Name: Dr. Vilas G	E-mail:vilasdhore@somaiya.edu				
Contact No: 7021					
Department/Section					
College: K J Somai	ya School of Engineering				
DOJ Somaiya:	Career Experience:	<b>Industry E</b>	xperience:	Teaching	Experience:
14 <sup>th</sup> August 2008	27 Yrs	-Yrs		27 Yrs	
Present Academic Designation: Present Administrative Designation:					
Associate Professor Departmental Examination Committee Coord		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: No
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	VJTI, Mumbai	Veer Jijabai	2023	NA
	Philosophy		Technological Institute		
	(Mech. Engg.)		(VJTI), Mumbai		
PG	Master of	Mumbai	Sardar Patel College of	2008	62.5 %
	Engineering	University	Engineering, Mumbai		
UG	Bachelor of	Amravati	College of Engineering	1997	64.0 %
	Engineering	University	Badnera, Amaravati		

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

Research Accomplishments and Projects			
No of students pursu	ing Ph.D as on date: Nil	No of students completed Ph.D : Nil	
No of students completed PG thesis: 02		No of students / groups completed	
Ongoing:01		UG projects as on date: 30+	
Publications	Number of Peer review Journal papers:	Number of Conference papers: 06	
Total: 13	06 (Scopus) (1 UGC Care)		

#### **Publications: International Journals**

- Dhore, V. G., Rathod, W. S., & Patil, K. N, "Mechanical and Tribological Attributes of Al-CNT-Sn Composites Prepared by Press and Sintering" *Journal of Composite Science*, 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." *Materials Science Forum (Trans Tech Publications Ltd)*, 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", *Materials Today: Proceedings* (Elsevier), 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", *Materials Today:* Proceedings (Elsevier), 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 "International Journal of Renewable Energy

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**

- 1. 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*
- 2. 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**

- 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.
- 2. 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*
- 3. 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
- 4. Jash Desai, Aayush Shah, Paarth Shah and Sreenivas Konar, Vilas Dhore, Finite Element Analysis of Disc Brake, *ICTEAH 2024*, *KJSCE Mumbai (Poster Presentation)*
- 5. 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.

#### **Patent:**

Application No.202021041070 A

Date of filing of Application: 22/09/2020

Publication Date: 26/02/2021

Title of the invention: A Metal Particulates Porous Composite for Automobile Oil Filter

Name of Applicant: Mr. Dhore Vilas Gulabrao

## Details of Research / consultancy / projects: Completed/ Ongoing

Project Title	Sponsoring agency	Year	Status
Design of Containerized Sub	L&T Automation Ltd. Rabale,	2020	Completed
Station of Rs 2,58750/-	Thane		
Design approval of Retractable	Technika, Rabale, Thane	2023	Completed
Ladder			
Consultancy work of Rs.	Kohli Industries, Ambernath	2024	Completed
8,10,000/- at Kohli Printing			
and Converting Machines Pvt.			
Ltd., Ambernath			

# **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 ICCC-2025 conference, SNDT Women's University Reviewer for the International Conference on Sustainable Industry 4.0: Innovations for a Greener Future, (ICSI-2025) at DY Patil Institute of Technology, Pune.
- 7. Reviewer for ICTEAH 2024 & 2025 organized by KJSSE.
- 8. Reviewer for IEEE Technically Co-Sponsored 4th Biennial International Conference on Nascent Technologies in` Engineering ICNTE 2021
- 9. 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 / Organized:**

- 1. Jury member for the Somaiya Innovation & Impact Festival on 21st & 22nd February 2025.
- 2. Judge for Impact Speech Session at Institute of Company Secretary of India, CBD Belapur, on 18<sup>th</sup> January 2025.
- 3. Auditor for audit of Question Paper & Answer book at Sardar Patel College of Engineering.
- 4. Resource Speaker for Student Development Program at Dr. D Y Patil Institute of Technology, Pune on 17<sup>th</sup> January 2024. Delivered talk on Al Matrix Composite Selection and Design
- 5. Presented research work in SVU Annual Research Meet 2024, on 31st January 2024.
- 6. Technical Session Convener for ICTEAH 2024 organized by KJSCE on 15<sup>th</sup> -16<sup>th</sup> April 2024.
- 7. Liaisoning Officer for AIU West Zone Vice Chancellors' Meet 2023-24 hosted by Somaiya Vidyavihar University, Mumbai on 19<sup>th</sup> & 20<sup>th</sup> December 2023.
- 8. Co-coordinator of Transport committee of Trio-Conclave Somaiya Vidyavihar University, Mumbai on  $2^{nd} 3^{rd}$  April 2024.
- 9. Member of organizing team for ICTEAH 2024 organized by KJSCE on 15<sup>th</sup> -16<sup>th</sup> April 2024.

## **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 2<sup>nd</sup> August 2025.
- 2. Three day workshop on Universal Human Values organized by K J Somaiya Institute of Technology, Sion, Mumbai from  $2^{nd}$  to  $4^{th}$  January 2025
- 3. Three day MET & HTS 2024 Conference & Expo from 4<sup>th</sup> 6<sup>th</sup> 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 6<sup>th</sup> -8<sup>th</sup> 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 10<sup>th</sup> to 16<sup>th</sup> January 2024.
- 6. FDP on Sharpening the Grant Writing Skills for Funded Research by FSDC-SVU on 8<sup>th</sup> January 2024.
- 7. 15<sup>th</sup> Summer School on Tribology by Tribology Society of India at IISc Bangalore from 13<sup>th</sup> to 17<sup>th</sup> 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 5<sup>th</sup> June to 7<sup>th</sup> 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 & IIDE on 11<sup>th</sup> 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 4<sup>th</sup> & 5<sup>th</sup> may 2020.*
- 14. Two days Intensive Course on "Heat Treatment" (Conducted by ASM International India chapter from 6<sup>th</sup> to 7<sup>th</sup> February 2020)
- 15. AICTE-ISTE approved Training Program on "Emerging Trends in The Field of Mechatronics". (Conducted by KJSCE from  $23^{rd} 27^{th}$  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 bay SPCE, Mumbai from* 2<sup>nd</sup> 7<sup>th</sup> January 2017)
- 19. One week short term course on "Industrial Tribology" (Conducted by Veermata Jijabai Technological Institute Mumbai from  $4^{th} 8^{th}$  July 2016)
- 20. One week short term course on "Finite Element Methods for Engineering Applications". (Conducted by SVNIT, Surat from 30<sup>th</sup> Nov to 4<sup>th</sup> Dec 2015)
- 21. One day National Workshop on "Advances in Finite Element Methods".

  (Conducted by Pillai HOC College of Engineering & Technology on 11<sup>th</sup> April 2015)
- 22. One week short term course on "Fault Diagnosis of Rotating Machines and Finite Element

Analysis". (Conducted by VJTI, Mumbai from 5<sup>th</sup> to 9<sup>th</sup> Jan 2015)

23. One week short term course on "Numerical Methods in Engineering".

(Conducted by SVNIT, Surat from 1<sup>st</sup> to 5<sup>th</sup> Jan 2014)

- 24. One week short term course on "Advanced in Machine Design". (Conducted by VJTI, Mumbai from 2<sup>nd</sup> to 6<sup>th</sup> Dec 2013)
- 25. One week faculty development program on "Advances in Fault Diagnosis of Rotating Machines and Fluid Film Bearing. (Conducted by VJTI, from 10<sup>th</sup> to 14<sup>th</sup> June 2013)
- 26. Two week ISTE workshop on "Computational fluid dynamics".

(Conducted by IIT Bombay from 12<sup>th</sup> to 22<sup>nd</sup> June 2012)

27. Two day ISTE workshop on "Writing Papers for Technical Conferences".

(Conducted by K. J. Somaiya College of Engineering, Mumbai from 18<sup>th</sup> to 19<sup>th</sup> Feb 2012)

28. Two week ISTE workshop on "Thermodynamics in Mechanical Engineering".

(Conducted by IIT Bombay from 14 to 24 June 2011)

#### **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 22<sup>nd</sup> Feb 2025.
- 4. Design consultancy work for Industry projects.

## **Notable Positions and Responsibility**

- 5. Coordinator of Departmental Examination Committee (DEC)
- 6. Senior Supervisor for May-June 2024 ESE
- 7. Member of Institute Level Unfair means Committee (from 2019)
- 8. Faculty in charge of Mechanical Engineering Students Association (MESA) (From 2010)
- 9. Member of Relative Grading Committee.
- 10. Member of Member Admission Publicity Committee (From 2022)
- 11. Laboratory in charge of MMM Lab from July 2009 to March 2020
- 12. Member of Departmental Examination Committee (DEC) (From 2013 to 2022)
- 13. Departmental Internship Coordinator (2020-22)
- 14. IPR Coordinator of Institution's Innovation Council (IIC) 2019-2020.
- 15. Member of Institution's Innovation Council (IIC) 2018-2019.
- 16. Member of Departmental Administrative Committee for NAAC
- 17. Coordinator for Industrial Application course 2018-2020
- 18. Departmental Project Coordinator from March 2010 to July 2015 at KJSCE.
- 19. Design Area Coordinator from 2012 to 2015

<b>Professional Membership:</b>

- Life member of "The Indian Society for Technical Education (ISTE)" from 2009.
- Life member of "Indian Institution of industrial Engineering" from October 2009.
- Life member of "**Tribology Society of India**" from November 2014.

Date: 06/09/2025 (Dr. Vilas. G. Dhore)