

## Dr.Prashant W.Deshmukh

### 1. Personal Information

- **Name:** Dr. Prashant W. Deshmukh
- **Position:** Associate Professor, Professor
- **Department:** Production Engineering
- **Contact Information:** [pwdeshmukh@sggs.ac.in](mailto:pwdeshmukh@sggs.ac.in), 9850601921 / 8149893221

### 2. Educational Background

- B.E. First Class Amravati University, Amravati (1998).
- M.E. First Class with Distinction (Thermal Engineering), S.P.P.U., Pune (2007).
- Ph.D.in Mechanical Engineering from Indian Institute of Technology Bombay (IITB), Mumbai-400076 (2016).

### 3. Research Interests

- **Areas of Expertise:** Heat Transfer, Computational Fluid Dynamics, Solar Energy.
- **Ongoing Projects:** Heat transfer enhancement of twisted tube retrofitted with twist tape insert.

### 4. Teaching Experience

- **Courses Taught: Undergraduate level:** Basic Mechanical Engineering, Engineering Drawing, Fluid Mechanics, Heat Transfer, Finite Element Method, Computational Fluid Dynamics, Estimation and Costing, Robotics and Automation, the strength of Materials, Fluid Machinery, System Engineering.
- **Courses Taught: Postgraduate level:** Fluid Dynamics, Mathematical Methods in Engineering, Computational Fluid Dynamics, Advanced Heat Transfer, Advanced Thermodynamics, Optimisation Techniques, Microfluidics
- **Course Development:** Finite Element Method, Computational Fluid Dynamics.

### 5. Publications and Presentations

Google Scholar link - <https://scholar.google.com/citations?user=MixnAOAAAAAJ>

- **Books:** Authored or edited books.
- **Journal Articles:** 20

- **Conference Papers:** 12
- **Editorial Work:** Editor of ICAME-2022: 2nd International Conference & Exposition on Advances in Mechanical Engineering at COEP Technological University, Pune - <https://www.sciencedirect.com/journal/materials-today-proceedings/vol/72/part/P3?page-size=100&page=3>
- Book Chapters: 01
- Editorial Work: Reviewer for 4 SCI-indexed journals.

## 6. Awards and Honors

- **Grants:** A research project “Development of Annular Heat Exchanger based on Field Synergy Principle” under **BCUD project scheme** of Savitribai Phule Pune University (SPPU) during the year 2009-2012.
- **Awards:** Forbes Marshall Runner up the award for UG project “Heat transfer enhancement in an evaporator tube using curved delta wing vortex generators” by Hrishikesh Shirsat, Michael Susngi, Masud Quraishi, Anuradha Bhoi for B.Tech final year students.

## 7. Professional Experience

- **Administrative Role:** Controller of Examinations (COE)

## 8. Supervision and Mentoring

- **Number of PG students guided (completed):**

Sr. No.	Name of Student	Dissertation Title	Year
1	Mr. Akshay Bhalerao	Development of spines for passive cooling of lithium ion battery for electric vehicle applications.	2023
2	Mr. Akshay Kamble	Design and Optimisation of Cold Plate for Prismatic Battery Cell for Electric Vehicle Applications.	2023
3	Ms. Sneha Patil	Enhancement of heat transfer of Nickel Manganese Cobalt (NMC) Lithium-ion battery packs using Herringbone Fins for electric mobility applications.	2023
4	Mr. Rohit Gurav	Thermohydraulic performance enhancement of flow through circular geometries using curved turbulators.	2022
5	Mr. Ashwinikumar	Development of electric vehicle with permanent magnet synchronous motor and its analysis with drive cycles in MATLAB/Simulink.	2022

6	Mr. Prakash Batule	Heat transfer performance improvement using for flow through circular pipes.	2022
7	Mr.Swapnil Kadlag	Model development to establish trade-offs among electric motor characteristics and electromagnetic noise.	2021
8	Mr.Rahul Chaudhar	Local & Average Heat Transfer and Friction Factor Characteristics of a Flow through a Helical Wire Coil for Turbulent Flow Conditions.	2021
9	Mr.Dulesh Pathode	Heat Transfer and Friction Factor Characteristics of Turbulent Flow Through Conical Heat Exchanger.	2021
10	Mr. Manoj Rathod	Experimental investigation of effect of hydrophobic coating on drag forces over a stationery circular cylinder under laminar flow conditions.	2020

### 9. Professional Memberships

- Life membership - International Society for Research and Development (ISRDR)
- SAE India
- Indian Society for Heat and Mass Transfer – ISHMT 1377

### 10. Miscellaneous

- **Languages:** English, Hindi, Marathi.
- **Skills:** Auto CAD, Ansys-Fluent.
- **Personal Interests:**  
 Conducting research,  
 Technical consultancy services,  
 Review of research articles for peers.