

## Faculty Profile

### Mechanical Department



### **Dr. Nitin K. Khedkar**

Professor Mechanical, Dy. Director-Administration,  
Ph.D., M.E., B.E.

Email: [dydirectoradministration@sitpune.edu.in](mailto:dydirectoradministration@sitpune.edu.in)  
[nitin.khedkar@sitpune.edu.in](mailto:nitin.khedkar@sitpune.edu.in)

#### **Research Interests & Expertise:**

##### **Broad areas:**

- Additive Manufacturing
- Manufacturing Automation & Industry 4.0
- Material Science & Metallurgy
- Automotive technology

##### **Specific areas:**

- Metal and Composite 3 D Printing
- Automation solutions for MSEM
- Material Characterization of Metal & Polymer Composites
- Robotics for domestic use

#### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work Experience** : 23 years

**Paper Published** : 40

**Patent Published** : 3

**Consultancy Project** : 5



## **Dr. Anand Kumar Pandey**

Professor, HOD Mechanical  
Ph.D., M.Tech., B.Tech., MBA  
Email: [anand.pandey@sitpune.edu.in](mailto:anand.pandey@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Alternative Fuels for IC Engine and Bio Diesel

#### **Specific areas:**

- Renewable Energy and E Mobility

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 16.6 years (Teaching) & 19.3 Year( Industry)

**Paper Published** : 60

**Patent Published** : 1

**Consultancy Project** : 4

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## **Dr. Chandrakant R. Sonawane**

Professor, Mechanical

Ph.D., M.E., B.E.

Email: [chandrakant.sonawane@sitpune.edu.in](mailto:chandrakant.sonawane@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Mechanical Engineering
- Thermal Engineering
- Computational fluid Dynamics
- AIML Application

#### **Specific areas:**

- Fluid structure interaction
- Moving Boundary problems
- Numerical Heat and Mass Transfer Application
- High Performance computations
- Refrigeration and HAVC Application

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 20 years

**Paper Published** : 52

**Patent Published** : 2

**Consultancy Project** : 2

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## **Dr. Anirban Rabindranath Sur**

Professor, Mechanical

Ph.D., M.E., B.E.

Email: [anirban.sur@sitpune.edu.in](mailto:anirban.sur@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Heat Transfer
- Refrigeration and Air Conditioning
- Renewable Energy

#### **Specific areas:**

- Micro- lattice structure and its application
- Micro cooling and Micro Heat Exchanger Adsorption Refrigeration
- Desiccant Cooling
- Absorption cooling
- Cooling by Solar heat or waste heat, Radiant cooling
- Thermal storage cooling / heating
- Application of Internet on Things(IoT) for mechanical engineering
- Application of CFD analysis

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 18 years

**Paper Published** : 30

**Patent Published** : 2

**Consultancy** : 1

**Project** : 11

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## **Dr. Vijaykumar S. Jatti**

Associate Professor, Mechanical

Ph.D., M. Tech., B.E.

Email: [vijaykumar.jatti@sitpune.edu.in](mailto:vijaykumar.jatti@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Mechanical
- Material Science
- Metallurgy
- Manufacturing
- Industrial Automation
- Optimization

#### **Specific areas:**

- Mechanical Design
- Conventional & Non-Conventional machining process.
- Additive Manufacturing
- Traditional Optimization Techniques
- Robotics
- PLC & Controllers

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 13.2 years

**Paper Published** : 121

**Patent Published** : 10

**Consultancy Project** : 3

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## **Dr. Anindita Roy**

Associate Professor, Mechanical

Ph.D., M. Tech., B. Tech.

Email: [anindita.roy@sitpune.edu.in](mailto:anindita.roy@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Renewable Energy system design and Optimization
- Reliability of Battery storage
- Thermal energy storage

#### **Specific areas:**

- Energy integration of renewable energy system
- Modelling and simulation of energy systems
- Design of wind turbines for low wind speed regime
- Thermal energy storage systems using thermocline
- Fast charging systems for lead Acid battery
- Thermal management of lithium ion battery

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 16 years

**Paper Published** : 23

**Patent Published** : 3

**Consultancy Project** : 2

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## **Dr. Amol Macchindra Dalvi**

Assistant Professor, Mechanical

Ph.D., M.E., B.E.

Email: [amol.dalavi@sitpune.edu.in](mailto:amol.dalavi@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Machine Design
- Advanced optimization Techniques
- Vibration Analysis

#### **Specific areas:**

- Swarm Algorithms
- Electric Vehicle Battery enclosure Design
- Pressure Vessel Design
- Mechanical System Design
- Finite Element Analysis
- Tool Path Optimization

#### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 19 years

**Paper Published** : 16

**Patent Published** : 0

**Consultancy Project** : 0

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## **Prof. Sarfaraj Shaikh**

Assistant Professor, Mechanical

M. Tech., B.E., Diploma

Email: [sarfarajs@sitpune.edu.in](mailto:sarfarajs@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Mechanical Engineering Design
- Automotive Technology
- 3D Printing

#### **Specific areas:**

- Mechanical Design Analysis
- Advancement in Automotive Engineering
- 3 D Printing
- Reverse Engineering
- Rapid Manufacturing

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher](#)

[Vidwan](#)

**Total work experience** : 12 years

**Paper Published** : 9

**Patent Published** : 0

**Consultancy Project** : 0

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## **Dr. Ravi Sekhar**

Assistant Professor, Mechanical  
Ph.D., M. Tech., B. Tech.  
Email: [ravi.sekhar@sitpune.edu.in](mailto:ravi.sekhar@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- System Identification and control of Mechanical system using machine learning

#### **Specific areas:**

- Manufacturing Materials

#### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 14 years

**Paper Published** : 45

**Patent Published** : 0

**Consultancy Project** : 0

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## **Dr. Nitin S. Solke**

Assistant Professor, Mechanical  
Ph.D. M.E., B.E., PGDPM, PGDBM  
Email: [nitin.solke@sitpune.edu.in](mailto:nitin.solke@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Teaching Techniques and Innovation

#### **Specific areas:**

- Learn Manufacturing and Manufacturing Flexibility
- IC Engine
- Thermal Engineering

**Total work experience** : 37 years

**Paper Published** : 14

**Patent Published** : 0

**Consultancy Project** : 0

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## **Prof. Sahid Tamboli**

Assistant Professor, Mechanical  
M. Tech., AMIE-B.E., Diploma  
Email: [sahidt@sitpune.edu.in](mailto:sahidt@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Fracture Mechanics
- Composite Materials
- Computer Aided Engineering

#### **Specific areas:**

- Linear and Non-Linear Static Analysis
- Finite Element Methods
- Composite Manufacturing Techniques

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 18 years

**Paper Published** : 8

**Patent Published** : 0

**Consultancy Project** : 0

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## **Dr. Mandar S. Sapre**

Assistant Professor, Mechanical

Ph.D., M. Tech., B.E.

Email: [mandar.sapre@sitpune.edu.in](mailto:mandar.sapre@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Engineering Mathematics
- Numerical Methods
- Programming

#### **Specific areas:**

- Finite Element Methods
- Optimization Techniques
- Operations Research

### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Research ID](#)

[Vidwan](#)

**Total work experience** : 16 years

**Paper Published** : 16

**Patent Published** : 0

**Consultancy Project** : 3

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## **Prof. Vikas R. Gulia**

Assistant Professor, Mechanical  
M.E., B.E.

Email: [vikas.gulia@sitpune.edu.in](mailto:vikas.gulia@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Heat Transfer
- Heat exchangers,
- Manufacturing
- Optimization

#### **Specific areas:**

- Micro channel Heat exchangers
- Evolutionary algorithm
- Advanced manufacturing Processes

#### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[Researcher ID](#)

[Vidwan](#)

**Total work experience** : 9 years

**Paper Published** : 7

**Patent Published** : 0

**Consultancy Project** : 3

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## **Prof. Shruti Shisher Maheshwari**

Assistant Professor, Mechanical

M. Tech., B. Tech.

Email: [shruti.maheshwari@sitpune.edu.in](mailto:shruti.maheshwari@sitpune.edu.in)

### **Research Interests & Expertise:**

#### **Broad areas:**

- Industrial Engg.
- Operation Research
- Total Quality Management

#### **Specific areas:**

- Supply Chain Management
- Optimization using AI

#### **Research Profiles:**

[Google Scholar](#)

[ORCID](#)

[ResearchID](#)

[VIDWAN](#)

**Total work experience** : 7.4 years

**Paper Published** : 9

**Patent Published** : Nil

**Consultancy Project** : Nil

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