

ARMY INSTITUTE OF TECHNOLOGY
DIGHI HILLS, PUNE - 15

STAFF PROFILE



Name of Teaching Staff	Gaikwad Sanjay Mahadev		
Designation	Assistant Professor		
Department	Mechanical		
Date of Joining the Institution	22/08/2008		
Qualifications with Class/ Grade	UG – BE Mech Distinction	PG – ME Mech First Class	PhD- Pursuing
Total Experience in Years	Teaching-12	Industry - 01	Research -02

Sr. No.	Name of the Organization	Designation	Duration	Subjects
1	AIT Pune CCO/Approval(Comp)/129	Assistant Professor	21 July 2008 to till date	Heat Transfer, Automobile Engineering
2	PES Modern COE Pune CCO/1277	Lecturer	9 Jan 2008 to 15 July 2008	Automobile Engineering
3	WCE Sangli	Lecturer	16 Jan2007- 7 Jan 2008	Heat Transfer,
4	WCE Sangli	Lecturer	17 July to 30 Nov 2006	Cryogenics
5	Raj Auto Aurangabad	W/S Supervisor	July 2003 to August 2004	-----

Paper Published	National – 00	International -15
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Paper Published in Conference	National - 02	International -28
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National	<ol style="list-style-type: none"> Gaikwad S.M., J.D.Patil,Gawali B.S.Gawali ,“Analysis of Cyclic flow heat exchanger used in PTC”,Souvenir & abstracts Nation Conference on Advances in Refrigeration and Cryogenics,June10-12,2016 MGM CET, Kamothe, Mumbai. J.D.Patil,Gawali, Gaikwad S.M., B.S.Gawali ,“Experimental study of heat transfer in oscillating flow: An application of
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	<p>shuttle heat transfer",Souvenir & abstracts Nation Conference on Advances in Refrigeration and Cryogenics,June10-12,2016 MGMCET, Kamothe, Mumbai.</p>
<p>International</p>	<ol style="list-style-type: none"> 1. Gaikwad S.M., Dr MK Nalawade," Investigation of Heat Transfer and Fluid Flow Characteristics in Straight and Zigzag Microchannels With Water as Working Medium ", 24th National and 2nd International ISHMT-ASTFE, Heat and Mass Transfer Conference (IHMTTC-2017),December 27-30, 2017, BITS Pilani, Hyderabad, India. 2. Gaikwad S.M., J.D.Patil,Gawali 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. 3. Gaikwad, A. A. Ramgude, J.D.Patil,Dr.Sankpal "CFD Simulation of Natural pattern leaf shape Microchannel,"International Conference on Global Technology Initiatives , volume 4,28-29March 2015,page D21 - 267. ISBN 978-93-5067-450-5. 4. Gaikwad S.M., R.B.Gurav,Kishor Kumar Nimbhore, Rahul Ranjan, Rahul Tiwari, "Experimental Investigation of Deltawing Voetex Generator on Flat Plate", 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 236-239.ISBN 978-93-5107-222-5. 5. 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-28-30 201 4,organized by Late Sau. K.Jain COE Chandwad, Nashik, page 240-245.ISBN 978-93-5107-222-5. 6. 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. 7. 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.

8. Gaikwad S.M, J.D.patil, Pritee Purohit, "**AVIATION : ALTERNATE FUEL**" , 2nd International Conference on Engineering, Technology and Management, Sep **2012**.
9. **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.
10. **Gaikwad S.M.**, Pandey Shekhar, Radhesh Krishnana,, Mithun Sarkar, Nirmal Singh,, "**CFD Simulation on Heat Transfer Characteristics of Laminar Air Flow on Dimple and Flat Plate** ", International Conference on Global Technology Initiatives , volume 1, march **2012**, page B149 - B154. ISBN 978-93-5067-450-5
11. **Sanjay Gaikwad** , Pritee Purohit, A.R. Ramgude, Raviraj Gurav, "**CFD simulation of Heat Exchanger used in Pulse tube**", International Conference on Recent Technology (i-CORT), Feb **2012** , IOK COE Pune.
12. **Sanjay Gaikwad** , Pritee Purohit, Dr. Gawali B.S, "Analysis of Cyclic Flow Heat Exchangers Used in Pulse Tube Refrigerator", First International Conference on Sunrise Technology (iCOST), 13th -15th Jan **2011** Dhule.
13. **Gaikwad S.M.** and Dr. Gawali B.S., "Analysis of Cyclic Flow Heat Exchangers Used in Pulse Tube Cryocooler", Twenty first National Symposium on Cryogenics, 22-24 Feb **2006**, National Physical Laboratory, New Delhi.
14. **Gaikwad S.M.**, S.B. Khare and Dr. Gawali B.S, "Theoretical Prediction and Experimental Investigation of Counter Flow Pulse Tube Refrigerator", Twenty first National Symposium on Cryogenics, 22-24 Feb **2006**, National Physical Laboratory, New Delhi.
15. Amit Ranaware, Ajinkya Satam, **Gaikwad S.M.**, "Experimental Verification of heat transfer Enhancement in square plate with v shape dimples", Proceeding of 3rd International Conference on Recent Trends in Engineering and Technology, March-28-30 **2014**, organized by Late Sau. K. Jain COE Chandwad, Nashik, page 438-241. ISBN 978-93-5107-222-5.
16. Neeraj Sahoo, Navin Kumar, Vipin Dwivedi, Pallavi Shishodia, S.M. Gaikwad, "**CFD Simulation on Heat Transfer Air Flow Dimple Plates with Delta Wing**," International Conference on Global Technology Initiatives , volume 2, march **2013**, page E18 - E22.

ISBN 978-93-5067-450-5.

17. 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.
18. 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.
19. 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.
20. Shekhar Pandey, S.M.Gaikwad, J.D.Patil, A.A.Ramgude, Pritee Purohit, R.B.Gurav, "**Experimental Investigation of Heat 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.
21. AdityaKrisha Deora, S.M.Gaikwad, R.S.Verma, "**Delaying Boundary Layer Separation Across Hot Cylinder Using Slotted Cylindrical Plate,**"International Conference on Global Technology Initiatives , volume 2,march **2013**,page E64 – E68. ISBN 978-93-5067-450-5.
22. 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.
23. Purohit Pritee, **S.M.Gaikwad**, A.A Ramgude, I.H.Patel, "Biodiesel: At Low Temperature", International Conference on Global Technology Initiatives , volume 1,march **2012**,page B26 - B29. ISBN 978-93-5067-450-5
24. Anand A Ramgude, Tiwari Rahul, **S.M Gaikwad**, "**High Pressure Common Rail Diesel Injection System**", International Conference on Global Technology Initiatives , volume 1,march **2012**,page B75 - B80. ISBN 978-93-5067-450-5

	<p>25. 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>26. Pritee Purohit ,Raviraj Gurav ,Sanjay Gaikwad ,A.R.Ramgude, "Properties and specifications of biodiesel and their influence on performance of engine: A Review", International Conference on Recent Technology (i-CORT),Feb 2012 ,IOK COE Pune.</p> <p>27. Raviraj Gurav ,Sanjay Gaikwad ,Pritee Purohit,A.R.Ramgude, "Duct Design using equal friction method & CFD", International Conference on Recent Technology (i-CORT),Feb 2012 ,IOK COE Pune.</p> <p>28. Sanjay Gaikwad ,Pritee Purohit,A.M.Gadade, "Determination of Performance and Emmission Characteristics of IDI Duel Fuel Engine", First International Conference on Sunrise Technology (iCOST),13th -15th Jan2011 Dhule.</p>
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Patents	05
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Sr. No.	Title of Patent	Patent No.	Date
1	Economical multipurpose cutter	4821/MUM/2015	23/12/2015
2	Breaking system with better vehicle stability using non-uniform contact pressure for two wheeler	4822/MUM/2015	23/12/2015
3	Work bench with USB Microscope for Micro art	201621002053	12/02/2016
4	Muffler cooling with delta wing vortex generator for safety purpose	201621002035	12/02/2016
5	Padm Heat Sink	201721024510 A	04/08/2017

Professional Memberships	ISHMT
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Consultancy Activities	CFD Training and Heat Transfer Testing
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Sr. No	Name of project	C/P	Amount	Duration
1	"Heat Transfer and fluid flow characteristics in straight and zigzag microchannel"	Projects BCUD SPPoU	1,50,000/-	2 Years

2017-18

Sr. No	Name of project	C/P	Amount	Duration	College Name	Academic Year
1	CFD course	Industry	20,000/-	6 Days	Me Venkatesh,Forb Marshal,Pune	2017-18
2	"Heat transfer enhancement in Divergent channel with Triangular Ribs"	ME Project	3000/-	3 Days	PES's Modern COE Pune	2017-18
3	"Heat transfer enhancement in pipe"	BE Project	1000/-	1 Day	DY Patil COE Ambi	2017-18
4	"Heat transfer enhancement in Divergent channel with elliptical Dimples"	ME Project	2000/-	2 Days	DY Patil COE Ambi	2017-18
5	"Heat transfer enhancement in pipe with bumps"	ME Project	3000/-	3 days	DY Patil COE Ambi	2017-18
Total			29,000/-			

2016-17

Sr. No	Name of project	C/P	Amount	Duration	Academic Year
1.	"Heat transfer enhancement in Divergent channel with Dimples"	Consultancy	2000/-	2 days	2016-17
Total			2000/-		

2015-16

Sr. No	Name of project	C/P	Amount	Duration	Academic Year
1.	CFD course	Software Training	50,000/-	1 Month	2015-16
Total			50,000/-		

2014-15

Sr. No	Name of project	C/P	Amount	Duration	Academic Year
1.	"Heat transfer enhancement in Divergent channel with ribs"	Consultancy	2000/-	2 days	2014-15
Total			2000/-		

Awards	"Best teacher" award for Year 2013-14 at AIT , Pune "University level 3rd Rank of Avishkar 2016 Project Competition"
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	Being recognized as First "ICT Enabler" for YouTube Channel "CFD for Engineer" from AIT Pune 28 Sep 2018
Grants Fetched	"Heat Transfer and fluid flow characteristics in straight and zigzag microchannel", BCUD Pune Rs 1,50,000/-
Interactions with Professional	CFD Training to Engineer of Forb Marshal Pune,
Workshops attended	24

Sr. No.	Name of the Topic	Date	Organized by	Level
1.	Four week FDP on "Use of ICT in Education for Online and Blended Learning"	2 May to 10 July 2016	IIT Bombay, Mumbai.	National
2.	One week FDP on CFD for beginners	6 th to 10 th June 2016	COEP , Pune.	National
3.	Two week FDP on "Manufacturing excellence"	22 April to 2 may 2015	College of Engineering, Sangamner	National
4.	Workshop on CFD	14 March 2015	JSMP Wagholi	National
5.	Two week FDP on "Padagogy for Effective use of ICT in Engineering education"	5-31 Jan 2015	IIT Bombay, Mumbai	National
6.	"Nanomaterials and Nanocomposites"	2 nd Dec-6 th Dec 2013	Department of Metallurgy, College of Enengineering, Pune	National
7.	"Nanotechnology: Opportunities and Challenges"	10 th June-21 st June, 2013	Department of Mechnical Engineering, Dr.Babasaheb Ambedkar Technological University, Lonare, Raigad (MS), India	National
8.	Computational Fluid Dynamics	12 th to 22 nd June 2012	IIT Bombay	ISTE Workshop National

9.	RECENT TRENDS IN HEAT EXCHANGER	27-29 Jan 2012	VIIT Pune and WCE Sangli	National
10.	5 th Symposium on Novel Ideas in CFD	25 th Jan 2012	I ² IT, Pune	State
11.	Application of CFD	8 th -9 th July 2011	RCOE,Wagholi, Pune	State
12.	Mission 10X	7 th -11 th Feb 2011	Wipro	National
13.	RECENT TRENDS IN HEAT EXCHANGER	29 th -30 th Jan 2010	WCE Sangli	National
14.	Detailing & Implementation of Syllabus for subject Theory of Machine & Mechanism -I	7 th Feb 2009	AIT Pune	University
15.	Road Accident -cause and remedies	19 th Feb 2009	Siddhant College of Engineering,. Pune.	State
16.	Detailing & Implementation of Syllabus for subject Machine Design	16 th Nov 2009	AIT Pune	University
17.	RECENT TRENDS IN HEAT EXCHANGER	28 th -29 th Jan 2008	WCE Sangli	National
18.	RAC Subject Teacher meet	31 st jan 2008	SIT Pune	University
19.	Implementation and scope of BME	22 nd dec 2008	Indira COE Pune	University
20.	Impact of life style management on health of students	23 rd -24 th Dec 2008	Modern COE Pune	State
21.	<i>Vibration control of rotating machines a diagnostic approach</i>	16 th -17 th July 2007	WCE Sangli	National
22.	Vibration and Noise Measurement	17 th Sep 2007	WCE Sangli	State
23.	<i>Pressure Vessels design and manufacturing</i>	28 th -29 th Sep 2007	WCE Sangli	State
24.	RECENT TRENDS IN HEAT EXCHANGER	31 st Mar 2006	WCE Sangli	National

- https://scholar.google.co.in/citations?user=j_Gow1kAAAAJ&hl=en