

STAFF PROFILE



Dr. Jitendra Dhondiram Patil

Associate Professor

Mechanical Engineering

jdpatil@aitpune.edu.in

Date of Joining
07/07/1997

Nature of Appointment
Regular

Educational Details

Qualification	Degree	University	Grade	Year
PG	ME	Shivaji University	68	1993
Graduation	BE	Shivaji University	72	1991
Doctoral	PhD	Shivaji University Kolhapur		2018

Areas of Interest

Heat transfer Enhancement in natural convection, Please find below project areas, Heat transfer Enhancement in natural convection, Heat transfer Enhancement in force convection, Oscillating flow heat exchangers, Mini channel heat exchangers, Micro channel heat exchangers, Enhancement of heat transfer using oscillating flow heat exchangers in mini and micro channels, Solar thermal systems, Solar photovoltaic systems, Wind mills, Mechatronics systems, Fluid power systems, Turbo machines

Experience Details

Total : 24.50 years	Teaching : 24.50 years	Research : 0.00 years	Industry : 0.00 years
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Type	Duration/ Period	Designation/ Organisation Name	Brief Job Profile
Educational	3.50 Years Oct 93 to April 97	Lecturer AISSMS College of Engineering Pune	Lecturer in Mechanical Engineering
Educational	5.50 Years May 97 to Dec 2002 April 97	Lecturer Army Institute of Technology Pune	Lecturer in Mechanical Engineering
Educational	2.50 Years Jan 2003 to June 2005 April 97	Sr Lecturer Army Institute of Technology Pune	Sr Lecturer in Mechanical Engineering
Educational	3.00 Years July 2005 to June 2008	Assistant Professor Army Institute of Technology Pune	Assistant Professor As per 5th Pay Scale
Educational	10.00 Years July 2008 to till date	Assistant Professor Army Institute of Technology Pune	Assistant Professor As per 6th Pay Scale with 8000 AGP

Journal Publications

- Jitendra D Patil, (2017). [Experimental study of heat transfer characteristics in oscillating fluid flow in tube](https://doi.org/10.1080/08916152.2016.1258018). *Experimental heat transfer*. 30(4), 328-340. ISBN/ ISSN No : 0891-6152 (Print), 1521-0480(online). URL : <http://dx.doi.org/10.1080/08916152.2016.1258018>.
- Jitendra D Patil, (2017). [Experimental investigation of heat transfer enhancement factors in the oscillating flow heat exchanger using Kurzweg's and Nishio's correlations](https://doi.org/10.1016/j.expthermflusci.2016.12.014). *Experimental Thermal and Fluid Science*. 86(0), 37-46. ISBN/ ISSN No : 0894-1777. URL : <https://doi.org/10.1016/j.expthermflusci.2016.12.014>.
- J D Patil, (2013). Finite Volume Analysis of Convective Heat Transfer Augmentation from Horizontal Rectangular fin by elliptical Perforation. *International Journal of Global Technology Initiatives*. 2(1), E40-

Conference Publications

1. Dr JD Patil, SM Gaikwad, (2019). Experimental study of oscillation flow in ectangular minichannel array. *25th National amd 3rd International ISHMT-ASTFE Heat and Mass Transfer Conference* -(-), -. ISBN/ ISSN No : -.
2. J D Patil, (2019). Experimental Study of Oscillation Controlled Heat Transport Tube: An Application of Shuttle Heat Transfer. *27th National Symposium on Cryogenics and Superconductivity*. -(-), -. ISBN/ ISSN No : -.
3. SM Gaikwad, Dr JD Patil, (2019). Experimental and numerical study of enhanced microchanne. *25th National amd 3rd International ISHMT-ASTFE Heat and Mass Transfer Conference*. -(-), -. ISBN/ ISSN No : -.
4. J D Patil, (2017). Investigation of Heat Transfer and Fluid Flow Characteristics in Ashoka Microchannel Heat Sink. *24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference* -(-), -. ISBN/ ISSN No : -.
5. J D Patil, (2017). Experimental and numerical study of heat transfer in rectangular microchannel under simultaneously developing flow condition. *24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference*. -(-), -. ISBN/ ISSN No : -.
6. J D Patil, (2017). Minichannels an effective tool to extend flux removal without increasing pressure drop penalty. *24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference* -(-), -. ISBN/ ISSN No : -.
7. J D Patil, (2016). Experimental study of heat transfer in oscillating flow: An application of shuttle heat transfer. *Nation Conference on Advances in Refrigeration and Cryogenics*. -(-), -. ISBN/ ISSN No : -.
8. J D Patil, (2016). Analysis of Cyclic flow heat exchanger used in PTC. *Nation Conference on Advances in Refrigeration and Cryogenics*. -(-), -. ISBN/ ISSN No : -.
9. J D Patil, (2015). CFD Simulation of Natural pattern leaf shape Microchannel. *International Conference on Global Technology Initiatives*. 4(-), page D21 - 267. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
10. J D Patil, (2015). Experimental study of heat transfer characteristics in oscillating fluid flow heat exchanger. *23th National and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference*, -(-), -. ISBN/ ISSN No : -.
11. J D Patil, (2015). [Numerical Analysis and Parametric Study of Micro-channel Heat Exchanger for Single Phase Water Cooling](#). *4th International conference on Recent trends in engineering and technology*. Nil (Nil), 187-194. ISBN/ ISSN No : (13):978-93-392-2288-8/(10):93-392-2288-1.
12. J D Patil, (2014). Numerical analysis and parametric study of microchannel heat exchanger for direct liquid cooling of microprocessor chip. *Recent Trends in Engineering and Technology*. Nil(Nil), 378-384. ISBN/ ISSN No : 978-93-5107-222-5.
13. J D Patil, (2014). Heat Transfer Analysis of Microchannel. *3rd International Conference on Recent Trendes in Engineering and Technology* -(-), 240-245. ISBN/ ISSN No : ISBN 978-93-5107-222-5.
14. J D Patil, (2013). Natural heat Convection through Dimple plates. *International Conference on Global Technology Initiatives*. 2(-), E69 – E71. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
15. J D Patil, (2013). Numerical Analysis for a Traction Control and Differential Lock Model for Tata Nano. *International Conference on Global Technology Initiatives*. 2(-), B81 - B87. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
16. J D Patil, (2013). CFD Simulation on Fluid flow in Micro channel Heat Exchanger. *International Conference on Global Technology Initiatives*. 2(-), E23 – E30. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
17. J D Patil, (2013). Enhancement of rate of heat transfer from the surface using delta wings vortex generator. *International Conference on Global Technology Initiatives*. 2(-), E11 - E17. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
18. J D Patil, (2013). Computational investigation of convective heat transfer over a dimpled surface. *International Conference on Global Technology Initiatives*. 2(-), E31 – E39. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
19. j, (2013). Finite Volume Analysis Of Convective Heat Transfer Augmentation From Horizontal Rectangular Fin by Elliptical Perforations. *International Conference on Global Technology Initiatives*. 2(-), E40 – E44. ISBN/ ISSN No : ISBN 978-93-5067-450-5..
20. J D Patil, (2013). Experimental Investigation of Heat Transfer on Dimple and Flat Plate. *International Conference on Global Technology Initiatives*. 2(-), E60 – E63. ISBN/ ISSN No : ISBN 978-93-5067-450-5.
21. J D Patil, (2013). Experimental study of heat transfer characteristics in oscillating fluid flow in tube . *22th National and 11th International ISHMT-ASME Heat and Mass Transfer Conference* -(-), -. ISBN/ ISSN No : -.
22. J D Patil, (2012). Feasibility of hydraulic hybrid. *International Conference on recent technology* . -(-), -. ISBN/ ISSN No : -.
23. J D Patil, (2012). AVIATION: ALTERNATE FUEL. *2nd International Conference on Engineering, Technology and Management* -(-), -. ISBN/ ISSN No : -.

24. J D Patil, (2012). CFD Simulation on Heat Transfer Characteristics of Laminar Air Flow Over Flat and Dimple Plates (single, in-line and staggered configurations). *2nd International Conference on Engineering, Technology and Management* -(-), -. ISBN/ ISSN No : -.
25. J D Patil, (2012). CFD Simulation on Heat Transfer Characteristics of Laminar Air Flow Over Flat and Dimple Plates (In-line and staggered configurations). *International Conference on Emerging Trends in Engineering*. -(-), -. ISBN/ ISSN No : -.
26. J D Patil, (1993). Three dimensional analysis of horizontal rectangular fin array under natural convection. *Eight ISME conference*. -(-), -. ISBN/ ISSN No : -.

Books

1. J D Patil, (2017). *Turbo Machines*. Nirali Prakashan . ISBN/ ISSN No : 978-93-5164-358-6.
2. J D Patil, (2015). *Fluid and Turbo Machinery*. Nirali Prakashan. ISBN/ ISSN No : 978-93-5164-473-6.

Research Grants

Title Of Project	Funding Agency	Duration		Sanctioned Amount	Role of Investigator
Experimental study of heat transfer and fluid flow analysis of oscillating flow in mini channel	BCUD SPPU Pune	01/07/2013	31/05/2015	240000.00	Principal Investigator

Consultancy

Title Of Project	Funding Agency	Duration	Sanctioned Amount	Investigator Role
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Professional Memberships

Society	Membership No	Duration	
Indian Society for Heat and Mass Transfer	734	01/01/2013	31/05/2030
The Indian Society for Technical Education	22565	01/01/1998	31/05/2030

Achievements/ Contribution

Year	Details
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No of PhD Students Guided : 0 **No of PG Students Guided** : 0
No of PhD Awarded Students : 0