

## Mechanical Engineering Department

### PhD Completed between 2011-2017

S N	Supervisor	Year	Student Name	Thesis Title	Co-Supervisor
1	A B Andhare	2016-17	Prasad Vijay Kane	Experimental Investigations for Intelligent Fault Diagnosis of Gearbox	
2	A Chatterjee	2011-12	Sanjay B Ingole	Linear and Non-Linear Joint Parameter Estimation	
3	A Chatterjee	2014-15	Mangesh S Kotambkar	Crack Detection in LP Stream Turbine Blade using Vibration Analysis	
4	A Chatterjee	2016-17	Tanuja S Vaidya	Dynamic Analysis of Structural Element Under the Moving Mass for Damage Assessment	
5	A M Kuthe	2010-11	Tushar Deshmukh	A Custom bone Implantation using rapid prototyping	
6	A M Kuthe	2013-14	Kishor M Ashtankar	Critical Analysis of Rapid Manufacturing in Context to Automobile Industries	
7	A M Kuthe	2016-17	Mangesh R Dharme	Fatigue Testing Of Customized Hip Implant	
8	A S Dhoble	2016-17	Vipin Bhaskarrao Gawande	Effects of Rib Shape on Thermo Hydraulic Performance of Roughened Solar Air Heater	D B Zodpe
9	D B Zodpe	2016-17	Sushant Satish Satputaley	Experimental Investigation of Suitability of Algae-Biodiesel as an Alternative Fuel for Diesel Engine	N V Deshpande
10	H T Thorat	2012-13	Hemant P Jawale	Comparison of Closed Chain and Serial Link Planar Manipulators for Positional Error	
11	I K Chopde	2014-15	Milind M Dhobe	Experimental Analysis of Effect of Heat Treatment on the Surface Quality and Service Life of a Blanking Die	
12	I K Chopde	2014-15	Sanjay S Uttarwar	Optimization of Process Parameters for ECM to Maximize MRR and Improve Surface Finish	
13	J G Suryawanshi	2014-15	Pundlik R Ghodke	Design and Development of Multi-Cylinder HSDI Diesel Engine with high Performance and Ultra low Emissions	

14	J G Suryawanshi	2015-16	Pravin T Nitnaware	An Investigation on Si Engine Using Hydrogen And Cng Blends	
15	N V Deshpande	2012-13	Nishikant V Kale	Energy Intervention Planning for rural Areas using Locally available Biofuels	S B Thombre
16	N V Deshpande	2012-13	Anoop D Shirbhate	Investigation of Cryogenic Treatment on Tool Life of Hss Tools	
17	N V Deshpande	2016-17	Satish Khushalrao Bhele	Combustion Studies of Biodiesel and Its Blends for Tubular Combustion Chamber	S B Thombre
18	P M Padole	2010-11	Ashish Deoghane	Integration of Medical Imagining Technique and Finite Element Method for Limbei Spine fusion Process	
19	P M Padole	2011-12	Ashwinikumar S Dhoble	Estimation of Mechanical Sustainability of bone for Orthopedic Implants: A Probabilistic Approach	
20	P M Padole	2011-12	Vithal G Arajpure	Performance Evaluation of Non-Metallic Gears in Machine Tools	
21	P M Padole	2013-14	Vishal V Shukla	Finite Element Analysis of Stenotic Artery For Optional Stent Deployment	
22	Mrs. R V Uddanwadikar	2015-16	Chetan Kuthe	Estimation of Precise Characteristics of Human Skeletal Muscle	
23	S B Thombre	2014-15	Naveenkumar Shrivastava	Investigations on Passive Direct Methanol Fuel Cell (DMFC)	
24	S B Thombre	2015-16	Hemant S Deshmukh	Experimental Studies On Single Slope Single Basin Passive Solar Still Integrated With Sensible And Latent Heat Storage	
25	S B Thombre	2015-16	Rupesh S Shelke	Experimental Studies on Dye Sensitized soalr Cells	
26	S B Thombre	2015-16	Yogesh C Dhote	Analysis Of Natural Convection Solar Air Heater With Built-In Storage	
27	Y M Puri	2016-17	Bhaskar Ramkrishna Borkar	Computer Aided Manufacturing Planning (Camp) Using Step Data Through Automatic Manufacturing Feature Recognition	
28	Y M Puri	2016-17	Vikas Gohil	Design, Development and Performance Analysis of Electrical Discharge Turning Process	

## PhD Ongoing

Sr No	Student Name	Supervisor
1	TUSHAR MADHUKAR SATHE	A S Dhoble
2	RAJESH G CHOUDHARI (Submitted)	Submitted
3	GIRISH EKNATH BHIIOGADE	J G Suryawanshi
4	ATUL SANE	Padole+ Uddanvadikar
5	MILIND PRAKASH KSHIRSAGAR	V R Kalamkar
6	DHEERAJ SHANKARRAO BHIIOGADE	A M Kuthe
7	VIMAL CHAND SONTAKE	V R Kalamkar
8	SANDEEP SHRIKRUSHNA JOSHI	A S Dhoble
9	RICHA RAJKUMAR AGRAWAL	R V Uddanwadikar
10	DHANANJAY C KATPATAL	A B Andhare
11	SANJAY MURLIDHARRAO RANDIWE	A M Kuthe
12	YOGESH VASANTRAO DESHPANDE	A B Andhare
13	NEELES KUMAR SAHU (Submitted)	Submitted
14	SANJAY KUMAR SHARMA	V R Kalamkar
15	TUSHAR KULKARNI	R V Uddanwadikar
16	ABHISHEK JHA (Submitted Oct-2017)	Submitted
17	SANDEEP WASUDEORAO DAHAKE	A M Kuthe
18	ANKUR JAISWAL	H P Jawale
19	DIWESH BABRUWAN MESHRAM	Y M Puri
20	PRAVIN ARUN KULKARNI	A S Dhobale
21	VINIT GUPTA	A K Singh
22	ANIL MADHUKARRAO ONKAR	A B Andhare
23	MAHESH BHAURAO MAWALE	A M Kuthe
24	AVINASH AJABRAO THAKRE	A K Singh
25	POOJA JUNJHUNWALA	Padole+ Thombre
26	VEER ALAKSHENDRA (Submitted Oct-17)	Submitted
27	CHIDANAND KISHOR MANGRULKAR	A S Dhoble
28	SAPKAL PRANAV SHARAD	A M Kuthe
29	ARUNENDRA KUMAR TIWARI	V R Kalamkar
30	PANDE ROHAN RAHUL	V R Kalamkar
31	NITISH SINHA	A K Singh

32	ABHISHEK MADHUKAR THOTE	R V Uddanwadikar
33	SHINDE MAHESH SHESHRAO	K M Ashtankar
34	SEEMA SUDHAKAR RAO MUNJEWAR	S B Thombre
35	ASHWINI M RAMTEKE	K M Ashtankar
36	SAUMYA RANJAN SAHOO	Shital Chiddarwar
37	TIJU T THOMAS	G Tiwari
38	KARWADE AMIT SANJAY	S B Thombre
39	RANJIT JAYPRAKASH SINGH	T Gohil
40	MALI RAHUL APPASAHEB	TVK Gupta
41	HEMENDRA PATLE	Dumpala
42	VIVEK PATEL	G Tiwari
43	VANDITA T SHAHU	S B Thombre
44	ASHUTOSH DINANATH BAGDE	A M Kuthe
45	MAKIREDDI DIWAKAR	V D Ghuge
46	ANIRUDDHA AJAY KANE	R Peetala
47	TALEKAR NITESH DASHRATH	M S Kotambkar
48	BHUSHAN KUMAR DHARMIK	Nitin Loutre
49	SHRADDHA M GONDANE	A K Singh

## Sponsored R & D Projects Completed

<b>Sponsored Research Projects approved to VNIT</b>							
	<b>Project Name</b>	<b>Co-ordinator</b>	<b>Dept.</b>	<b>Sponsoring Agency</b>	<b>Project Value</b>	<b>Sanction date</b>	<b>Duration (years)</b>
1	SMART Foundry 2020	A M Kuthe	Mechanical	DST	134,51,600	17/8/16	3 years
2	Development of digital dental restoration (DDR) system	R V Uddanwadikar	Mechanical	DST	41,52,000	30/3/2016	2 years
3	Development of composite coatings for high temperature tribological application	R V Dumpala	Mechanical	DST (SERB)	36,54,000	01/10/2016	3 years
4	Development of composite coatings for high temperature tribological application	R V Dumpala	Mechanical	DST (SERB)	36,54,000	01/10/2016	3 years
5	Online monitoring and characterisation of distortion in multi layer laser cladding process	T V K Gupta	Mechanical	DST	42,00,000	10-01-2017	3years
6	Development of fluid structure interaction(FSI) solver for cardio vascular disease: An Aneurism	Tushar Gohil	Mechanical	DST (SERB)	26,23,000	10-01-2017	3years
7	Response of hemispherical sandwich shell structures subjected to projectile impact	Gourav Tiwari	Mechanical	SERB	20,00,000	10-01-2017	3years
8	Bio-medical engineering and technology incubation sub centre VNIT in collaboration with IIT Powai	A M Kuthe	Mechanical	DST+RGSTC		2014-19	
9	Design Analysis and Optimization of 15mm Artillery Gun	V R Kalamkar	Mechanical	Gun Carriage Factory - Neus Numeric Pvt Limited	2475600	28.09.2017	
10	Development of Robot programming (demonstration): system for spray painting operation	Dr. S S Chiddarwar	Mechanical	DST		2013	4years
11	Estimation of human muscles characteristic	Dr. R. V. Uddanwadikar	Mechanical	DST		2013	4 years
12	Wear Estimation in the joint of mechanism using ANN	Dr. A. M. Kuthe	Mechanical	MHRD		2002	4 years
13	Crack detection in structural components using nonlinear frequency response functions, structure panel	Dr. A. Chatterjee	Mechanical	AR & DB		2009	3 years

14	Development & testing of customized joint replacement implant using layer manufacturing techniques	Dr. A. M. Kuthe	Mechanical	RGSTC		2009	4 years
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## Sponsored R & D Projects Ongoing

Sr No.	F Y	Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Order no. & Date	Total Amt of Project (In Lakhs Rs.)	Amt received in 2016-17(in words)
1		Dr. A. M. Kuthe	DST/RGSTC	Biomedical Engineering and Technology centre Incubation	NA	39	Thirty Nine Lakhs
2		Dr. A. M. Kuthe	DST	Smart Foundary 2020	NA	63.88	Sixty three lakhs eighty eight thousand
3		Dr. Rashmi Uddanwadiker	DST	Development of Digital Dental Restoration	NA	31	Thirty one lakhs
4		Dr. A. S. Dhoble, Dr. M. S. Kotambkar	Tyco (India) Pvt. Ltd. Nagpur	Performance enhancement of grinding mill	NA	1	One Lakh
5		Dr. Arun Singh	NRDMS-DST	Application of rate, state, temperature and pore pressure friction (RSTPF) model for rock slope stability and failure hazard assessment	NA	8.5	Eight lakh fifty thousand
6		Dr. Ravi Dumpala	DST (ECRA)	Development of Ni based composite coatings using electroless plating method for high temperature tribological applications	NA	23.81	twenty three lakhs eighty one thousand
7		Dr. Trushar Gohil	DST (ECRA)	Development of Fluid - Structure Interaction (FSI) Solver for Cardiovascular Disease: An Aneurysm	NA	13.35	thirteen lakh thirty five thousand
8		Dr. TVK Gupta	DST (ECRA)	Online Monitoring and Characterization of Distorsion in Multi Layer Laser Cladding Process	NA	22.1	twenty two lakhs ten thousand
9	2016	R V Uddanwadikar	Development of Digital Dental Restoration (DDR)System	Department of Science and Technology	NA	41.52	29
10		R V Dumpala	Development of composite coating for high temperature tribological application	DST(SERB)	NA 01.10.2016	36.54	

## **Research Publications as under SCOPUS**

Dr. A A Thakre

Dr. A B Andhare

Dr. A Chatterjee

Dr. A K Singh

Dr. A M Kuthe

Dr. A S Dhoble

Dr. D A Jolhe

Dr. D B Zodpe

Dr. H P Jawale

Dr. H T Thorat

Dr. J G Suryawanshi

Dr. K M Ashtankar

Dr. M S Kothambkar

Dr. Nitin Kumar Lautre

Dr. P M Padole

Dr. P V Kane

Dr. Mrs. Rashmi Uddanwadikar

Dr. Ravikumar Dumpala

Dr. S B Thombre

Dr. Ms. Shital Chiddarwar



Dr. T V K Gupta

Dr. V R Kalamkar

Dr. Y M Puri