

Somaiya Vidyavihar University

Name: Dr. Vilas Gulabrao Dhire			E-mail: vilasdhore@somaiya.edu
Contact No: 7021776642			
Department/Section: Mechanical Engineering			
College: K J Somaiya School of Engineering			
DOJ Somaiya: 14 th August 2008	Career Experience: 28 Yrs	Industry Experience: Nil	Teaching Experience: 28 Yrs
Present Academic Designation: Associate Professor		Present Administrative Designation: Departmental Examination Committee Coordinator	

Area of research/specialization and Courses Delivered
Research domain/interests/areas 1. Metal Matrix Composites, 2. Nanomaterials 3. Powder Metallurgy 4. Design & Modelling Courses Delivered 1. Elements of Machine Design 2. Engineering Drawing 3. Advanced Machine Design 4. Materials Science and Metallurgy 5. Mechanical Measurements 6. Engineering Mechanics 7. Strength of Materials 8. Mechanical System Design 9. Applied Thermodynamics 10. Refrigeration & Air conditioning 11. Mechanical Measurement and Metrology 12. Safety Regulations & Future of Electric Vehicles

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
Details of Recognitions 1. UG: University of Mumbai, Somaiya Vidyavihar University 2. PG: Somaiya Vidyavihar University			

Education					
Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
Ph.D	Doctor of Philosophy (Mech. Engg.)	VJTI, Mumbai	Veer Jijabai Technological Institute (VJTI) , Mumbai	2023	NA
PG	Master of Engineering	Mumbai University	Sardar Patel College of Engineering, Mumbai	2008	62.5 %
UG	Bachelor of Engineering	Amravati University	College of Engineering Badnera, Amaravati	1997	64.0 %

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Notable Experience Details					
Sr. No	Name of the Organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1	K. J. Somaiya School of Engineering	Associate Professor	01/07/2024	Till date	2 Years
2	K. J. Somaiya College of Engineering	Assistant Professor / Lecturer	14/08/2008	30/06/2024	16 Years
3	P.V.P.P. College of Engineering, Sion	Lecturer	12/07/2007	13/08/2008	1 Year
4	K. C. College of Engineering, Thane	Lecturer	01/09/2006	11/07/2007	1 Year
5	BVIT, Kharghar	Lecturer	01/01/2006	31/08/2006	8 Months
6	Muchhala Polytechnic Thane	Lecturer	08/07/1998	31/12/2005	7.5 years

Research Accomplishments and Projects		
No of students pursuing Ph.D as on date: Nil		No of students completed Ph.D : Nil
No of students completed PG thesis: 04		No of students / groups completed UG projects as on date: 40+
Publications Total: 16	Number of Peer review Journal papers: 06 (Scopus) (1 UGC Care)	Number of Conference papers: 07 Book Chapters: 02; Patent:03
Publications: International Journals 1. Dhore, V. G., Rathod, W. S., & Patil, K. N, "Mechanical and Tribological Attributes of Al-CNT-Sn Composites Prepared by Press and Sintering" <i>Journal of Composite Science</i>, 2021 5 (8) 215-228. Scopus Indexed Impact Factor 3.00 2. Dhore, V. G., Rathod, W. S., & Patil, K. N. "Fabrication and Characterization of Cold-Pressed and Sintered Aluminium - MWCNT Composites." <i>Materials Science Forum (Trans Tech Publications Ltd)</i>, 2021, 1025. 60-68. Scopus Indexed Impact Factor 0.5 3. Dhore, V. G., Rathod, W. S., & Patil, K. N., "Synthesis and Characterization of High Yield Multiwalled Carbon Nanotubes by Ternary Catalyst", <i>Materials Today: Proceedings (Elsevier)</i>, 2018, 5(2), 3432-3437. Scopus Indexed Impact Factor 3.2 4. Dhore, V. G., Rathod, W. S., & Patil, K. N. "Investigation of Mechanical Properties of Carbon nanotubes Reinforced Aluminium Composite by Metal Injection Molding", <i>Materials Today: Proceedings (Elsevier)</i>, 2018, 5(9), 20690-20698. Scopus Indexed Impact Factor 3.2 5. Khawale V.R., Dhore V.G., Experimental study and comparison of integrated solar dryer with and without reversed absorber and reflector "<i>International Journal of Renewable Energy</i>		

Technology, (Inderscience Publishers), 2023 14(1), 1-15.

6. Khawale V.R. Kale B.N., Dhore V.G., “Experimental Analysis of Single Glazing, Double Glazing and Triple Pass Solar Dryer”, *International Journal for Research in Engineering Application & Management* 2020, 6(3)
7. Sathe Y. N., Dhore V.G., Steering Mechanism using Motorized Tie-Rods, *Journal of Advancement in Machines*, 2023 8 (3), 33-47

Book Chapters

8. Shah Vijesh, Gilke N R, Dhore V.G, Phutane C, & Kondhol B, "Design of Gripper and Selection of Robotic Arm for Automation of a Pick and Place Process." *Advances in Manufacturing Systems: Lecture Notes in Mech.Engg., Springer* (2021): 95 **Scopus Indexed**
9. Dhore, V. G., Rathod, W. S., & Patil, K. N., “Characterization of Fe-Co-Ni-Ternary Metal Catalyst for High Yield Multi-Wall Carbon Nanotubes” published by **CRC press, Taylor & Francis** in a book 'Mechanical Engineering for Sustainable Development: State of Art Research'.

International Conferences

10. Dhore, V. G., Rathod, W. S., & Patil, K. N., “Experimental Analysis and Power Law Model of Multiwall Carbon Nanotubes Yield on Fe-Co-Ni Ternary Metal Catalyst”, *International Conference on Advances in Thermal Systems, Materials and Design Engineering (ATSMDE2017)* VJTI, Mumbai, 22-23 December, 2017.
11. Jain A, Jeswani D. R., Jain R. K., Pathak Y. K, Dhore V.G., Design and Analysis of Composite Automotive Leaf Spring, *International Conference in Advancements in Design and Tribology (ICADT-2021)* at SVNIT Surat
12. Siddhi Navgekar; Vilas Dhore, Design, manufacturing and testing of cooling system of an FSAE vehicle, *International Conference on Recent Developments in Mechanical Engineering 2022 (ICRDME-22)* RCOEM, Nagpur
13. Jash Desai, Aayush Shah, Paarth Shah and Sreenivas Konar, Vilas Dhore, Finite Element Analysis of Disc Brake, *ICTEAH 2024, KJSCE Mumbai (Poster Presentation)*
14. Shivaji Arvilkar, Vilas Dhore, Experimental analysis of Mechanical Properties of Honeycomb Structured Specimens in *International conference on Advances in Mechanical, mechatronics & Civil (ICAMMCE- 2025)* at Thakur College of Engineering & Technology, Mimbai.

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15. Dhore, V. G., Patil, K. N, & Rathod, W. S., “Analysis of Tribological Properties of Al-CNT Composites Using Factorial Design” 23rd ISME International Conference on Conference on Recent Advances in Mechanical Engineering at LNMIIT Jaipur jointly organized by IIT Jodhpur, MNIT Jaipur from 17th to 19th December 2025

16. Srishti Naik, Ajay Gangrade , Vilas Dhore , Kashinath Patil, “Thermal analysis of epoxy composite insulation used in medium-voltage circuit breaker ” 3rd ICTEAH 2026, organized by K J Somaiya School of Engineering from 16th -17th April 2026.

Patent:

Sr. No.	Title of the Patent	Application No	Date	Status
1	A Metal Particulates Porous Composite for Automobile Oil Filter	202021041070 A	26/02/2021	Published
2	A Device for Extracting Sugar Juice from Sugar Beet Root	202621029061	11/03/2026	Filed
3	A compaction Assisted Diffusion process for extracting juice containing sucrose from a sugar beet root	202621029062	11/03/2026	Filed

Details of Research / consultancy / projects: Completed/ Ongoing

Project Title	Sponsoring agency	Year	Status
Design of Containerized Sub Station of Rs 2,58750/- for L&T Automation Ltd.	L&T Automation Ltd. Rabale, Thane	2020	Completed
Design approval of Retractable Ladder	Technika, Rabale, Thane	2023	Completed
Design and Bill of Material of Printing Machine of Rs.8,10,000/- at Kohli Printing and Converting Machines Pvt. Ltd., Ambernath	Kohli Industries, Ambernath	2024	Completed
Prototype, Design and Development of sugar beet crushing system of Rs. 4,23,000/-for Godavari Bio-refineries Limited	Godavari Bio-refineries Limited	2025	Completed
Design and development of Bagasse Washing System of Rs. 4,45,000/- for Godavari Bio-refineries Limited	Godavari Bio-refineries Limited	2026	Completed

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Reviewer:

1. Reviewer for Journal of Mines Metals and Fuels
2. Reviewer for Engineering Research Express, IOP Science
3. Reviewer for Powder Metallurgy Journal, SAGE Publications
4. Reviewer for International Journal on Interactive Design and Manufacturing, Springer Nature
5. Reviewer for Journal of Optoelectronics and Advanced Materials
6. Reviewer for ICSIETS 2026, YCC Nagpur
7. Reviewer for ICSMSS 2025 organized by the Department of Mechanical Engineering DJSCE
8. Reviewer for ICCI-2025 conference, SNDT Women's University
9. Reviewer for ICSI2025 conference, D Y Patil Institute of Technology Pimpri, Pune
10. Reviewer for ICTEAH 2024 & 2025 organized by KJSSE.
11. Reviewer for IEEE Technically Co-Sponsored 4th Biennial International Conference on Nascent Technologies in` Engineering ICNTE – 2021
12. Session coordinator for National Convention on “Role of Industrial Engineering: Tools & Techniques to Mitigate Global Effect of COVID 19” during 29- 30 January 2021.

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

Delivered / Attended:

1. Organized Mech-Tech Ideathon on 20th March 2026 jointly by MESA & SAE.
2. Session Chair for 23rd ISME International Conference on Conference on Recent Advances in Mechanical Engineering at LNMIIT jointly organized by IIT Jodhpur, LNMIIT & NMITJ
3. Auditor for Academic Audit of Mechanical Engineering at MPSTME on 13 Sept 2025.
3. Jury member for the Somaiya Innovation & Impact Festival on 21st & 22nd February 2025.
4. Judge for Impact Speech Session at Institute of Company Secretary of India, CBD Belapur, on 18th January 2025.
5. Auditor for audit of Question Paper & Answer book at Sardar Patel College of Engineering.
6. Resource Speaker for Student Development Program at Dr. D Y Patil Institute of Technology, Pune on 17th January 2024. Delivered talk on AI - Matrix Composite - Selection and Design
7. Presented research work in SVU Annual Research Meet 2024, on 31st January 2024.
8. Technical Session Convener for ICTEAH 2024 /2025 / 2026 organized by KJSCE.
9. Liaisoning Officer for AIU West Zone Vice Chancellors' Meet 2023-24 hosted by Somaiya Vidyavihar University, Mumbai on 19th & 20th December 2023.
10. Co-coordinator of Transport committee of Trio-Conclave Somaiya Vidyavihar University, Mumbai on 2nd – 3rd April 2024.

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Online Courses completed

1. NPTEL online course on “Nature & Properties of Materials” by Prof. Bishakh Bhattacharya, IIT Kanpur from July – Sept 2017.
2. NPTEL online course on “Manufacturing of composites” by Prof. Janakranjan Ramkumar, IIT Kanpur from July – Sept 2018.
3. NPTEL online course on “Effective Engineering Teaching In Practice” by Prof. K. Suraishkumar, IIT Madras from Jan –Feb 2024.
4. NPTEL online course on “Product Design & Manufacturing” by Prof. Janakranjan Ramkumar, IIT Kanpur from Jan – April 2025.

FDPs/Seminars/Workshops Attended:

1. One day workshop on Probing the Research Process: From Idea to Impact Values organized by K J Somaiya Institute of Technology, Sion, Mumbai on 2nd August 2025.
2. Three day workshop on Universal Human Values organized by K J Somaiya Institute of Technology, Sion, Mumbai from 2nd to 4th January 2025
3. Three day MET & HTS 2024 Conference & Expo from 4th - 6th September 2024 organized by ASM International India Chapter at Bombay Exhibition Centre, Mumbai
4. Three days Training Program on Composite Materials & its Application organized by ICAR-CIRCOT Mumbai during 6th -8th March 2024.
5. One Week National level Online Faculty Development Program on Outcome Based Education and Essential AI Tools for Teachers organized by the Internal Quality Assurance Cell (IQAC) of St. Thomas College, Palai, Kerala from 10th to 16th January 2024.
6. FDP on Sharpening the Grant Writing Skills for Funded Research by FSDC-SVU on 8th January 2024.
7. 15th Summer School on Tribology by Tribology Society of India at IISc Bangalore from 13th to 17th June 2023.
8. 3 Days industrial training on Industry 4.0 & IOT with Absolute Motion Pvt. Ltd. in association with K J Somaiya College of Engg. From 5th June to 7th June 2023.
9. FDP on "Stress Management, Art of Living and Effective Communication Skills" at SPCE, Mumbai from 14-th Nov-to 25 Nov 2022.
10. Faculty development program on “Advances in Composite Materials and Manufacturing Process” organised by St. Ann’s College of Engineering and Technology, Andhra Pradesh from 22 to 26 June 2020.
11. Faculty development program on “Online Teaching and E-content” organised by S K Somaiya College & IIIDE on 11th and 12 June 2020.
12. Faculty development program on “Engineering Innovation, Entrepreneurship and its Relevance in Industry 4.0 Practices in the Post COVID -19 Situation” organised by Terna college of Engineering from 25 May to 29 May 2020.

13. Faculty development program on “Challenges Opportunities and Possible caused due to COVID 19 in Process equipment Industries” organised by *Pillai HOC College of Engg & Technology Rasayani* on 4th & 5th may 2020.
14. Two days Intensive Course on “Heat Treatment” (*Conducted by ASM International India chapter from 6th to 7th February 2020*)
15. AICTE-ISTE approved Training Program on “Emerging Trends in The Field of Mechatronics”. (*Conducted by KJSCE from 23rd – 27th December, 2019*)
16. Five Day Training Course on SolidWorks by Addonix Technologies Pvt. Ltd. (*Conducted by KJSCE from Sept - November 2018*)
17. Two Day Workshop on “Writing Research Paper and Patent” at. (*Conducted by VIIT Pune on 29th and 30th January 2018*)
18. One week short term course on “Nanoscience and Nanotechnology: Fundamentals, Synthesis and Applications”. (*Conducted by SPCE, Mumbai from 2nd – 7th January 2017*)
19. One week short term course on “Industrial Tribology” (*Conducted by Veermata Jijabai Technological Institute Mumbai from 4th – 8th July 2016*)
20. One week short term course on “Finite Element Methods for Engineering Applications”.
(*Conducted by SVNIT, Surat from 30th Nov to 4th Dec 2015*)
21. One day National Workshop on “Advances in Finite Element Methods”.
(*Conducted by Pillai HOC College of Engineering & Technology on 11th April 2015*)
22. One week short term course on “Fault Diagnosis of Rotating Machines and Finite Element Analysis”. (*Conducted by VJTI, Mumbai from 5th to 9th Jan 2015*)
23. One week short term course on “Numerical Methods in Engineering”.
(*Conducted by SVNIT, Surat from 1st to 5th Jan 2014*)
24. One week short term course on “Advanced in Machine Design”. (*Conducted by VJTI, Mumbai from 2nd to 6th Dec 2013*)
25. One week faculty development program on “Advances in Fault Diagnosis of Rotating Machines and Fluid Film Bearing. (*Conducted by VJTI, from 10th to 14th June 2013*)
26. Two week ISTE workshop on “Computational fluid dynamics”.
(*Conducted by IIT Bombay from 12th to 22nd June 2012*)
27. Two day ISTE workshop on “Writing Papers for Technical Conferences”.
(*Conducted by K. J. Somaiya College of Engineering, Mumbai from 18th to 19th Feb 2012*)
28. Two week ISTE workshop on “Thermodynamics in Mechanical Engineering”.
(*Conducted by IIT Bombay from 14 to 24 June 2011*)

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Notable Key Scholastic Achievements	
	1. Reviewer for Scopus / SCI Journals (Springer Nature, SAGE publication, IOP Science, JOAM) 2. Fellowship of Indian Institution of Industrial Engineering. 3. Best paper awarded in ICAMME 2025 on 22nd Feb 2025. 4. Design consultancy work for Industry projects.

Social Responsibilities	
	▪ Regular Voluntary Platelet Donor at Tata Memorial Hospital Mumbai ▪ Yoga & Pranayama Volunteer for Art of Living organization

Notable Positions and Responsibility	
	1. Department Faculty Development Cell Coordinator (FDC) from August 2025 2. Departmental Examination Committee Coordinator (DEC) from September 2022 3. Senior Supervisor for ESE, May-June 2024/2025/2026 4. Member of Institute Level Unfair means Committee (from 2019) 5. Faculty in charge of Mechanical Engineering Students Association (MESA) (From 2010) 6. Member of Relative Grading Committee (2023-24) 7. Member of Member Admission Publicity Committee (From 2022) 8. Laboratory in charge of MMM Lab from July 2009 to March 2020 9. Member of Departmental Examination Committee (DEC) (2013 to 2022) 10. Departmental Internship Coordinator (2020-22) 11. IPR Coordinator of Institution's Innovation Council (IIC) (2019-2020) 12. Member of Institution's Innovation Council (IIC) (2018-2019) 13. Member of Departmental Administrative Committee for NAAC 14. Coordinator for Industrial Application course (2018-2020) 15. Departmental Project Coordinator (2010 – 2015) 16. Design Area Coordinator (2012 – 2015)

Professional Membership:	
	▪ Life member of "The Indian Society for Technical Education (ISTE)". (MIIE-9469) ▪ Life member of "Indian Institution of industrial Engineering (IIIE)" (LM-61549) ▪ Life member of "Tribology Society of India" (TSI) (LM # 5687).

Date: 07/07/2026

(Dr. Vilas. G. Dhore)