



AISSMS
COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय
Accredited by NAAC with "A+" Grade



Department of Mechanical Engineering

Faculty Profile

Prof.(Dr) D Y Dhande

PhD (Mechanical Engineering)

Professor

✉ dydhande@aiissmscoe.com

☎ (020) 26058587; Extn: 1804

🔗 <https://scholar.google.co.in/citations?user=8nTGMEgAAAAJ&hl=en>

🔗 https://www.researchgate.net/profile/Dinesh_Dhande?ev=hdr_xprf



Research Areas / Areas of Interest

CFD, Tribology, CFD in bearings, FEM, Bioifuels, Artificial Neural Network in Mechanical Engineering Applications

Personal Details

Date of Birth : 10 / 09 / 1976

Domicile: Maharashtra

Gender : Male

Blood Group: AB+ve

Contact Details: B502, Vardhaman Heights, S.No.66/2, Near Chhatrapati
Chowk, Rahatani, Pune – 411017

Academic Background

S. NO.	Qualification	Specialization	University	Class/Grade	Year of Passing
1	Ph.D.	Mechanical Engineering	Pune	Awarded	Jan 2018
2	M.E.	Mechanical – Design Engg.	Pune	I st	May 2004
3	B.E.	Mechanical Engineering	Mumbai	I st	May 1998

Work Experience

S. No.	Type of Experience	Years	Months
1	Teaching	20	11
2	Research	00	00
3	Industry	1	8
4.	Others	--	--
Total		22	7

Subjects / Courses Taught

S. No.	Subject	UG/PG	Class (FE/SE/TE/BE/ME)	No of times Subject Taught
1	Design of Machine Elements - II	UG	TE (Mechanical)	03
2	Applied Computer Aided Engineering	UG	TE (Mechanical SW)	04
3	Research Methodology	PG	FYME (Mechanical)	06
4	Elective III	PG	SYME (Mechanical)	06

5	Finite Element Analysis	PG	SYME (Mechanical – Design)	03
6	Noise, Vibration Harshness	PG	SY(Mechanical – Automotive)	02
7.	Computer Aided Machine Drawing	UG	SE (Mechanical)	01

Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals	02	15	01	15	02
Conferences	01	07	01	03	--

Publication Details (Journals)

S. No	Document Details	Authors	Year	Source Details	ISBN/ ISSN	Publisher
1.	A Numerical Investigation of the Effect of Blade Number on the Performance of an INSEAN E779A Marine Propeller in a Cavitating Flow Using Computational Fluid Dynamics	Nazaruddin Sinaga*, Dinesh Y. Dhande, Bambang Yunianto	2022	Ocean Engineering (SCI and Scopus Indexed), Vol.261, October 2022, 112063	ISSN : 0029-8018	Elsevier
2.	Development of Artificial Neural Network to predict performance of Spark Ignition Engine fueled with waste pomegranate ethanol blends	Dhande, D.Y*, Gaikwad D P, Choudhari C S.	2022	Information Processing in Agriculture (Scopus Indexed)	ISSN: 2214-3173	Elsevier

3.	Video Summarization Using Deep Learning for Cricket Highlights Generation.	Gaikwad, D*., Sarap, S., & Dhande, D. Y.	2022	Journal of Scientific Research, 14(2), 533–544. (UGC Care List)	ISSN: 2070-0237 eISSN:2070-0245	Faculty of Sciences, University of Rajshahi
4.	Complex assembly Analysis for Geometric and Dimensional Tolerance to obtain selective assembly from partitioned bins using a multi-objective approach to control clearance variation of IC Engine	Shrikant Chaitanya*, Dinesh Y Dhande, A K Jeevanantham	2022	Journal of The Institution of Engineers (India): Series C (Scopus Indexed)	Print ISSN :2250-0545 Online ISSN:2250-0553	Springer
5.	Evaluation of Emission Characteristics and Performance of Pomegranate Ethanol Blended S. I. Engine using Artificial Neural Network and Rule Learner Classifier	Dhande, D.Y*., Gaikwad D P, Choudhari C S.	2022	Journal of The Institution of Engineers (India): Series A (2022) (Scopus Indexed)	Electronic ISSN 2250-2157 Print ISSN 2250-2149	Springer
6.	Prediction of spark ignition engine performance with bioethanol-gasoline mixes using a multilayer perception model	Dhande, D.Y*., Gaikwad D P, Choudhari C S, Sinaga, N. & Dahe, K.B.	2022	Petroleum Science and Technology LPET (Scopus and Web of Science Indexed)	Print ISSN: 1091-6466 Online ISSN: 1532-2459	Taylor & Francis
7.	Smart Technologies to Mitigate and Manage the Pandemic:	Choudhari C S*, Dhande D Y	2022	SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology,	Print ISSN : 2229-7111 Online ISSN : 2454-5767	Institute of Technology, School of Management

	Today and Tomorrow.			13(02):82-6. (UGC indexed)		Sciences, Lucknow
8.	Experimental Investigation of Spark Ignition Engine Performance Fuelled with various Pomegranate Ethanol-Gasoline Mixtures	Dhande, D.Y*, Sinaga, N. & Dahe, K.B.	Dec 2021	Journal of The Institution of Engineers (India): Series C (2021) (Scopus Indexed)	Print ISSN :2250-0545 Online ISSN:2250-0553	Springer
9.	Extraction of bioethanol from waste pomegranate fruits as a potential feedstock and its blending effects on a performance of a single cylinder SI engine	Dhande D.Y., Nighot D.V., Nazaruddin Sinaga, Kiran B. Dahe	2021	Renewable and Sustainable Energy Reviews 149, October 2021, 111349	ISSN : 13640321	Elsevier
10	Comparative Analysis of Abrasive Wear Using Response Surface Method and Artificial Neural Network	Dhande, D.Y., Phate M R & Sinaga, N.	2021	Journal of The Institution of Engineers (India): Series D, 102, pages 27–37	ISSN: 2250-2130, 2250-2122	Springer
11.	Study on combustion, performance	Dhande, D.Y., Sinaga, N. & Dahe, K.B.	2021	Heliyon, 7(3), E06380, pg.1-11	ISSN : 2405-8440	Elsevier

	and exhaust emissions of bioethanol-gasoline blended spark ignition engine					
12.	The study of performance and emission characteristics of a spark ignition (SI) engine fueled with different blends of pomegranate ethanol	Dhande, D.Y., Sinaga, N. & Dahe, K.B.	2021	International Journal of Energy and Environmental Engineering, 12, pages 295–306	Print ISSN: 2008-9163 Online ISSN : 2251-6832	Springer
13.	Implementation of CFD–FSI Technique Coupled with Response Surface Optimization method for Analysis of Three-Lobe Hydrodynamic Journal Bearing	Dhande D.Y. Pande D.W. Lanjewar G.H.	2019	Journal of The Institution of Engineers (India): Series C, 100, 955–966	Print ISSN :2250-0545 Online ISSN:2250-0553	Springer
14.	Study of aerodynamic drag of sports utility vehicle by experimental	Bauskar, M.P., Dhande, D.Y., Vadgeri, S., Patil, S.R.	2019	Materials Today: Proceedings, Volume 16, Part 2, Pages 750-757	ISSN 2214-7853	Elsevier

	and numerical method					
15.	Numerical analysis of three lobe hydrodynamic journal bearing using CFD–FSI technique based on response surface evaluation	Dhande D.Y. Pande D.W. Lanjewar G.H.	2018	Journal of the Brazilian Society of Mechanical Sciences and Engineering, 40, 393	Print ISSN: 1678-5878 Online ISSN: 1806-369	Springer
16.	Multiphase flow analysis of hydrodynamic journal bearing using CFD coupled Fluid Structure Interaction considering cavitation	Dhande D.Y. Pande, D.W.	2018	Journal of King Saud University - Engineering Sciences, Volume 30, Issue 4, Pages 345-354	ISSN: 1018-3639	Elsevier
17.	A two-way FSI analysis of multiphase flow in hydrodynamic journal bearing with cavitation	Dhande D.Y. Pande, D.W.	2017	Journal of the Brazilian Society of Mechanical Sciences and Engineering, 39, pages3399–3412	Print ISSN: 1678-5878 Online ISSN: 1806-369	Springer
18.	Numerical analysis of hydrodynamic journal bearing	Dhande D.Y. Pande, D.W.	2016	International Journal of Vehicle Structures and	Print ISSN: 0975-3060; Online	MAFTREE

	lubrication using computational fluid dynamics and fluid structure interaction approach			Systems, Vol 8, No 4 (2016)	ISSN: 0975- 3540	
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Publication Details (Conferences)

S. No	Document Details	Authors	Year	Conference Details	Organised by
1.	Experimental analysis of Hydrodynamic Journal Bearing	Mahesh Nigade, Dr S B Zope, Dr. H.V.Vankudre and Dr D Y Dhande	2020	National Conference on Technical advancements for social upliftment (VNC2020-TASU)	Vidyavardhini College of Engineering & Technology, Vasai
2.	Design and development of A multiple control enabled vacuum cleaning and wiping robot	Vinaya Salunkhe, Yadyesh Kulkarni, Dhananjay Kudche, Shubham Badhe and Dr D Y Dhande	2020	International Conference on Mechanical Engineering for sustainable Development (ICMESD2020)	AISSMS College of Engineering & BCUD, SPPU, Pune
3.	Effect of Free Stream Turbulence on Aerodynamic Performance of Wind	Nazaruddin Sinaga, D Y Dhande, Syaiful Syaiful,	2020	International Conference on Mechanical Engineering	AISSMS College of Engineering & SPPU, Pune

	Turbine Airfoil NACA 4415	Bambang Yunianto		For sustainable Development 2020	
4.	Blade Number Effects on the Performance of INSEAN E779A Marine Propeller in Cavitating Flow	Nazaruddin Sinaga, D. Y. Dhande and Hizkia Lie Kusnadi	2020	International Conference on Mechanical Engineering For sustainable Development 2020	AISSMS College of Engineering & SPPU, Pune
5.	Numerical analysis of multiphase flow in hydrodynamic journal bearing using CFD coupled Fluid Structure interaction with cavitation		2017	International Conference on Automatic Control and Dynamic Optimization Techniques, ICACDOT 2016,	International Institute of Information Technology, Pune & IEEE, Pune
6.	CFD analysis of carbon fiber reinforced polytetrafluoroethylene (PTFE) hydrodynamic journal bearing using optimization technique		2017	International Conference on Automatic Control and Dynamic Optimization Techniques, ICACDOT 2016	International Institute of Information Technology, Pune & IEEE, Pune
7.	Experimental and CFD performance analysis of hydrodynamic journal bearing using Jatropa blended Copper-Oxide nanoparticle as lubricant		2017	International Conference on Automatic Control and Dynamic Optimization Techniques, ICACDOT 2016	International Institute of Information Technology, Pune & IEEE, Pune

8.	Numerical Analysis of Hydrodynamic Journal Bearing Lubrication using computational Fluid dynamics and Fluid structure approach		2016	International Conference on Mechanical Engineering Design (ICMED 2016)	SSN College of Engineering, Chennai, TN, India
9.	Parametric Modelling & FEA analysis of flextural bearing		2015	Recent Advacements in Mechanical Engineering 2016	G H Raison College of Engineering & Managment Wagholi, Pune
10	Numerical Analysis of Hydrodynamic Journal Bearing Lubrication using Fluid structure approach		2015	Innovative Trends in Engineering	Institution of Engineers(I), Pune Local Chapter
11	Determination of Abrasive wear of PTFE using pin-on-disk		2009	National Conference on Advances in Mechanical Engineering-2009	Manipal University, Manipal, Karnataka, India

PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	-	14	> 50

Professional Memberships

Professional Body	Level (National/ International)	Type (Fellow/Life/Annual)	Membership No.

Tribology Society of India	National	Life	LM5783
Solar Energy Society of India	National	Life	LM2557/2021

Patents / IPR Filed / Granted

S. No	Investigator Details	Title	Year	Status (Filed/Granted)	Details
1	--	--	--	--	--

Books Published

S.No	Title	Name of the Publisher	ISBN/ISSN Number
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Research Grants Received

S. No	Program	Duration	Funding Agency	Grant Amount
1.	Research Proposal	2009-11	BCUD, SPPU, Pune	INR1.5 Lacs
2.	MODROB	2021-23	AICTE	INR 20 Lacs

Details of Workshop / STTP / FDP / Seminar / Conferences Organized

S. No	Title	Type	Duration	Level (State/National/ International)	Sponsoring Agency
01	Advances in Engineering	Induction/Refresher	8-14 December 2021	National	AICTE+ISTE

		program			
02	International Conference on Mechanical Engineering for sustainable Development (ICMESD2020)	Conference	17-18 February 2020	International	SPPU, Pune
03	Industrial Tribology	Workshop	4-5 October 2015	State	TSI
04	MECHPGCON2018	Conference	13-14 June 2018	University	BoS, SPPU Pune

Contribution as Resource Person

S. No.	Place/ Organization	Topic	Level(National/Int/ State/Regional)	Date
1.	AISSMS COE, Pune	Application of CFD-FSI Technique for Analysis of Hydrodynamic Journal Bearings	National	09/12/2021

Details of Workshop / STTP / FDP / Conferences Attended

S. N	Title	Type	Duration	Organizer	Sponsoring Agency
1.	Noise and Vibration Control of Industrial Rotary Machines	STTP	15/03/21 to 20/03/21	Annaheb Dange College of Engineering and Technology, Ashta	AICTE

2.	One week FDP on NAAC Accreditation Process		15/04/2021 – 22/04/2021	RUSA and Modern college of Arts, Commerce and science, Pune	RUSA
3.	One week FDP course on “AI and Robotics”		25/04/2021 to 29/04/2021	DYPIT, Pune	--
4.	Three day workshop on “Research, Development and Innovation Ethics”		17th -19th May 2021	KBGT College of Engineering, Nasik	
5.	Tribology and Sustainability	International STTP	August, 24-28, 2020	SRMIST, Tamilnadu	SRM University
6.	Recent Advances In Tribology And Surface Engineering	STTP	August 17-22, 2020	SAINTGITS College Of Engineering, Kottayam, Kerala	AICTE
7.	Recent Research Trends in Tribology	Webinar Series	August 3-7, 2020	GMIT, Guwahati	Assam Science and Technological University (TEQIP III)
8.	12th Summer School of Tribology	Training Program	July, 21-25	Tribology Society of India	IOCL, Faridabad and TSI
9	Futuristic Technologies in Mechanical Industries	FDP	June 5-9, 2020	DYPIMER, Pune	ISTE and IWS

10	Applications of Finite Element Analysis (FEA) and Computational Dynamics (CFD) using ANSYS	FDP	June 13-17, 2020	Govt College of Engg, Karad & Rajikiya Engg College, Azamgarh	AICTE (TEQIP-III)
11	Advances in Tribology	STTP	4-9 November 2019	AISSMS College of Engg, Pune	AICTE
12.	Fundamentals of Tribology	QIP STTP	7-11 October 2019	IISc, Bengluru	AICTE
13.	Vision-Mission-PEO-PSO-PO-CO: Framing, Mapping, Assessment and Attainment	FDP	10-15 June 2019	AISSMS College of Engg, Pune	ISTE
14.	Advances in Fault Dignosis of Rotating Machines and Fluid Film Bearings	TE QIP	10-14 June 2013	VJTI, Mumbai	AICTE
15.	Gear Tribology	QIP STTP	1-5 April 2008	IIT, Bombay	IIT Bombay

Major Professional Responsibilities Handled

S. No.	Role and Responsibilities
1.	Department NAAC coordinator
2.	Central NBA criteria 5 coordinator
3.	Assistant CAP Director, ME CAP , Nov2019

4.	Member, syllabus detailing core team of Solid Modelling & Drafting, Geometric Dimensioning & Tolerancing, SE-Mech Curriculum (2019 Course)
5.	Chairman, Applied Computer Aided Eninerig for May2019 Examinations, TE (Mech.SW)
6.	Chairman, Project Stage I and Seminar III for Nov.2018 and May 2019 of ME(Mechanical –CAD,CAM Automation)
7.	Chairman, Industrial Tribology & Maintenance for Nov.2015 and 2016 Examination of ME (Mechanical- Automotive)
8.	Center incharge for GATE Examinations 2009,10,11,12.
9.	Presiding officer for JEE (Main) and JEE (Advanced) for 2013, 2014 and 2015
10.	PG Co-ordinator (Automotive Engineering)
11.	Member, R & D Cell
12.	Development of Computer Labs for UG as well as PG
13.	Member, Exam Cell
14.	Member, Academic Audit Committee

Awards Received

S. No.	Awards
1.	PhD Guide recongnition for the subject Mechanical and Automobile Engineering by SPPU wide its letter no. BOD/Sci. & Tech./18/158 dated 19/07/2021
2.	PG recognition for ME(Mechanical) by SPPU vide its letter no. BUTR/Engineering/128/211 dated 24/03/2017
3.	Recognition of Excellence by AISSM Society, Pune
4.	Certificate and medal by Jalgaon district Govt.servents Co-OP society, Jalgaon on completion of M.E.
5.	Certificate and medal by Jalgaon district Govt.servents Co-OP society, Jalgaon on completion of PhD.

Declaration: I hereby declare that all the statement made above are correct to the best of my knowledge and belief.

Dr D Y Dhande

(Name with Signature)