 Solar Powered Grass Cutter**

Design No: 398595-001

Date of Issue: 09/05/2024

**14 Grain Storage Containers**

Design No: 404519-001

Date of Issue: 03/05/2024

**15 Pneumatic Sheet Metal Cutting Machine**

Design No: 404518-001

Date of Issue: 05/03/2024

**16 Water Jet Based Projectile Motion Apparatus**

Design No: 411510-001

Date of Issue: 16/05/2024

**17 AgriLiftMax**

Design No: 411510-001

Date of Issue: 16/05/2024

**18 Folding and Unfolding Type Ceiling Fan Canopy**

Design No: 412020-001

Date of Issue: 16/05/2024

**19. Air Compressor with Air Impact Wrench Moving Stand**

Design No: 412491-001

Date of Issue: 06/06/2024

**20 Advance Mulching Machine**

Design No: 415231-001

Date of Issue: 28/06/2024

**21 An Automatic Sowing Machine**

Design No: 416243-001

Date of Issue: 12/07/2024

**22 Sweet-Harvest Planter**

Design No: 416242-001

Date of Issue: 26/06/2024

**23 Versatile Load Modulation Weight System**

Design No: 429376-001

Date of Issue: 28/11/2024

**24 Smart Vault Grain Storage**

Design No: 429373-001

Date of Issue: 28/11/2024

**25 Precision Braille Printer with Threaded Motion Control**

Design No: 428121-001

Date of Issue: 01/10/2024

**26 Hitch Set for Agricultural Tractors**

Design No: 404509-001

Date of Issue: 15/10/2024

**27 Cargo Bicycle with Suspension Mounted on Rear Shaft (EV/Non-EV)**

Design No: 398593-001

Date of Issue: 15/10/2024

**28 Monitoring Battery Water Level Indicator for Inverter Using IoT Device**

Design No: 425833-001

Date of Issue: 01/10/2024

**29 90-Degree Holder**

Design No: 436345-001

Date of Issue: 03/01/2025

**30 Multifunctional E-Weeder**

Design No: 449025-001

Date of Issue: 05/06/2025


**Product  
Developed**

1. Design and development of Automatic brick making Machine
2. Design and development of universal suspension test Rig
3. Design and development of Agriculture Mechatool. [Got prize in karmveer Expo,82,000]
4. Design and development of Solar Electric weeder [Got prize in Technovision]
5. Design and Development of Easy operated and cost effective advanced fertilizer spraying machine
6. Design and Development of Multifunctional Stretcher
7. Mechanised Mulching Machine with Multiple operations
8. Multi-purpose Mulching Paper machine
9. Agro grip Rover [1<sup>st</sup> price at Dipex 2025]







 <b>बैंक ऑफ महाराष्ट्र</b> Bank of Maharashtra		<b>K. K. Wagh College of Engineering, Nashik</b>		Valid for 3 Months from the date of issue	
		<b>IET K K Wagh Expo-25</b>		0 1 0 3 2 0 2 5 D D M M Y Y Y Y	
Pay अदा करें <b>Agriculture Mechatool</b>				Or Bearer	
Rupees रुपये <b>Eighty-two thousand rupees only.</b>				या धारक को	
		₹ <b>82,000/-</b>			
A/c No. खाता नं.					
Payable at par at all the branches of Bank of Maharashtra.					
		K. K. Wagh College of Engineering, Nashik Authorised Signatory(ies) हस्ताक्षर/Signature(s) Please sign above			







<b>Professional Memberships:</b>	Member of SAE
<b>Certifications:-</b>	<p>4. <i>Certified Internal Auditor.</i></p> <p>5. <i>SAP MM Certified.</i></p> <p><a href="https://www.credly.com/badges/7765ff16-b49e-4ffb-bfc5-ace7e9dbca89/public_url">https://www.credly.com/badges/7765ff16-b49e-4ffb-bfc5-ace7e9dbca89/public_url</a></p> <p>6. <i>Power-BI certification from skill nation</i></p>

### Consultancy Activities and Proposal Granted

Duration	Title of Activity	Issued Organization	Amount
<b>"SowTech Rotavator: Revolutionizing Automated Sowing and Soil Preparation for Sustainable Agriculture"</b>	Proposal	RGSTC(Central Ministry)	40,00,000
<b>Ice Plant Tutor With Data Logger system</b>	Proposal	BCUD	1,00,000/-
September to December 2024	Industrial Project	Modelling assignment Tejal Industry	20000/-

### Awards

1. Recognized as **Best Paper award** at **Sinhgad Institute of Technology**
2. **Best Project Guide** for **Dipex 2025**.
3. Nominated for **Best Techer award 2023**.
4. Achieved five star rating with delighted customer award in a filtration department for PDM in KPIT cummins,Pune

### FACULTY DEVELOPMENT PROGRAMMES ORGANIZED:-

1.Advance Artificial Intelligence Technique and Matlab Integration National Faculty Development programme from 21-10-2024- 26-10-2024

**SANJIVANI COLLEGE OF ENGINEERING, KOPARGAON**  
(An Autonomous Institute, Affiliated to SPPU, Pune)

**Faculty Development Program on Advanced Artificial Intelligence (AI) Techniques & MATLAB Integration**  
Department of Mechanical Engineering

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Monday, 21/10/2024 11.00 am to 1.00 pm Topic : Deep Learning with MATLAB	Tuesday, 22/10/2024 11.00 am to 1.00 pm Topic : Machine Learning with MATLAB	Wednesday, 23/10/2024 11.00 am to 1.00 pm Topic : AI for MSP	Thursday, 24/10/2024 11.00 am to 1.00 pm Topic : Leveraging AI for Predictive Maintenance	Friday, 25/10/2024 11.00 am to 1.00 pm Topic : MATLAB Simulink and optimization	Saturday, 26/10/2024 11.00 am to 1.00 pm Topic : Engineering Data Visualization and Reporting
Mr. Debanand Singdeo Ph.D. Senior Engineer, Math Works India Private Limited, Bangalore	Mr. Sunil S. Khandebari Application Engineer, DeepTech Systems Pvt., Mumbai, Pune	Mr. Anil Kumar Application Engineer, DeepTech Systems Pvt., Mumbai, Pune	Dr. Ashwini Deshpande Associate Professor in the CATC Department of "MAHES" Campus, College of Engineering for Women, Pune	Dr. Mahesh P. Nagarkar R&D and PhD in Mechanical Working as R&D at Tata Steel, Institute of Technology, Wagholi Pune	Dr. Radhakrishna Nalk Data Scientist and Co-Founder of AdhikariLLP

Registration Link: Scan Here for Registration  
[https://docs.google.com/forms/d/e/1FAIpQLSc8QwCpCoGdyqg\\_XRiy6\\_EdZMLw0Tu3d4Gj-p84e5A/viewform?usp=cf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSc8QwCpCoGdyqg_XRiy6_EdZMLw0Tu3d4Gj-p84e5A/viewform?usp=cf_link)

Mr. V. J. Suryawanshi  
Mr. N. S. Surwar  
Program Coordinators

Dr. P. M. Patare  
HOD, Mechanical Engg.

Dr. A. G. Thakur  
Director

Shri. Amit N. Kolhe  
Managing Trustee

On Registration Fee Refund Note

2. Solidworks 2024 and 3D Experience, by Dassult system/IFS Academy on 9<sup>th</sup> and 10 Feb 2024

## GUEST LECTURE DELIVERD:-

Sr. No	Name of Topic	Venue	No of Beneficiaries	Dates
1	Solidworks and 3D Experience –FDP	SCOE Kop	64	9 <sup>th</sup> and 10 <sup>th</sup> Feb 2024
2	Advanced Modelling Using Creo	SCOE Kop	65	16oct-30nov 2023
3.	Python for Data Science	Scoe Kop	52	11sept-10oct 2023
4.	Solidworks	Scoe Kop	72	10 <sup>th</sup> March-30 <sup>th</sup> April 2024
5	State Level Guest lecture “Intellectual Property Rights	SSGM collge Kopargaon	400+	State Level Guest lecture “Intellectual Property Rights



“Education Through Self Help is Our Motto”

Rayat Shikshan Sanstha's

**Shri Sadguru Gangageer Maharaj Science, Gautam Arts & Sanjivani Commerce College, Kopargaon. Dist: Ahilyanagar, 423 601**

Affiliated to Savitribai Phule Pune University, Pune

NAAC Reaccredited A++ Grade (CGPA 3.69), ISO 9001:2021 Certified

**Internal Quality Assurance Cell in collaboration with Research Advisory Committee & Innovation and Incubation Cell Organizes**

**State Level Seminar on “Intellectual Property Rights”**

**Resource Persons**



**Session I: Dr. Rahul K. Bawane**  
Assistant Professor,  
Pimpri Chinchwad College of Engineering & Research, Pune  
Patent Drafting  
10.00 am to 11.00 am



**Session II: Mr. Vaibhav J. Suryawanshi**  
Assistant Professor, Sanjivani College of Engineering Kopargaon.  
Intellectual Property Demystified: Patents & Trademarks  
11.00 am to 12.00 pm



**Session III: Dr. Sahil S. Salvi**  
Assistant Professor,  
Pimpri Chinchwad College of Engineering & Research, Pune  
Copyrights: “Filing & Registering”  
12.00 pm to 1.00 pm

**Day & Date: Wednesday, March 12, 2025**

Registration Link: <https://forms.gle/GAFHiVseQxiswh9x8>  
WhatsApp Gr. Link: <https://chat.whatsapp.com/CBnYAXRPzWTGg8mKjmEDgG>  
Zoom link: <https://tinyurl.com/e38k7u4b>

Dr. V. B. Gade	Dr. N. V. Malpure	Prof. (Dr.) N. M. Chavhan	Prof. (Dr.) M. T. Sarode
Chairman	Coordinator	Chairman	Principal
Research Advisory Committee	IQAC	Innovation & Incubation Cell	S. S. G. M. College,

### FACULTY DEVELOPMENT PROGRAMMES ATTENDED

Name of the FDP / Workshop	Organization	Duration	Month-Year
AI Innovations and MATLAB Solutions	PCET'S, Pimpri Chinchwad College of Engineering & Research, Ravet.	1 week	23/9/2024 to 28/9/2024
Hyperspectral Imaging	Chang Chung University, Taiwan	1 Week	22/01/2025 to 27/01/2025
Data science using Python	NTTTR Chandigarh	5 days	10-14 Dec 2022
Introduction to Data Science in Python	University of Michigan-Coursera <a href="https://coursera.org/verify/9NALZV7HYRP">https://coursera.org/verify/9NALZV7HYRP</a>	1 month	Nov14-Dec14 2022
Exploratory Data Analysis for Machine Learning	IBM-Coursera <a href="https://coursera.org/verify/U8EUBFKA3DRG">https://coursera.org/verify/U8EUBFKA3DRG</a>	5 days	Dec- 2022 to Jan 202
Emerging Technological Advancement and practical applications of Data science	SKN institute of Technology, Pune ISTE Approved	5 days	16 Jan 2023 to 20 Jan 2023
Supervised Machine Learning: Regression	IBM-Coursera <a href="https://coursera.org/verify/YM2AYQX4YSQ4">https://coursera.org/verify/YM2AYQX4YSQ4</a>	5 days	14-12-2020 to 18-12-2020
Unsupervised Machine Learning	IBM-Coursera <a href="https://coursera.org/verify/GPBXFJ709QTK">https://coursera.org/verify/GPBXFJ709QTK</a>	5 days	Dec 2024 –Jan 2024
FDP-Python for Data Science	NPTEL	-	Jul-Aug 2022

### OTHER Professional URLs

Personal Website	<a href="https://wordpress.com/view/vaibhavsgi.wordpress.com">https://wordpress.com/view/vaibhavsgi.wordpress.com</a>
Linked In Profile	<a href="https://www.linkedin.com/in/vaibhav-suryawanshi-427134263/">https://www.linkedin.com/in/vaibhav-suryawanshi-427134263/</a>
GitHub URL	<a href="https://github.com/vaibhav04surya?tab=repositories">https://github.com/vaibhav04surya?tab=repositories</a>
YouTube Channel	<a href="https://www.youtube.com/@vjstechnical21">https://www.youtube.com/@vjstechnical21</a>