

MS. PRANJALI RAVINANDAN TETE

PROFESSIONAL SUMMARY

A National Doctoral Fellowship (NDF) researcher and a committed academic professional offering five years of experience in academic roles. Dedicated and innovative with a proven history of strong student rapport. The objective is to pursue a highly rewarding career in the area of my specialization whereby I could offer my full potential to the organization and contribute meaningfully to long-term growth. I am looking for more exciting interdisciplinary projects in the electric vehicle battery thermal management system domain to work with.



Nagpur, Maharashtra, India

pranjalitete@gmail.com

+91 8237462436
+91 8329282014

Google Scholar:

<https://scholar.google.com/citations?user=RtVGXCkAAAAJ&hl=en>

Web of Science ResearcherID:
ABE-2735-2021

ORCID ID: 0000-0002-1992-9712

SCOPUS Author ID: 57208734802

AREA OF SPECIALIZATION

- Mechanical Engineering
- Thermal Engineering
- Electric Vehicle's Battery Thermal Management Systems

RESEARCH INTEREST

- Battery Thermal Management Systems of Electric Vehicles
- Computational Fluid Dynamics (CFD)

EDUCATION

Shri. Ramdeobaba College of Engineering & Management, Nagpur.
February 2020- present (Pursuing)

Ph.D. Full Time (AICTE National Doctoral Fellowship Scheme)

Thesis Title: Experimental Investigation and Mathematical Modeling on Advancement of Battery Thermal Management System

Supervisor: Dr. Mahendra M. Gupta (RCOEM, Nagpur)

Description: Working on the design and development of a modular battery pack with enhanced cooling for the electric vehicle's battery thermal management system.

Type of study: Experimental and Numerical (CFD Analysis)

Shri. Ramdeobaba College of Engineering & Management, Nagpur.
2014-2016

M. Tech (Heat Power Engineering) CGPA 8.9

St. Vincent Pallotti College of Engineering & Technology, Nagpur.
2010-2014

B.E. (Mechanical Engineering) Aggregate 74.13%

Shri. Shivaji Science College, Congress Nagar, Nagpur.
HSC 81.33%

Saraswati Vidya Mandir, Nagpur.
SSC 89.69%

WORK EXPERIENCE

Priyadarshini Bhagwati College of Engineering, Nagpur
Assistant Professor
June 2018- August 2019

K. D. K. College of Engineering, Nagpur
Assistant Professor
August 2016- March 2018

Courses Taught: Engineering Thermodynamics, Fluid Mechanics, Engineering Graphics & Design, Workshop technologies, Engineering Metallurgy, Operations Research, Computer-Aided Design

PUBLICATIONS

SCI Publications

1. Pranjali R. Tete, Mahendra M. Gupta, Sandeep S. Joshi, "Developments in battery thermal management systems for electric vehicles: A technical review," Journal of Energy Storage, Volume 35, 2021, 102255, ISSN 2352-152X, <https://doi.org/10.1016/j.est.2021.102255>.
2. Pranjali R. Tete, Mahendra M. Gupta, Sandeep S. Joshi, Numerical investigation on thermal characteristics of a liquid-

SKILLS

- Software tools: ANSYS Fluent, Spaceclaim, Mini Tab
- Computer Skills- MS Office, C language, HTML, CSS
- Good communication skill
- Planning and analytical skills
- Building relationships
- Data collection and analysis
- Student research guidance
- Thesis advisement

PUBLICATIONS

- SCI- 02
- SCOPUS- 01
- Book Chapter- 01
- Others- 05
- International Conferences- 02

PROJECT DETAILS:

M. Tech Project:

Performance Analysis of Crystalline Silicon Solar Cell Using Down-converting Phosphors Synthesized by Solid-State Reaction Method.

Supervisor: Dr. Sandeep S. Joshi (RCOEM, Nagpur)

B.E. Project: Linear static analysis of motorcycle alloy wheel

Supervisor: Prof. P. M. Deshpande

ACHIEVEMENTS

- Won **Platinum Award in Young Researcher Category** from Confederation of Indian Industry (CII), Gurugram, Haryana, India.
- Won the **AWSAR- Best Popular Story Award** constituted by the **Department of Science & Technology, GoI.**

cooled lithium-ion battery pack with cylindrical cell casings and a square duct, Journal of Energy Storage, Volume 48, 2022, 104041, ISSN 2352-152X, <https://doi.org/10.1016/j.est.2022.104041>.

SCOPUS Publication

1. Shubhangi P. Gurway and Pranjali R. Tete, "Future of nanotechnology: An overview", AIP Conference Proceedings 2104, 030041 (2019) <https://doi.org/10.1063/1.5100468>

Book Chapter

1. Tete, P., Kedar, P., Gupta, M., Joshi, S. (2022). Numerical Simulation of a Finned-Surface Prismatic Lithium-Ion Battery Thermal Management System. In: Kolhe, M.L., Jaju, S.B., Diagavane, P.M. (eds) Smart Technologies for Energy, Environment and Sustainable Development, Vol 1. Springer Proceedings in Energy. Springer, Singapore. https://doi.org/10.1007/978-981-16-6875-3_64

Other Publications

1. A.B. Lanjewar, N. S. Wakchaure, P. R. Tete, and S. S. Joshi, "Determination of optimum tilt angle of solar collectors for solar cities in Maharashtra, India", Tech-Chronicle Tech-Ed, ISSN: 2454-1958, 2016, pp. 94-97.
2. P. R. Tete, C. S. Jiotode, "Multilevel Car Parking System using Geneva Mechanism", International Journal for Research in Applied Science & Engineering Technology(IJRASET), ISSN: 2321-9653, Volume 6, Issue III, March 2018.
3. Pranjali R. Tete, "Principles and Applications of Operations Research Techniques", Research and Development in Machine Design, Volume 2 Issue 1, HBRP Publication Page 5-9 2019.
4. Pranjali R. Tete, Shubhangi P. Gurway, "Applications of Finite Element Method in Biomedical Engineering: A Review", Recent Trends in Production Engineering, Volume 2 Issue 1, HBRP Publication Page 18-22 2019.
5. S V Borkar, P. R. Tete, S. V. Kale, S. V. Ghugal, "Camless Engine: An Approach", Research and Development in Machine Design, Volume 2 Issue 1, HBRP Publication Page 10-17 2019.

International Conferences

1. Puneet Kedar, Pranjali Tete, Mahendra Gupta, Sandeep Joshi 'Numerical Analysis of Battery Thermal Management System using Natural Convection and Different Phase Change Materials', International Conference on Advances in Sustainable Research for Energy and Environmental Management (ASREEM-2021), August 06- 08th, 2021 at SVNIT Surat.
2. Rahul Waghmare, R. Jilte, Sandeep Joshi, Pranjali Tete, 'Review on Agrophotovoltaic systems with a premise on thermal management of photovoltaic modules therein', International Conference on Advances in Sustainable Research for Energy and Environmental Management (ASREEM-2021), August 06- 08th, 2021 at SVNIT Surat.

- Participated as a finalist in the Grand Finale of the prestigious competition **KPIT Sparkle 2022** in the Top 24 teams all over India.
- Secured 1st position in B.E. 8th semester
- Campus placement at Tech Mahindra, Pune in 2014
- GATE 2014 Qualified

PERSONAL DETAILS:

- Date of Birth: 6 April 1993
- Gender: Female
- Languages known: English, Marathi, Hindi
- Nationality: Indian

Patents

- **Title of Invention:** A System For Cooling of Battery Cells
Application No. : 202121028817
Status: Filed with Indian Patent Office on 26/06/2021, Published in Indian Patent Journal on 03/09/2021

Poster Presentation

- Poster Presentation at National workshop on ‘Solar Energy Utilization for Sustainable Development’ at CSIR-NEERI, Nagpur (November 2015).

Contribution as Reviewer

- Scientia Iranica, Sharif University of Technology, Tehran, I.R. Iran (SCI Indexed)