

Personal Details (Bio-data)		
Name	Dr. Vijay Mulchand Barethiye ymbarethiye@gmail.com ymbarethiye@me.viti.ac.in	
Designation	<ul style="list-style-type: none"> • Lecturer, Mechanical Engineering Department, VJTI Mumbai. • I/c Controller of Examinations (Diploma), VJTI Mumbai (May 2018 to Jan 2021). 	
Qualification	<ul style="list-style-type: none"> • B.E. (Mechanical): Govt. Engineering College Amravavti, (India). • M.E. (Cad/Cam): Amravavti University, (India). • Ph.D.(Mechanical): Jadavpur University, Kolkata (India). 	
Date of Birth	29 th March 1978	
Academic Experience	20 years	
Research Interest	Automobile Engineering, Vehicle Suspension System, Cad/Cam, Fuzzy Control System, AI Techniques, Manufacturing Process	
Ph.D. Thesis	Modeling and Analysis of Passive and Active Vehicle Suspension System , at Jadavpur University, Kolkata (India), 2018	
Publications	International Journals	07
	International Conferences	07
	Short Term Course/FDP Attended	14
Diploma Project Guided	55	
M.Tech. Dissertations Guided	02	
Book Published	<ul style="list-style-type: none"> • “Fluid Mechanics and Machinery” S’Chand, New Delhi - April 2012 (For Diploma in Mechanical and Production Engineering Group) 	
Interaction with outside world	<ul style="list-style-type: none"> • Singapore: Visited to Singapore to attend International Conference on Data Processing and Application (ICDPA 2023) during June, 16-18 2023. • Greece: Visited to Athens and Crete, Greece to attend and present the research paper in 14th ICOVP International Conference on Vibration Problems at Crete, Greece during September 1-4, 2019 organised by National Technical University of Athens. • Italy: Visited to Department of Industrial Engineering, University of Rome Tor Vergata, Rome during 5-8 September 2019 and interacted with 	



	researchers and the state-of-the-art research facilities available in the laboratories.
Membership of Professional Body	<ul style="list-style-type: none"> • Senior Member --Indian Society of Mechanical Engineers (ISME) • Fellow-- The Society of Innovative Educationalist & Scientific Research Professional Chennai
Event Coordinator	<ul style="list-style-type: none"> • Diploma Convocation Ceremony for the Academic Year 2017-18 and 2018-19 • One Week Faculty Development Program on “Emerging Trends in Automotive Technology” during 13th -17th January 2020 sponsored by MSBTE Mumbai. • ATAL Online One Week Faculty Development Program on “Electric Vehicle” during 1st -5th February 2021.

List of Publications

- **Referred Journals**
- **V. M. Barethiye**, G. Pohit and A, Mitra, “Analysis of A Quarter Car Suspension System Based on Nonlinear Shock Absorber Damping Models” International Journal of Automotive and Mechanical Engineering, Volume 14, Issue 3 pp. 4401-4418 September 2017. <http://dx.doi.org/10.15282/ijame.14.3.2017.2.0349>
- **Vijay Barethiye**, G. Pohit, A. Mitra, “A combined nonlinear and hysteresis model of shock absorber for quarter car simulation on the basis of experimental data.” Engineering Science and Technology, an International Journal, DOI: 10.1016/j.jestech.2017.12.2003, December 2017. <https://doi.org/10.1016/j.jestech.2017.12.003>
- **Vijay Barethiye** and Sharad Tarte, Finite Element Analysis to Investigate the Effect of Distribution of Nanoplatelets on The Mechanical Properties, International Journal of Mechanical Engineering and Technology, 9(13), 2018, pp. 1724- 1734.
- **Vijay Barethiye**, A Study and Brief Review on Active Vehicle Suspension System, International Journal of Advanced Research in Engineering and Technology, 2019, 10(6), pp. 771-781.
- **Vijay Barethiye** Analysis of Active Suspension System for Nonlinear Half Car Model, TEST Engineering & Management, 2020 (83), pp. 274-281.
- **Vijay Barethiye** and Vilas Mane, Analysis of An Automotive Composite Drive Shaft, International Journal of Advanced Research in Engineering and Technology, 11(12), 2020, pp. 3699-3707.
- **Barethiye V.**, Pohit G., and Mitra A., Modeling and Analysis of Passive Suspension System Using half Car Model Based on Hybrid Shock Absorber Model, Proceedings of 14th International Conference on Vibration Problems, Lecture Notes in Mechanical Engineering, Springer, Singapore. http://dx.doi.org/10.1007/978-981-15-8049-9_79
- **List of Presentations/Publications in International Conferences**
- V. M. Barethiye, G. Pohit, A. Mitra (2023) “AI based modeling for the simulation of hysteresis characteristics of shock absorber” at International Conference on Data processing and Application (ICDPA-2023), Singapore during 16-18 June, 2023.

- **V. M. Barethiye**, G. Pohit, and A. Mitra, (2020), “Modeling and Simulation of Full Car Suspension System Based on Hybrid Shock Absorber Model” at 2nd International Conference on Mechanical Engineering and Nanotechnology (ICAMEN), February 28-29, 2020 organised by Manipal University Jaipur.
- **V. M. Barethiye**, G. Pohit, and A. Mitra, (2019), “Modeling and Analysis of Passive Suspension System Using half Car Model Based on Hybrid Shock Absorber Model” at the 14th International Conference on Vibration problems (ICOVP) held in Crete, Greece on 1-4 September 2019.
- **V. M. Barethiye**, G. Pohit, and A. Mitra, (2018), “Active Suspension System for Nonlinear Half Car Model,” in 1st International Conference on Mechanical Engineering (INCOM-2018), January 4-6, 2018, Jadavpur University, Kolkata, India.
- **V. M. Barethiye**, G. Pohit, and A. Mitra, (2017), “Simulation and Analysis of Semiactive and Active Suspension System,” in International Conference on Recent Innovations in Production Engineering (RIPE-2017), March 24-25, 2017, Madras Institute of Technology (MIT), Chennai, India.
- **V. M. Barethiye**, G. Pohit, and A. Mitra, (2016), “Study on the Performance of Vehicle Characteristics by Varying Damping Coefficients Using Car Model,” in 61st Indian Society of Theoretical and Applied Mechanics Conference (ISTAM 2016), December 11-14, 2016, Vellore Institute of Technology (VIT), Vellore, India.
- **V. M. Barethiye**, G. Pohit, and A. Mitra, (2016), “Simulation of Quarter Car Model for the Shock Absorber Compliance with Rubber Bush and Washers,” in 6th International Congress on Computational Mechanics and Simulation (ICCMS 2016), 27th June – 1st July 2016, Indian Institute of Technology (IIT), Bombay, Maharashtra, India.

Faculty Development Programme / Short Term (1/2 Weeks) Programs Attended

1. **Two weeks** Online Faculty Development Programme on “**Industry 4.0 Technologies: Application in Manufacturing Supply Chain**” organized by **Electronics and ICT Academy, NIT Patna**, held from **02 May–13 May, 2022** in online mode under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” of the Ministry of Electronics and Information Technology (MeitY), Government of India.
2. **One Week** AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “**3D Printing and Design**” from 13/01/2022 to 17/01/2022 at Central University of Jharkhand.
3. **One Week** AICTE Training and Learning (ATAL) Academy Online FDP on “**Electric Vehicles**” from **2021-2-1 to 2021-2-5** at Veermata Jijabai Technological Institute Mumbai.
4. **One Week** Faculty Development Training on **Emerging Trends in Automotive Technology**, VJTI, Mumbai period- 13-17 January, 2020
5. **One Week** Faculty Development Programme on **Advanced Data Analysis & Decision Making**, VJTI, Mumbai period- 30 Dec 2019-3 Jan 2020.
6. **Two Weeks** AICTE Sponsored QIP on “**Machine Learning Tools & Applications for Engineers**” held during 12th - 21st June, 2017.
7. **One Week** Faculty Development Programme on **Rapid Product Development and Manufacturing**, VJTI, Mumbai. Period: - November 26-30 2013

8. **One Week** Faculty Development Programme on **CFD Applications & Engineering analysis using Computing Soft wares**, VJTI, Mumbai. Period: -11 Nov to 15 Nov 2013
9. **One Week** Faculty Development Programme on **Recent Trends in Finite Element Method and Introduction to Boundary Element and Mesh Free Method**, VJTI, Mumbai. Period: -18/02/2013 to 22/02/2013
10. **Two Weeks** Short Term Course on **Engineering Thermodynamics**, Conducted by IIT Bombay at VJTI, Mumbai. Period: -11/12/2012 to 22/12/2012
11. **One Week** Staff Development Programme on **Tool and Techniques in Industrial Engineering**, VJTI, Mumbai. Period: -12/03/2012 to 16/03/2012
12. **Two Weeks** Staff Development Programme on **Research Methodology and Issues in Engineering**, Thiagraja College of Engineering, Madurai, Tamilnadu. Period: -12/12/2011 to 24/12/2011
13. **One Week** Staff Development Programme on **Computational Fluid Dynamics (CFD) For Engineers**”, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat. Period: -01/02/2010 to 05/02/2010
14. **One Week** Staff Development Programme on **Solid Modeling Using Pro-E**, NITTTR Bhopal. (M.P.). Period: -02/02/2009 To 06/02/2009
15. **One Week** Staff Development Programme on **Computer Aided Drafting**, Government Polytechnic Amravati. Period: -16 Jun to 21 Jun 2008
16. **Two Weeks** Staff Development Programme on **Non-Conventional Energy Resources and Energy Conservation**, Government College of Engineering, Amravati, (Maharashtra). Period: -13/12/2004 To 25/12/2004
17. **One Week** Staff Development Programme on **Career Guidance and Counselling**, National Institute of Technical Teachers Training and Research (NITTTR), Bhopal. (M.P.). Period:-20/09/2004 To 24/09/2004

Dr. Vijay M. Barethiye