

ARMY INSTITUTE OF TECHNOLOGY
DIGHI HILLS, PUNE - 15
STAFF PROFILE



| Name of Teaching Staff | | Jitendra D Patil | | |
|--------------------------------------|------------------------------------|--|---------------------------------------|---|
| Designation | | Assistant Professor | | |
| Department | | Mechanical | | |
| Date of Joining the Institution | | 02/05/1997 | | |
| Qualifications with Class/ Grade | | UG – BE Auto Distinction | PG – ME Mech (Heat Power) First Class | PhD- 31 st May 2018 |
| Total Experience in Years | | Teaching-24 | Industry -Nil | Research –Nil |
| Sr. No. | Name of the Organization | Designation | Duration | Subjects |
| 1 | AISSMS College of Engineering Pune | Lecturer in Mechanical Engineering | Oct 1993 to April 1997 | Heat Transfer, Basic Mechanical Engg, Applied Thermo-I,II,III |
| 2 | Army Institute of Technology Pune | Lecturer in Mechanical Engineering | May 1997 to Dec 2002 | Basic Mechanical IC Engines Automobile Engg. Non-conventional Energy Sources |
| 3 | Army Institute of Technology Pune | Sr Lecturer in Mechanical Engineering | Jan 2003 to June 2005 | Fluid Machinery, Industrial Fluid Power, Alternative Energy Sources |
| 4 | Army Institute of Technology Pune | Assistant Professor As per 5 th Pay Scale | July 2005 to June 2008 | Turbo Machinery Industrial Fluid Power |
| 5 | Army Institute of Technology Pune | Assistant Professor As per 6 th Pay Scale with 8000 AGP | July 2008 to till date | Turbo Machines, Hydraulics and Pneumatics, Mechatronics, Solar and Wind Energy |
| Paper Published in Journals | | National – Nil | | International - 02 |
| National | | Nil | | |
| International Journal (SCI) | | <p>1) Patil J.D. and Gawali B.S., 2017, “Experimental investigation of heat transfer enhancement factors in the oscillating flow heat exchanger using Kurzweg's and Nishio's correlations”, Experimental Thermal and Fluid Science, 83, pp. 37-46, (Elsevier, ISSN: 0894-1777, Impact Factor: 2.128).</p> <p>2) Patil J.D. and Gawali B.S., 2017, “Experimental study of heat transfer characteristics in oscillating fluid flow in tube”, Experimental Heat Transfer 30 (4) , pp. 328-340 (Taylor and Francis, Print ISSN: 0891-6152, Online ISSN: 1521-0480 Impact Factor: 1.22)</p> | | |
| Paper Published in Conference | | National - 03 | | International - 19 |

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|---------------|---|
| National | <ol style="list-style-type: none"> 1. J.D. Patil, Gaikwad S.M., B.S. Gawali ,”Experimental study of heat transfer in oscillating flow: An application of shuttle heat transfer”, Souvenir & abstracts Nation Conference on Advances in Refrigeration and Cryogenics, June10-12, 2016 MGMCET, Kamothe, Mumbai. 2. Gaikwad S.M., J. D. Patil, B.S.Gawali ,”Analysis of Cyclic flow heat exchanger used in PTC ”,Souvenir & abstracts Nation Conference on Advances in Refrigeration and Cryogenics, June 10-12, 2016 MGMCET, Kamothe, Mumbai. 3. Dr N K Sane, Miss A N Tikekar, J D Patil, “Three dimensional analysis of horizontal rectangular fin array under natural convection” Eight ISME conference, 5 and 6th March 1993, organized by IIT Delhi. |
| International | <ol style="list-style-type: none"> 1. Patil J.D. and Gawali B.S., “Experimental and numerical study of heat transfer in rectangular microchannel under simultaneously developing flow condition”, Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), December 27-30, 2017, , BITS Pilani, Hyderabad, India. 2. Patil J.D. and Gawali B.S., “Minichannels an effective tool to extend flux removal without increasing pressure drop penalty”, Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), December 27-30, 2017, , BITS Pilani, Hyderabad, India 3. Gaikwad S. M., J. D. Patil, B. S. Gawali , ” 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 (IHMTTC-2017), December 27-30, 2017, BITS Pilani, Hyderabad, India. 4. Patil J.D. and Gawali B.S., “Experimental study of heat transfer characteristics in oscillating fluid flow heat exchanger”, Proceedings of the 23th National and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, December 17-20, 2015, Thiruvananthapuram, India. 5. Patil J. D. and Gawali B S, “Experimental study of heat transfer characteristics in oscillating fluid flow in tube ”, Proceedings of the 22th National and 11th International ISHMT-ASME Heat and Mass Transfer Conference, December 28-31, 2013, IIT Kharagpur, India. 6. Patil J.D. and Gawali, B.S., “Numerical analysis and parametric study of microchannel heat exchanger for direct liquid cooling of microprocessor chip”, 4th International conference on Recent trends in engineering and technology SNJBs KBJ college of engineering Chandwad, Nashik 2014, ISBN:978-93-5107-222-5 Published by Elsevier. 7. Gaikwad, A. A. Ramgude, J.D.Patil, Dr. Sankpal “CFD Simulation of Natural pattern leaf shape Microchannel, |

”International Conference on Global Technology Initiatives , volume 4,28-29 March 2015,page D21 - 267. ISBN 978-93-5067-450-5.

8. Gaikwad S.M., **Jitendra Patil** ,Kishor Kumar Nimbhore, Rahul Ranjan, Anil Kumar, Pawan Sharma, “Heat Transfer Analysis of Microchannel”, Proceeding of 3rd International Conference on Recent Trendes in Engineering and Technology,march-28-30 2014,organized by Late Sau. K.Jain COE Chandwad, Nashik, page 240-245.ISBN 978-93-5107-222-5.
9. S. M. Gaikwad, Lavpreet Sharma, **J. D. Patil**, “Enhancement of rate of heat transfer from the surface using delta wings vortex generator,” International Conference on Global Technology Initiatives , volume 2,march 2013,page E11 - E17. ISBN 978-93-5067-450-5.
10. Gaikwad S.M,Pandey Shekhar, Radhesh Krishnana, **J. D. Patil**, Pritee Purohit, “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, Sep 2012.
11. Gaikwad S. M, J. D. Patil, Pritee Purohit, “AVIATION : ALTERNATE FUEL” , 2nd International Conference on Engineering, Technology and Management, Sep 2012.
12. Gaikwad S.M, Pandey Shekhar, Radhesh Krishnana, **J.D.patil**, Pritee Purohit, “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, NMAM Institute of Technology, May 2012, Nitte, India.
13. R. B. Gurav, S. M. Gaikwad, **J. D. Patil**, A. A. Ramgude, Preeti Purohit, “CFD Simulation on Fluid flow in Micro channel Heat Exchanger,” International Conference on Global Technology Initiatives , volume 2,march 2013, page E23 – E30. ISBN 978-93-5067-450-5.
14. I. H. Patel, S. M. Gaikwad, **J. D. Patil**, A. A. Ramgude, R. B. Gurav, “Computational investigation of convective heat transfer over a dimpled surface, ”International Conference on Global Technology Initiatives , volume 2,march 2013,page E31 – E39. ISBN 978-93-5067-450-5.
15. R. B. Gurav, S. M. Gaikwad, **J. D. Patil**, A. A. Ramgude, “Finite Volume Analysis Of Convective Heat Transfer Augmentation From Horizontal Rectangular Fin by Elliptical Perforations, ”International Conference on Global Technology Initiatives , volume 2,march 2013, page E40 – E44. ISBN 978-93-5067-450-5.
16. Shekhar Pandey, S. M. Gaikwad, **J. D. Patil**, A. A. Ramgude, Pritee Purohit, R. B. Gurav, “Experimental Investigation of Heat

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| | | <p>Transfer on Dimple and Flat Plate, "International Conference on Global Technology Initiatives , volume 2,march 2013, page E60 – E63. ISBN 978-93-5067-450-5.</p> <p>17. Rahul Ranjan, S. M. Gaikwad, J. D. Patil, R. B. Gurav, A.A. Ramgude, Pritee Purohit, I. H. Patel, "Natural heat Convection through Dimple plates, "International Conference on Global Technology Initiatives , volume 2,march 2013, page E69 – E71. ISBN 978-93-5067-450-5.</p> <p>18. Patil Jitendra D, S. M. Gaikwad, A. K. Shukul, S. K. Hansra, "Numerical Analysis for a Traction Control and Differential Lock Model for Tata Nano", International Conference on Global Technology Initiatives , volume 1,march 2012, page B81 - B87. ISBN 978-93-5067-450-5</p> <p>19. J D Patil, S. A. K. Shukul, S. K. Hansra, "Feasibility of hydraulic hybrid", International Conference on recent technology , Organized by Institute of Knowledge College of Engineering, Shikrapur, Pune, India.</p> | | |
| PhD Guide Give field & University | | Nil | | University - Nil |
| PhDs/Projects Guided/Evaluated | | Nil | | |
| Books Published/ IPRs/Patents | | 03 | | |
| Books | | 03 | | |
| Sr. No. | Books, chapters in books | ISBN/ISSN number (if any) | Title of Book | Date of Publication |
| 1 | Two Chapters | Nirali Prakashan | Fluid Machinery | June 2006 |
| 2 | Two Chapters | 978-93-5164-473-6 | Fluid and Turbo Machinery | March 2015 |
| 3 | Two Chapters | 978-93-5164-358-6 | Turbo Machines | June 2017 |
| IPRs | | Nil | | |
| Patents | | Nil | | |
| Professional Memberships | | Life Member of ISTE (LM 22565) Life Member of ISHMT | | |
| Consultancy Activities | | Nil | | |
| Research Grant Received | | 01 | | |
| Sr. No | Name of project | C/P | Amount | Duration |
| 1 | Experimental study of heat transfer and fluid flow analysis of oscillating flow in mini channel | Projects BCUD SPPU Pune | 2,40,000/- | 2 Years (2013-15) |
| Grants Fetched | | "Experimental study of heat transfer and fluid flow analysis of oscillating flow in mini channel", BCUD Pune Rs 2,40,000/- | | |
| Courses Conducted/ Talk as Resource Person | | 03 | | |
| | | 1. Conducted two day course on "Non-conventional energy sources" at Regional training center Dapodi for a batch of | | |

| | | 40 engineers from water resources and PWD. 2. Conducted two day course on “Solar energy” at Regional training center Dapodi for a batch of 40 engineers from water resources and PWD. 3. Delivered talk as a resource person in two day workshop on “Recent Trends in Heat Exchangers” organized by Department of mechanical engineering, Walchand College of Engineering Sangli, on 24 th October 2016 | | |
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| Training Courses and Conference/Seminar/ Workshop Attended | | 30 | | |
| Sr. No. | Name of the Topic | Date | Organized by | Level |
| 1. | Attended 24 th National and 2 nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017) | 27 th to 30 th Dec 2017 | BITS Pilani, Hyderabad, India. | International |
| 2. | One week FDP on CFD for beginners | 6 th to 10 th June 2016 | COEP, Pune. | National |
| 3. | 23 th National and 1 st International ISHMT-ASTFE Heat and Mass Transfer Conference | 17 th to 20 th , Dec 2015, | Liquid propulsion system, ISRO, Thiruvananthapuram, India | International |
| 4. | 22 nd National and 11 th International ISHMT-ASME Heat and Mass Transfer Conference 2013 | 28 th to 31 st Dec 2013 | IIT Kharagpur, India. | International |
| 5. | 3 rd International Conference on Recent Trends in Engineering and Technology (ICRTET 2014) | 28 th to 30 th March 2014 | SNJBs KBJ college of engineering Chandwad, Nashik 2014. | International |
| 6. | Innovation-2015, Regional Research Conference | 1 st July 2015 | Jointly by Wadia College of Engg Pune and BCUD Pune University | National |
| 7. | Innovation-2014, Regional Research Conference | 2 nd May 2014 | Jointly by Amrutvahini College of Engg Sangamner and BCUD Pune University | |
| 8. | Participated 8th National level workshop on recent trends in Heat Exchanger | 01 st to 03 rd Feb 2013 | Jointly by Walchand College Sangli, AIT Pune, MIT Pune and VIIT Pune | National |
| 9. | Participated in one day Workshop on “Syllabus finalization of Fluid engineering subject under board of studies | 12 th Feb 2013 | Jointly by College of Engineering Manjari (BK) Pune and University of Pune | National |

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| | Mechanical Engineering, Pune University” | | | |
| 10. | Member of Local organizing Committee of 7th National level workshop on recent trends in Heat Exchanger | 27 th to 29 th Jan 2012 | Jointly by Walchand College Sangli and VIIT Pune | National |
| 11. | Participated in Two-week ISTE Workshop on “Computational Fluid Dynamics” | 12 th to 22 nd June 2012. | Indian Institute of Technology Bombay. | National |
| 12. | Attended Two Day workshop on “Computational Fluid Dynamics and its applications” | 08 th and 09 th July 2011 | G H Rasoni College of Engineering and Management, Wagholi Pune | National |
| 13. | Attended Two day workshop on “Recent trends in heat exchangers” | 29 th & 30 th Jan 2010 | Walchand College of Engineering, Sangli | |
| 14. | Attended one week short term training program on “Advances in refrigeration and cryogenics air separation” | 17 th to 22 nd Dec 2008 | Govt. COE Pune | National |
| 15. | Attended two day workshop on “Recent trends in heat exchangers” | 28 th & 29 th Jan 2008 | Walchand College of Engineering, Sangli | National |
| 16. | Attended one day workshop on “Mechatronics Practicals of Pune University” | 24 th Aug 2007 | PCCOE Pune | National |
| 17. | Detailing & Implementation of Syllabus for subject Theory of Machine & Mechanism -I | 7 th Feb 2009 | AIT Pune | University |
| 18. | Detailing & Implementation of Syllabus for subject Machine Design | 16 th Nov 2009 | AIT Pune | University |
| 19. | Attended industrial training on Industrial Hydraulics” | 17 th to 21 st May 2004 | Bosch Rexroth (India) Ltd Ahmedabad | National |
| 20. | Attended national conference on “Energy conservation and management , NCECM- | 11 th to 13 th June 2001 | Rajarambapu Institute of Technology, Rajaramnagar, Islampur, Sangli. | National |

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| | 2001” | | | |
| 21. | Attended one day seminar on “Solar concentrators” | 6 th Feb 2004 | Ministry of non-conventional energy sources govt of India and organized by Pune Vidyarti Griha’s COET Pune | National |
| 22. | Attended one day workshop on “Revision of third year mechanical engineering syllabus” | 28 th Feb 2005 | Pune Vidyarti Griha’s COET Pune | National |
| 23. | Attended one day workshop on “Implementation of syllabus of Industrial fluid power subject ” | 17 th Sept 2000 | DY Patil College of engineering Pune and Pune University | National |
| 24. | Attended one day workshop on “Revised syllabus of thermal engineering at SE, TE and BE mechanical engineering ” | 10 th Jan 2004 | Amrutvahini College of engineering Sangamner and Pune University | National |
| 25. | Attended one day workshop on “Solar energy engineering ” | 13 th March 2001 | Govt College of engineering Pune | National |
| 26. | Attended one day seminar on “Bio-Energy conversion ” | 24 th March 2006 | MAE Alandi | National |
| 27. | Attended one day seminar on “Modern trends in heat exchangers ” | 31 st March 2006 | Walchand College of Engineering, Sangli | National |
| 28. | Attended one day workshop on “Introduction to mechatronics ” | 2 nd Sept 2006 | College of Engineering Nashik | National |
| 29. | Attended short term QIP course on “Alternative fuels and low combustion engines” | 24 th to 29 th May 1999 | IIT Delhi | National |
| 30. | Attended national symposium on “Future trends in refrigeration technology ” | 24 th to 25 th Jan 1998 | Walchand College of Engineering, Sangli | National |

- Link for Google Scholar account:

<https://scholar.google.co.in/citations?user=6IwTiWkAAAAJ&hl=en>