

## Curriculum Vitae

**Name:** Dr. Jagdeep M Kshirsagar  
Dr. B.A.M. University, Ch. Sambhajinagar  
Associate Professor, MED

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**Date of Birth:** 19<sup>th</sup> July 1969



### Academic Credentials

Class/ Degree	Specialization	Institution	University	Year	%/CGPA	Class
Ph.D.	Mechanical Engineering (Heat Transfer Boiling)	Government Engineering college Aurangabad	Dr. B.A.M. University, Aurangabad	2017	---	--
M.E./ M. Tech.	Mechanical Design	Government Engineering college Aurangabad	Dr. B.A.M. University, Aurangabad	2000	60.73	First class
B.E./B.Tech.	Mechanical Engineering	M.S. Bidve Engineering college Latur	Marathwada University, Aurangabad	1992	60.25	First class

**M. Tech. Project:** “Computer aided design of dies using AUTOLISP on window platform.”

**Ph. D. Research:** “Enhancement of Critical Heat Flux in Pool Boiling using Nanofluids”

**Key Research Areas:** Nucleate Pool Boiling, Heat Transfer.

### Experience

Sr. No.	Organization	Post	From	To	No. of Years
01	Transfield Engineering Thane	Trainee engineer	14/06/92 to	13/06/1993	01
02	Government Polytechnic, Beed	Lecturer	23/09/1993 to	31/05/1994	01
03	V.V. P. Ltd., MIDC, Waluj, Aurangabad.	Trainee engineer	14/06/1994 to	01/03/1995	0.8
04	Marathwada Institute of Technology, Aurangabad	Lecturer and Sr. Lecturer	02/03/95	to 30/06/2008	13
05	Maharashtra Institute of Technology, Aurangabad	Assistant Professor	1 <sup>st</sup> July 2008 to	30 Aug 2011	03
06	Maharashtra Institute of Technology, Aurangabad	Associate Professor	1 <sup>st</sup> September	2011 to till date	11
07	Research Experience				10

### List of Courses Taught/Teaching at UG level

01	Fluid Mechanics	05	Basic Mechanical Engineering
02	Fluid Mechanics and Machineries	06	Engineering Drawing
03	Heat Transfer	07	Alternative Energy Sources
04	Computational Techniques	08	Fluid Mechanics and Heat Transfer

### List of Courses Taught/Teaching at PG level

1. Advance Heat Transfer
2. Computational Fluid Dynamics

Major research projects	NIL			
Minor research Projects	NIL			
No of student awarded Ph. D				
No. of Student register for Ph.D				
Sr. No.	PRN	Student Name	Topic	Registration date
1	201536256	IRFAN HANIF MOHMMAD	“PERFORMANCE ANALYSIS OF HEAT TRANSFER RATE OF NANO FLUIDS IN HEAT EXCHANGER USING INDUCED TURBULENCE”	04/03/2022
2.	201536258	SHUBHANGI SAMADHAN TAYDE	EXPERIMENTAL INVESTIGATIONS ON HEAT TRANSFER IN HELICAL COIL HEAT EXCHANGER USING NANOFLUIDS.	04/03/2022
3.	201536259	ABHIJIT SHALIGRAM KOUSAL	EXPERIMENTAL STUDY OF TWO-PHASE FLOW THROUGH SMALL CHANNELS OF VARIABLE FLOW AREA.	4/3/2022

#### Additional Assignments/Duties

- Worked as Chief Superintendent Dr. B.A.M. University, MBA Examinations Oct./Nov 2022 held in March 2023
- Member Board of Studies, Government Engineering College, Aurangabad, An Autonomous Institute, Govt. of Maharashtra 2023
- Worked as Chairman, for the committee deciding the remuneration charges for UG /PG/PhD/ B.Voc examination, for Autonomous institute 2021 Maharashtra Institute of Technology, Aurangabad 08/01/2022
- Worked as a Chairman of the jury, National Level Technical Mega Event, Techno-Minds2K21, 17 and 18 June 2021 at MIT Aurangabad
- Worked as Admission In-charge/coordinator Direct Second Year Admissions 2018-19,19-20,20-21,2021-2022,2022-23,23-24
- Worked as Convener Anti ragging Committee 2016-17-2017-18, 2018-19.
- Worked as Central coordinator Practical Oral examination 2017-18,2018-19, 19-20, 20-21

- Member of flying squad Dr. B. A. M. University Aurangabad for May/June 2017 examinations
- Worked as Chief Superintendent Dr. B. A. M. University Examination May-June 2018
- Worked as a coordinator for IQA Cell 2011-12,2012-13,2013-14
- Worked as Director for CAS, M/J 2011, Examination, Dr. B. A. M. University Aurangabad.
- Worked as Joint Director for CAS, M/J 2010, Examination, Dr. B. A. M. University Aurangabad.
- Worked as a officer CAS Engineering examination May/June 2002 at Dr. B.A.M.U. Aurangabad.
- Worked as a Asst. Director CAS Engineering examination May/June 2003 at Dr. B.A.M.U. Aurangabad
- Worked as Chief Institute's Coordinator NBA 2005-06 , 2006-07,07-08
- Worked as Institute Class test coordinator for the Year 2005-06
- Worked as Departmental Timetable coordinator for the Year 2003-04
- Worked as Coordinator for IMTEX VISIT at New Delhi the Year 2000-01
- Worked as Coordinator for various Industrial visits and the Educational Tours 2000 2001

### **Membership of Professional Bodies**

1. LMISTE 41078, Indian Society for Technical Education
2. MIE – M-1561523, Institution of Engineers
3. Quarterly Franklin Membership (Membership ID#IX59035), London journal press
4. ISHARE, Membership No: 59661 for year 20-21

### **Research Projects/Projects Guided**

- 01 Enhancement of critical heat flux using different nanofluids
- 02 Experimental investigation of forced convective heat transfer coefficient and pressure drop in nanofluids in a double pipe heat exchangers under turbulent flow
- 03 Experimental Analysis of Valve and Valve Seat Wear in Gas Fueled Engine
- 04 Experimental investigation of heat transfer enhancement in shell and helical coiled tube heat exchanger using SiO<sub>2</sub>/ water nanofluids

- 05 Heat Transfer Enhancement with Alumina Nanofluids and Twisted Tapes in Shell and Tube Heat Exchanger
- 06 Optimization of GMAW Process Parameters to Improve the Length of Penetration in EN 10025 S 235 Grades.
- 07 Optimization of GMAW Process Parameters to Improve the Penetration in E250 and E350 Materials
- 08 Experimental Investigations on Forced Convective Heat Transfer and Pressure Drop of MgO/water Nanofluids under Turbulent Flow
09. Comparative performance analysis of R600a and R436a as an alternative of R134a refrigerant in a domestic refrigerator
10. Performance analysis of air water heater by using HFC refrigerants
- 11 Assessment of the design for single cylinder forged crankshaft using finite element analysis

#### **Computer/Software Proficiency**

1. M S office (MS Word, MS Power point, Excel)
2. MSCIT Certification

#### **Seminar/Workshop/Industrial Training/STTP//FDP/1.EP/Conference Attended**

- 01 Attended two weeks AICTE – ISTE STTP on **Intelligent machines** at REC Warangal (AP) 31.12.2001 to 12.01.2002.
- 02 Attended One day workshop on CFD at IIT Mumbai. 14.02.2004.
- 03 Attended two day work shop on "**Computational Fluid Dynamics**" at SGM College of engineering, Shegaon 30,31 March 2009
- 04 Attended two weeks AICTE – ISTE STTP on **Engineering Optimization Techniques and its application in research**'' (EOTAR2012) FROM 2<sup>nd</sup> Jan 12 Jan 2012.
- 05 Attended one-week ISTE STTP at Government Engineering College Aurangabad on **Energy Conservation Technologies** from 5<sup>th</sup> January 2012 to 12<sup>th</sup> January 2012

- 06 AICTE approved four week faculty development programme (FDP) on **Use of ICT in Education for Online and Blended Learning**” conducted by I I T Mumbai and Sponsored by MHRD, New Delhi from 2<sup>nd</sup> May 2016n to 10<sup>th</sup> July 2016
- 07 Successfully completed Faculty Awareness Program on Outcome Based Education and NBA Accreditation Organized by “Internal Quality Assurance Cell” of Maharashtra Institute of Technology, Aurangabad on 14-5-2020.
- 08 Attended webinar on, Development and use of rubric for effective assessment organized by National Institute of technical teachers and research Bhopal, 28th July 2020
- 09 Two days educational summit on **outcome-based education (OBE) and National assessment and accreditation council NAAC** Organized by mastersoft India and IQAC MIT Aurangabad, 14 and 15 May 2021
- 10 Attended One Day Online Workshop on “**OBE Concepts & Implementation and Digital Preparedness for NBA**” organized by Internal Quality Assurance Cell (IQAC), Maharashtra Institute of Technology, Aurangabad on 29th May 2021.
- 11 Attended and Successfully completed online one-week STTP on “**Experimental Methods in Engineering**’ held on 5<sup>th</sup> July to 9<sup>th</sup> July2021, Sponsored by TEQIP, Government Engineering College Karad Maharashtra
- 12 Attended and Successfully completed online one-week AICTE sponsored STTP on, “**Data Science and Big Data Analytics**” held on 26 July 2021 to 31 July 2021 through online mode at Indo Global College of Engineering, Abhipur, New Chandigrah.

#### **Seminar/Workshop/Industrial Training/STTP//FDP/CEP/Conference organized.**

1. Organized three days National level conference on "**Nanotechnology and Nano materials** On 15<sup>Th</sup> to 17<sup>th</sup> September 2013 at MIT (T), Aurangabad
2. Organised two days online workshop on **Energy Efficient Buildings** on 17 and 18<sup>th</sup> July 2020 at MIT Aurangabad (Online)

#### **Invited talks delivered**

1. Invited talk on “Heat Transfer enhancement using Nanofluids” in FDP on

Heating, Ventilation, Air Conditioning and Refrigeration (HVAC&R) on 30<sup>th</sup> and 31<sup>st</sup> January 2018 at Tatyasaheb Kore Institute of Engineering & Technology (TKIET) Warnanagar and Shivaji University Kolhapur

2. Invited talk on “Experience sharing on Active Learning ‘At one week Refresher course on ‘Use of ICT for effective Teaching and Learning’” on 12<sup>th</sup> January 2019, MIT Aurangabad.

### List of Research Publications

#### Papers in International Journal

- 1 "Review of the influence of nanoparticles on thermal conductivity, nucleate pool boiling and critical heat flux" International journal of Heat Mass Transfer vol 51 issue 3, pp381-398., DOI 10.1007/s00231-014-1412-3 (Springer) impact factor 0.924 (2014)
- 2 Experimental Investigation of Nucleate Pool Boiling characteristics of high Concentrated Alumina/Water Nanofluids" International journal of Heat Mass Transfer (Springer) impact factor 1.224 accepted on 25 September 2017  
<https://doi.org/10.1007/s00231-017-2253-7>
- 3 "Determination Of Critical Heat Flux In Pool Boiling Using ZnO Nanofluids" International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181, Vol. 2 Issue 7, July – 2013
- 4 Preparation and characterization of copper oxide nanoparticles and determination of enhancement in critical heat flux" Scientific Thermal science, International journal of heat and mass transfer. THERMAL SCIENCE: Year 2017, Vol. 21, No1A, pp. 233-242 Impact factor 1.18 DOI:10.2298/TSCII40619026K
- 5 Characterization and investigation of heat transfer enhancement in pool boiling with water-ZnO nano-fluid” THERMAL SCIENCE: Year 2017, Vol. 21, No05,pp. 2039-2047 Impact factor 1.18 Doi10.2298/TSCII50516200K
- 6 Experimental Analysis of Valve and Valve Seats Wear in Gases (CNG) Fuelled Engine" IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684,p-ISSN: 2320-334X, Volume 11, Issue 4 Ver. I (Jul- Aug. 2014), PP 56-62
- 7 Optimization of GMAW Process Parameters to Improve the Length of Penetration in EN10025 S 235 Grade” Journal of Welding and Joining. Vol 35No.1 (2017)pp74-78  
<https://doi.org/10.5781/jwj2017.35.1.74>
- 8 Review of enhancement in heat transfer rate using nanofluids of helically coiled tube Heat exchanger” International Journal of Latest Trends in Engineering and Technology

Vol.(8)Issue(1),pp.385-396,e-ISSN:2278-621X

DOI:<http://dx.doi.org/10.21172/1.81.050>

- 9 Heat Transfer Enhancement with Al<sub>2</sub>O<sub>3</sub> Nanofluid in Shell and Tube Heat Exchanger using Twisted Tapes: A Review  
*IJSRD - International Journal for Scientific Research & Development*| Vol. 5, Issue 08, 2017 | ISSN (online): 2321-0613
- 10 Review of forced convective heat transfer and pressure drop nanofluids under turbulent flow *International Journal of Latest Trends in Engineering and Technology (IJLTET)*  
IJLTET Journal, Volume 16 Issue 3 May, 2020

### **Books/ Book Chapter**

- 01 Performance analysis of air water heater by using HFC refrigerants’ ‘MECHANICAL ENGINEERING FOR SUSTAINABLE DEVELOPMENT State-of-the-Art Research Apple academic Press, Waretown USA
- 02 Comparative performance analysis of R600a and R436a as an alternative of R134a refrigerant in a domestic refrigerator *International Conference on Mechanical, Materials and Renewable Energy IOP Conf. Series: Materials Science and Engineering* **377** (2018) 012047  
doi:10.1088/1757-899X/377/1/012047

### **Papers in National /International Conference Proceedings**

- 1.. A review on performance of Refrigerant Mixtures using Vapour Compression refrigeration system’’ 4<sup>TH</sup> National Conference on Innovations in Mechanical Engineering (NCIME 16) , Madanapalle Institute of Technology and Science Chittor (AP)
2. Performance analysis of air water heater by using HFC refrigerants’ ‘Proceedings of the 1<sup>st</sup> International and 18th ISME Conference ISME 18 February 23rd – 25th, 2017, NIT Warangal, Warangal ISME-TE-03
3. ‘‘INVESTIGATION OF TWO-PHASE FLOW PRESSURE CHARACTERISTICS IN SMALL-DIAMETER CHANNELS WITH ABRUPT TRANSITIONS IN GEOMETRY’’the International Conference on Multidisciplinary Innovation for Global Sustainability and Development (MIGS-2025)held on April 17th and 18th, 2025 at G H Raisoni University, Amravati, Maharashtra

### **Patents**

1. A Hybrid Configuration Air Conditioning System with the Utilization of Thermoelectric and Vapour Compression Technologies,

**NPTEL Certification**

Start Date	End Date	Duration (in Weeks)	Course Name	Marks (Out of 100)	Performance
Feb 2020	Mar2020	Four	Learn Moodle 3.8 Basics, by Moodle HQ.	----	
Jan 2020	Apr2020	Twelve	NBA Accreditation and Teaching – Learning in Engineering(NA TE)	95	
Feb 2019	Mar 2019	Four	Teaching and Learning in Engineering	66.08	Elite
July 2019	Sep 2019	Eight	TALE-2 Course Design and instruction of Engineering Course	67.33	Elite
July 2017	Aug 2017	Four	Outcome based Pedagogic Principles for effective Teaching	60.00	Elite

**Awards, Achievements and Recognition**

1. Recognised Ph.D. guide and P.G. Teacher Dr. B. A. M. University, Aurangabad
2. Quarterly Franklin Membership (Membership ID#IX59035), London journal press

**Vidwan and Orcid Number**

Vidwan-ID 186886

Vidwan Link : <https://vidwan.inflibnet.ac.in/profile/186886>

Web of Science Researcher ID O-4339-2019

**Orcid Number : 0000-0001-8988-2377**

**0000-0001-6204-0268**

Scopus Author ID: 57195446782

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

Editorial Board Member: EnPress Thermal Science and Engineering

<http://systems.enpress-publisher.com/index.php/TSE/about/editorialBoard>

Date: 25/3//2026

Place: Aurangabad

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