

## BIO-DATA



1. **Name** BIPIN BHARAT MASHILKAR
2. **Designation** Assistant Professor
3. **Residential Address** Thane
4. **Date of birth** 30<sup>th</sup> June
5. **Total Experience** 16 years
  - i. **Teaching** 15.5 years
  - ii. **Industrial** 6 month

6. **Qualifications**

Exam Passed	Year	Institution/ University	Branch/Specialization	Percentage/CGPI
M. E.	2008-2009	LTCOE/Mumbai	Mechanical (Cad/ Cam & Robotics)	62%
B. E.	2004-2005	Fr.CRCOE/Mumbai	Mechanical Engg.	62.28%

**Additional Qualification:**

7. **Employment Record**

Institution	Year (From To)	Designation
Fr. C.R.I.T. Vashi	Dec 2008 to till date	Ass. Professor
Lokmany Tilak College Of Engg	July 2005 to Dec 2008	Lecturer
Vighaneshwar Air-conditioning	Dec 2004 to June 2005	Jr. Service .Engg.

8. **Undergraduate / Postgraduate Teaching Experience and Subjects Taught**

**Subjects Taught at UG level**

Sr.No.	Name of Subject	Semester
1.	Engg. Mechanics	I
2.	Engg. Drawing	II
3.	Strength of Material	III
4.	Fluid Mechanics	IV

**Subjects Taught at PG level**

Sr.No.	Name of Subject	Semester

9. **Research Experience**

10. **Research Funding / Consultancy Services:**

Sr.No.	Name of the Company	Address	Product	Consulting Service	Consulting Fees	Period

**Research Grants:**

Sr.No.	Name of Funding Organization	Type of Grant	Amount (Rs.)	Year	Name of Research Project

**Technical Collaboration / Lab Funding with Industries**

Sr.No.	Name of the Funding Organization	Type of Support	Amount (Rs.)	Year

**11. Professional Societies Fellowship / Membership**

1. National Society of Fluid Mechanics and Fluid Power (NSFMFP)
2. International Association of Engineers (IAENG )

**12. Achievements / Awards / Position**

**13. Projects guided in UG/PG level**

**14. Short Term Training Programmes attended**

1. Three days training program (6th, 20th July and 14th Sep, 2019) on “Measurement, Control and Virtual Instrumentation” conducted by Department of Mechanical Engineering, Fr. C Rodrigues Institute of Technology, Vashi, Navi Mumbai.
2. One week (June 25-29, 2019) training on “ANSYS Mechanical and CFD” conducted by Department of Mechanical Engineering, Fr. C. Rodrigues Institute of Technology, Vashi Navi Mumbai in association with ARK Info Solutions Pvt. Ltd.
3. One week (June 17-21, 2019) AICTE-QIP Sponsored short term course on “Solar Thermal Technologies for Process Heat and Power” organized by Department of Energy Science and Engineering (DESE), IIT Bombay.
4. One-week (May 28-June 3, 2018) AICTE-QIP Sponsored short term course on “Introduction to Numerical Heat Transfer, Fluid Flow and its Applications” organized by Mechanical Engineering Department, CIT, Coimbatore.
5. Six-day faculty development program on “communication skills” organized by FCRIT Vashi from October 03, 2013 to October 09, 2013
6. Two week ISTE workshop on engineering mechanics conducted by IIT Bombay from 26<sup>th</sup> Nov. to 6<sup>th</sup> Dec.
7. One week (23/02/2017 to 28/02/2017) short term training program on “Fluid Flow and Computational Methods” organized by V.J.T.I., Matunga, Mumbai.
8. Electrical Vehicle, All India Shri Shivaji Memorial Society’s collage of Engineering Pune AICTE Training and Learning Academy (5<sup>th</sup> -9<sup>th</sup> Nov 2020)

**15. List of Journal Papers Published**

1. Varkute, Nilesh, Badal Kudachi, Bipin Mashilkar, Priyan Kamble, Anmol Rane, Aishwarya Harad, and Glen Rebello. "Experimental and Numerical Investigation of Latent Heat-Based Energy Storage System Using Nano-Enhanced Phase Change Material." In Recent Advances in Mechanical Engineering: Select Proceedings of CAMSE 2021, pp. 559-571. Singapore: Springer Nature Singapore, 2022.
2. Kudachi, Badal, Bipin Mashilkar, Nilesh Varkute, Omkar Mawalankar, Ashish Shanbhag, Shalom Gaikwad, and Antony Maria Camillus. "Experimental Study of PCM Based Latent Heat Thermal Energy Storage System Using Fins." In International Conference on Advances in Energy Research, pp. 789-801. Singapore: Springer Nature Singapore, 2022.
3. Kudachi, Badal, Nilesh Varkute, Bipin Mashilkar, Srikant Guthulla, Prabhav Jayaprakash, Alex Aaron, and Simran Joy. "Experimental and computational study of phase change material based shell and tube heat exchanger for energy storage." Materials Today: Proceedings (2021).
4. Kudachi, Badal, Nitin Satpute, Nilaj N. Deshmukh, and Bipin Mashilkar. "Performance and Emission Characteristics of Thermal Barrier Coating on Diesel Engine Fueled with Cottonseed Biodiesel." In Advances in Applied Mechanical Engineering, pp. 205-213. Springer, Singapore, 2020.
5. Numerical investigation of Heat Transfer Augment in a Rectangular Solar Air Heater Duct. Published in *IJERT* , Volume Issue 10, October-2014.

**16. List of Papers Published in National and International Conferences**

1. CFD Analysis of Heat Transfer Enhancement in a Rectangular Solar air heater duct by using Artificial Roughness.in NCSAME-2009, JNTU Hyderabad, Aug 20, 21,2009
2. Analysis of Discrete Manufacturing System of Transmission Shafts & Gears for it Optimum Performance Present in ICOST 2011, DHULE, Jan 13-15, 2011
3. Effects of Parameters on Oil content and Growth of Algae, International Conference on Advances & Futuristic Trends in Mechanical and Materials Engineering 2013, at Punjab Technical University.
4. Automated bottle filling system. “International conference on Emerging trends on technology” on 18<sup>th</sup> &19<sup>th</sup> March 2015” VIVRUTI\_2015”.
5. “Design and fabrication of fully automatic solar tracking system”, Proceedings of International conference on emerging trends in engineering innovation and technology management, volume - II, Himachal Pradesh, India, December 16 to 18, 2017, pp. 152-157.

6. "Design and Fabrication Pyrheliometer" International Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST 2018), April 27th & 28th, 2018 at NIT, Tiruchirappalli.
7. "Experimental and Computational Study of Phase Change Material Based Shell and Tube Heat Exchanger for Energy Storage", 2nd International Mechanical Engineering Congress (IMEC – 2019), NIT Tiruchirappalli, 29 Nov. 2019 – 01 Dec. 2019.
8. "Performance and Emission Characteristics of Thermal Barrier Coating on Diesel Engine Fueled with Cottonseed Biodiesel", 1st International Conference on Applied Mechanical Engineering Research (ICAMER - 2019), NIT Warangal, 2-4 May 2019.
9. "Hybrid Shock Absorber with Electromagnetic and Fluid Damper for Application in an Automotive Suspension", International Conference on Nascent Technologies in Engineering (ICNTE 2019), IEEE, 4-5 Jan 2019.
10. "Experimental and Computational Study of Phase Change Material Based Shell and Tube Heat Exchanger for Energy Storage", 2nd International Mechanical Engineering Congress (IMEC – 2019), NIT Tiruchirappalli, 29 Nov. 2019 – 01 Dec. 2019.
11. "Performance and Emission Characteristics of Thermal Barrier Coating on Diesel Engine Fueled with Cottonseed Biodiesel", 1st International Conference on Applied Mechanical Engineering Research (ICAMER - 2019), NIT Warangal, 2-4 May 2019.
12. "Experimental and Numerical Investigation of Latent Heat Based Energy Storage System Using Nano Enhanced Phase Change Material", 2nd International Congress on Advances in Mechanical and Systems Engineering (CAMSE-2021), Dr. B. R. Ambedkar NIT Jalandhar, 17-19 July 2021
13. "Thermal Analysis of Earth Tube Heat Exchanger Using Experimental Setup and Simulation", 2nd International Congress on Advances in Mechanical and Systems Engineering (CAMSE-2021), Dr. B. R. Ambedkar NIT Jalandhar, 17-19 July 2021
14. "Experimental Study of PCM Based Latent Heat Thermal Energy Storage System Using Fins", 8th International Conference on Advances in Energy Research (ICAER-2022), IIT Bombay, 07-09 July, 2022.
15. "IOT Based Solar Powered Automated Water Level Indicator and Distribution System", 5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE 2023), FCRIT, Vashi, 20-21 Jan., 2023.
16. "Vibration Analysis of Faults in Rotating Machineries", *In Proc. International Conference on Technologies for Energy, Agriculture and Healthcare (ICTEAH 2024), Mumbai, India, April, 15-16, 2024*
17. *Design and Development of Cycloidal Gear Box, international conference on recent advance in science, engineering and technology, organized by MKSSS Cummins college of engineering, Nagpur, 29-30 JULY 2023.*
18. Design and Development of a Fully Automated Solar Grass Cutting Robot" in the International Conference on Advances in Mechanical, Mechatronics & Civil Engineering (IC-AMMCE 2025) organized during February, 21 & 22<sup>nd</sup>, 2025 at Thakur College of Engineering and Technology, Kandivali (E), Mumbai.

**17. Books/Reports/General articles etc.**

**18. Invited Lectures in FDP/ STTP**

**19. International Conference Technical Program Committee Member / Reviewer**

**20. Patents**