

Profile



Name Dr. Bharat S. Kale
Designation Assistant Professor
Residential Address B-204, Soham CHS, Plot No D-16/1, Sector 20, Airoli
Navi Mumbai
Maharashtra
Date of birth 14 April
Total Experience 17 years
i. Teaching 17 years
ii. Industrial Nil

Qualifications

Exam Passed	Year	Institution/ University	Branch/Specialization	Percentage/CGPA
Ph.D.	2021	University of Mumbai	Mechanical Engineering	---
M.Tech	2009	Government College of Engineering, Amravati	Thermal Engineering	68.56 %
B.E.	2005	Prof. Ram Meghe Institute of Technology and Research, Badnera, Amravati, affiliated to S.G.B. Amaravati University	Mechanical Engineering	70.28 %

Employment Record

Institution	Year (From To)	Designation
Fr. C. Rodrigues Institute of Technology, Vashi Navi Mumbai, Affiliated to the University of Mumbai	Nov 2022 till date	Assistant Professor

Datta Meghe College of Engineering, Airoli, Navi Mumbai. Affiliated to the University of Mumbai	July 2007 to Nov 2022	Assistant Professor
---	--------------------------	---------------------

Undergraduate / Postgraduate Teaching Experience and Subjects Taught

Subjects Taught at UG level

Sr.No.	Name of Subject	Semester
1.	Thermodynamics	III
2.	Heat Transfer	V
3.	Thermal Engineering,	V
4.	Power Engineering,	VIII
5.	Thermal Fluid Power Engineering,	VI
6.	Micro Electro Mechanical System	VIII
7.	Renewable Energy Sources	VII
8.	Theory of Machines I	IV
9.	Engineering Drawing	II
10.	Computational Methods	V

Subjects Taught at PG level

Sr.No.	Name of Subject	Semester
1	Control Engineering	I
2	Product Design	I

Research Experience: Nil

Research Funding / Consultancy Services:

Research Grants:

Sr. No.	Name of Funding Organisation	Type of Grant	Amount (Rs.)	Year	Name of Research Project
01	Department of Science and Technology: Ministry of Science & Technology (Government of India)	Research grant under the scheme Advanced Manufacturing Technologies (AMT)	43,11,785 (Forty-three lakh eleven thousand seven hundred eighty-five rupees)	2024-25	Technology Development for Controlled Fabrication of 2D and 3D Net -shaped microstructures using lifting plate Hele Shaw cell

02	University of Mumbai	University Minor Research, (Reference No. PD/237/601 of 2019)	30,000 (Thirty Thousand)	2018-19	Development of Experimental setup for Study and Analysis of Microfractals under vacuum and higher pressure using Non-Newtonian Fluid.
----	----------------------	---	--------------------------	---------	---

Professional Societies Fellowship / Membership

- Life Member of ISTE, Membership No.:- LM – 58156
- International Association of Engineers (IAENG), Membership No.:- 200278
- Annual Membership of SAEINDIA, Membership No.:- 7160511211

Achievements / Awards / Position

- **ASME IDETC/CIE 2022, USA:** Awarded **Best Paper** and a **\$500 cash prize** for exceptional research contribution.
- **ICAME 2022, SRM Institute of Science and Technology, Chennai:** Recipient of the **Best Paper Award**.

Projects guided in UG/PG level.

PG Level:

Sr. No.	Title of Dissertation / Project	Year	Name of student(s)
1	Analysis of Crash Box for Enhancement of Crash Performance of Vehicle Using Hybrid Approach	2022	Ms. Snehal Wagh
2	Numerical simulation of microfractals formation in lifting plate Hele-Shaw cell	2022	Mr. Suraj Satyawar Raul
3	Performance Evaluation of Quarter Car Model Semi-Active Suspension System with Fuzzy Logic Controller	2017	Mr. Nikhil Deepak Desai
4	Fabrication and Simulation of Conductive Tapered Microcantilever using Lift off Technique	2016	Ms. Neha K. Mishra
5	Development of micro-lens Array using Micro-EDM and micromoulding Process	2016	Mr. Harshvardhan B. Mokashi
6	Stress Analysis of Doors and Windows of Boeing 787 Aircraft subjected to Biaxial loading	2014	Mr. Swapnil J. Soni

Short Term Training Programmes

Organised

- Successfully organised five days of STTP on "Tools and methods of Research and Publication" as coordinator, dated 8th July 2024 to 12th July 2024 at FCRIT, Vashi
- Successfully Organised Three days workshop on "Recent Trend in Mechanical Engineering 2.0" June 2021 as a Convener, dated 20th -22nd Oct 2021.
- Successfully Organised Three days STTP on "Recent Trend in Mechanical Engineering 2021." 28th -30th June 2021 as a Co-ordinator, dated 28th -30th June 2021
- Successfully Organised Two days' workshop on "Hand Gesture Control Devices" on 9th and 10th October 2015

Attended

- Successfully completed one-week FDP on "Semiconductors in Design and Development of Micro-electro Mechanical Systems" organised by AICTE Training And Learning (ATAL) Academy Online FDP, 8th January 2024 to 13th January 2024, at Sardar Patel College of Engineering Mumbai.
- Successfully completed one-week Elementary FDP on "Advanced 3D printing and design" organised AICTE Training And Learning (ATAL) Academy Online FDP, 20th December 2021 to 24th December 2021, at Sardar Patel College of Engineering Mumbai.
- Successfully completed one-week Elementary FDP on "Developing Interpersonal Skills and Effective Communication Intelligence" organised AICTE Training and Learning (ATAL) Academy Online FDP, 6th December 2021 to 10th December 2021, at Sardar Patel College of Engineering Mumbai.
- Successfully completed one-week Elementary FDP on "Drug Engineering" organised AICTE Training and Learning (ATAL) Academy Online FDP, 04th October 2021 to 08th October 2021, at Sardar Patel College of Engineering Mumbai.
- Successfully completed one-week Elementary FDP on "3D Printing and Design" organised AICTE Training and Learning (ATAL) Academy Online FDP, 20th September 2021 to 24th September 2021, at Sardar Patel College of Engineering Mumbai.
- Successfully completed one-week Elementary FDP on "Micro-electromechanical Systems" organised AICTE Training and Learning (ATAL) Academy Online FDP, 23rd November 2020 to 27th November 2020, at Sardar Patel College of Engineering Mumbai.
- Successfully completed two-week STTP on "Outcome based Education conducted by Datta Meghe College of Engineering, Airoli Navi Mumbai" 25-06-2020 to 04-07-2020
- Successfully completed one FDP on "1st International FDP on Research and Development in Material Behaviour, Processing and Characterisation Techniques" organised by Dept. Mechanical Engineering, GLA University, Mathura in association with Indian Institute of Metals (IIM), Mathura Chapter and Panjab University, Chandigarh, 09-06-2020 to 14-06-2020

- Successfully completed one-week STTP "Application of Industrial Engineering in Manufacturing & Infrastructure organised by Department of Mechanical Engineering, Datta Meghe College of Engineering, Airoli Navi Mumbai, In association with Indian Institution of Industrial Engineering (IIIE), 18-05-2020 to 22-05-2020
- Successfully completed one-week training cum workshop organised under TEQIP Phase-II on "Advanced Pressure Vessel Design and Analysis" in collaboration with L&T, by Mechanical Engineering Department of SPCE, Andheri (west) Bhavan's Campus, Mumbai-58, from 26th May to 30th May 2014.
- Successfully completed one day workshop on "Computational Fluid Dynamics using Open FOAM" organised by FOSSEE, at IIT Bombay held on 22nd March 2014.
- Successfully completed two-day workshop organised on "Industrial Fluid Power and its Application" by Sinhgad Institute of Technology Lonavala, from 14/02/2012 to 15/02/2012.
- Successfully completed a two-week ISTE workshop on "Thermodynamics in Mechanical Engineering" conducted by IIT Bombay from 14th to 24th June 2011.
- Successfully completed three days' workshop on "Environmental Studies (EVS)" conducted by Jeevan Vidya Centre, Somaiya Vidyavihar on behalf of the University of Mumbai, 6th -8th August 2009
- Successfully completed two-week STTP on "Trends in Computer Networking" conducted by Datta Meghe College of Engineering, Airoli Navi Mumbai, 13th July to 24th July 2009.
- Successfully completed two-week STTP on "Accreditation and ISO certification of Technical Institution" conducted by Datta Meghe College of Engineering, Airoli Navi Mumbai, 7th July 2008 to 18th July 2008.
- Successfully completed three-week workshop cum training on Engineering Tools and Techniques Course "Imagineering Connect" conducted by Larsen and Toubro Limited, 2nd June to 20th June 2008.

Invited Lectures in FDP/ STTP:

1. Delivered a lecture on "Publication Ethics" on 29 January 2025 at the Department of Computer Engineering, FCRIT, Vashi
2. Delivered a lecture and hands-on Training on "Impact of IOT in Mechanical Engineering" on 15 January 2025 at the Department of Mechanical Engineering, at Datta Meghe College of Engineering, Airoli, Navi Mumbai
3. Delivered a lecture on "Preparation and submission of research proposals" on 28 August 2024 at the Department of Information Technology, at Datta Meghe College of Engineering, Airoli, Navi Mumbai
4. Delivered a lecture on "Mastering the Art of Research Paper Writing: Strategies for Success" on 17 January 2024 at Datta Meghe College of Engineering, Airoli, Navi Mumbai
5. Delivered a lecture on "Novel Technique to Develop Controlled Net Shape Microstructures using Fluid Shaping" as a resource person ATAL FDP on "3D Printing and Advanced Manufacturing" on 8th February 2023 at D.K.T.E. SOCIETY'S TEXTILE & ENGINEERING INSTITUTE, Rajwada Ichalkaranji (Dist.- Kolhapur).

6. Delivered an expert talk on "A Novel Technique of Microfabrication" in online webinar series organised by the Department of Engineering Sciences, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai on 14th Jan 2021.
7. Delivered an expert talk on "Future of Mechanical and Chemical Engineering" organised by the first-year Department, Anuradha Engineering College, Chikhali, Dist. Buldhana on 9th Feb 2021.

International Conference Technical Program Committee Member / Reviewer

Reviewer for International Conference

1. International Conference On "Industry 4.0 - Nascent Technologies and Sustainability for 'Make in India' Initiative" dated 22nd - 23rd December 2022.
2. Sardar Patel International Conference (SPICON 2022) on Industry 4.0 - Nascent Technologies and Sustainability for 'Make in India' Initiative, 22nd -23rd December 2022.

Reviewer for International Journal:

- Springer Journal: International Journal on Interactive Design and Manufacturing (IJIDeM), Publisher:
- An International Journal on Innovative Applied Sciences, Engineering and Biomedical Research
- Taylor & Francis's Journal: Combustion Science and Technology,

Reviewer for:

- Elsevier's Materials Today: Proceedings

Patents

1. A design Patent is registered on "Experimental Setup for Study of Fractal Formation on Curved (Conical, Spherical) Surfaces in Lifting Plate Hele-Shaw Flow." Design Patent Application No. 340352-001, Published in Journal No is 49/2022, dated 09/12/2022
2. A design Patent is registered " Nose cap of the centrifugal pump." To Indian Patent office Design Patent Application No. 378951-001,
3. A process patent on "Machine For the Development of 2-D and 3-D Microfractals Through Lifting Plate Hele-Shaw Cell." Indian patent application number 202321081635 dated 01/12/2023