

# RESUME

## Dr. Deepak P. Hujare

B.E. (Mechanical), M. Tech.(Machine Design)-VJTI Mumbai,  
Ph.D. (Mech Engg.) COEP Pune



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## Career Objective

To be a part of a well-motivated and aspiring team which can provide opportunities for an individual to grow along with the institution.

## Educational Qualifications

Sr. No.	Degree	Year	Institute	Board/University	Marks	Class
1	S.S.C.	1989	S.S.K.P. High School, Nagardeola	Pune	80.57	Distinction
2	D.M.E.	1992	Govt. Polytechnic Jalgaon	B.T.E. Bombay	67.36	First Class
3	B.E. Mechanical	1995	S.S.V.P.S.C.O.E. Dhule	N.M.U. Jalgaon	66.78	Distinction
4	M.Tech. - Machine Design	2006	V.J.T.I. Mumbai	Mumbai University	78.5	Distinction
5	Ph.D.- Mechanical	2018	C.O.E.P. Pune	S.P.P.U. Pune	--	Awarded in 2018

## Ph.D. Thesis

**Title:** “Vibration signature due to shaft misalignment”  
**Research Center:** College of Engineering Pune  
**Research Guide:** Dr. Madhuri G. Karnik. (Ph.D. IIT Kanpur)  
**University:** Savitribi Phule Pune University

### 1. International Journal:

1. "Design and analysis of tie-in connection system components for subsea laboratory", Keval K. Patil, D. P. Hujare, A. H. Purohit, IAETSD Journal for advanced research in applied sciences, volume 4, issue 2, JULY /2017, ISSN: 2394-8442

**Impact factor: 5.8**

2. "Crack detection in Shaft by Finite Element Analysis and Experimental Modal Analysis", Deepak P. Hujare, Nitesh R. Girase, Dr. Madhuri G. Karnik, European Journal of Advances in Engineering and Technology, 2016, 3(10): 1-7,ISSN: 2394-658X

**Impact factor: 4.126**

3. "Vibration responses of parallel misalignment in Al shaft rotor bearing system with rigid coupling",Deepak P. Hujare, Madhuri G. Karnik", Elsevier- Materials Today: Proceedings 5 (2018), 23863–23871, ISSN:2214-7853

**Impact factor: 0.97**

4. "Design and analysis of Door with stiffened plates", Pravin P. Hujare, Deepak P. Hujare, International Journal of Applied Engineering (IJAE 2011), 30-36, ISSN: 9734562

**Impact factor: 0.51**

5. "Thermo-mechanical analysis for skirt of pressure vessel using FEA approach", International journal of mechanical engineering (IJME 2012), volume: 2, 13-20, ISSN: 2319-2240

**Impact factor: 2.04**

6. "Experimental study of unbalance in shaft rotor system using vibration signature analysis", International journal of emerging engineering research and technology, volume 3, Issue 4, April 2015, 124-130, ISSN 2349-4395

7. "Noise and vibration analysis for source identification of three-cylinder diesel engine using FEA and experimental techniques", Vivek Varma, Deepak Hujare, Rajesh Askhedkar, International Journal of Scientific & Technology Research, Volume 8, Issue 09, September 2019-I.

**Impact factor: 0.31**

8. "Experimental Study of Parallel Misalignment in Shaft Rotor System using Vibration Signature Analysis", International Engineering Research Journal,2016, Page No 1431-1434, ISSN:2395-1621

9. "Investigation on indentation crater characteristics due to impact of different spherical sizes particles with constant kinetic energy on aluminium", Praveen Ingavle, Girish R.

Desale, Deepak Hujare, International Journal of Scientific & Technology Research (Accepted)

10. "Investigation on collision efficiency and indentation crater characteristics due to the impact of spherical shape mild steel particles at normal impact on different materials", Praveen Ingavle, Girish R. Desale, Deepak Hujare, Journal of Bio and Tribo Corrosion, Springer( Accepted)

## 2. International Conferences:

- "Design and analysis of high pressure door system", International conference at Swami Vivekanand Institute of research, Indore (MP, 2009).
- "Vibration responses of parallel misalignment in Al shaft rotor bearing system with rigid coupling", Elsevier International Conference on Advances in Materials and Manufacturing Applications (IconAMMA) at Amrita University Bangalore, 17-19 August 2017

## Post Graduate Projects Guided

Sr. No.	Year	Title of project	Name of student
1	2019	Study and Analysis of slurry erosion wear of Engineering material	Mr. Praveen S. Ingavale
2	2019	Noise and vibration analysis of Diesel Engine	Mr. Tamada Vivek Verma
3	2017	"Finite Element Analysis of Shaft-Rotor System under misalignment"	Mr. Shekhar S. Naik
4	2017	Design and Analysis of Tie-in connection system components for subsea laboratory	Mr. Keval K. Patil
5	2017	Vibration Analysis of Containerized Engine Testbed to avoid Failure of Damper	Miss. Eeha Kulkarni
6	2016	Analysis of crack in Shaft using Ansys	Mr. Nitesh R. Girase
7	2015	Diagnosis of unbalance in Shaft Rotor system using vibration Signature analysis	Mr. Santosh R. Algule
8	2013	Failure Analysis of Reactor Vessel used in Chemical Refinery Application	Mr. Sagar m. Sawant

## Research Funded Projects

- **Project title** : "Study and analysis of vibration response due to shaft Misalignment"
- **Funding agency** : B.C.U.D. , Savitribai Phule Pune University, Pune
- **Duration of research:** 2 years (April 2013-March 2015)
- **Project Details** :

In the project work, an experimental set up was designed and developed with provision for changing misalignment values, speed, diameter and length of shaft, loading, unbalance, coupling. The misalignment was set by using modern laser alignment tool and vibration responses were recorded by B&K vibration analyser and RT Pro vibration analysis software. The investigation and analysis of misalignment was carried out for the shaft rotor bearing system for misalignment.

## **Experience Summary :(Teaching- 22 yrs, Industrial- 03 yrs, Total- 25 years)**

### **1. Teaching Experience : (22 years)**

**A) Name of the Institute :** Maharashtra Institute of Technology, Pune.

**Duration :** 13 Years

**Period :** From : 28/07 /2007 onwards

**Present Designation :** Professor

**Job profile :** Taught following subjects and carried out experiments related to the subjects in college Lab.

- Advanced Mechanical Vibrations - M.E. Design Engg.
- Material Handling Equipment Design - M.E. Design Engg.
- Dynamics Of Machinery - B.E. Mechanical
- Machine Design-I - T.E. Mechanical
- TOM & Machine Design- II - T.E. Mech S/W
- Machine Design-II - T.E. Mechanical
- TOM & Machine Design- I - S.E.Mech S/W

**U.G.C. Approvals :1.Lecturer**

Ref. No. : CCO/App/237  
Dated :19/10/2007

**2.Assistant Professor**

Ref. No. : CCO/Approval (Camp)/243  
Dated : 17/10/2008

**3.Associate Professor**

Ref. No. : CCO/Approval (Camp)/243  
From: 01/07/2011 To:30/09/2019

**4. Professor (MITWPU)**

Ref. No. : MIT-WPU/Est./Appt.Order/ /2019  
Dated: 30/09/2019

**P.G. Teacher Recognition** : 1. Ref. No.BUTR/Engg/2281-51 Dated:12/09/2008  
2. Ref. No.BUTR/Engg/62/213 Dated:17/02/2014

**B) Name of the Institute :** S.S.V.P.S. B.S.D. College of Engineering, Dhule.

**Duration :** **9 Years**

**Period :** From : 25/08 /1998 onwards

**Designation :** Lecturer

**Job profile :** Taught following subjects and carried out experiments related to the subjects in college Lab.

i) Strength of Material

ii) Design of Machine Elements

iii) Transmission System Design

iv) Mechanical Vibration

v) Machine Drawing & Computer Graphics

vi) Manufacturing Process & Workshop practices

**U.G.C. Approved :** Lecturer

Ref. No. : N.M.U. / 18 / D -9 /803 /2000 &

Dated : 29/02/2000.

## **2. Industrial Experience: (3 years)**

**Name of the company :** **Kalyani Brakes Limited, Jalgaon.**

**Duration :** 3 Years (Approx.)

**Period :** 01/12 /1995 to 24/08/1998

**Designation :** Senior Engineer

**Job Profile :**

**A) Department : Machine Shop**

1. Exposure to general purpose machines like Lathe, Drilling, Milling .Setup and fine tuning of Special Purpose Machines.
2. Experience of precision and finishing operations like Gun drilling and honing which includes NC Gun drill and NC Honing machines.

3. Experience on Single piece flow Toyota manufacturing system of TMC line and Rotor Line.
4. Familiar with ISO 9000 and Quality assurance procedures.

**B) Department : Process Engineering**

1. Method tryout for development products.
  2. Study and analysis of rework and rejection by quality control techniques.
  3. Design and Assembly of jigs and fixtures.
  4. Tryout of jig and fixtures.
  5. Preparation of ISO documents like Tryout sheets, SQC reports, launch reports.
- Contributes for improvement & development of existing process.

### **Administrative Responsibilities Handled**

- Coordinator for newly established TATA Technology Visualization and Competency center of excellence.
- Coordinator of AICTE committee for MITWPU Faculty of Engineering and Technology from last 2 years.
- Coordinator of Infrastructure committee of MITWPU Faculty of Engineering and Technology from last 2 years.
- Lab-Incharge for Theory of machines and Mechanical vibration Laboratory- Development of test set up for DOM and Mechanical vibration subjects, and completely responsible for the functioning of Lab
- Coordinator - for reallocation/transfer of Laboratories/Class rooms/ Faculty Rooms/ Seminar hall/ Drawing Hall/Computer centers etc. of school of Mechanical Engg department
- Coordinator for MIT –Mahindra & Mahindra MOU
- Coordinator Project based Learning for Mechanical Engineering Department
- In charge for NBA criterion VI.
- Faculty advisor for the BAHA Team (2009) and received the 9th rank all over INDIA.
- Established the TOM and Mechanical vibration Laboratory and Seminar hall for PG Design Engineering
- Worked as member of “Records & Information System” for the mechanical department
- Worked on various academic and non-academic committees at college level
- UG/PG Academic Project Review committee member
- Working as a Sr. Supervisor for SPPU examinations from last 8 years.
- Coordinator for Mechanical Engineering Department development Fund Account.

## Events Organized/Contributed

- Co-ordinator for Mahindra & Mahindra annual Technical event “ Auto Quotient” for various engineering colleges in Pune city for almost 6 years
- Arranged the Mahindra & Mahindra Ltd. Technical competition event “ Tech Rumble” for 3 years.
- Active member and liasoning officer for our prestigious events Bhartiya Chhatra sansad & National Teacher Congress from last 5 years.

## Major Research Projects Handled in coordination with various Industries

Project 1: Failure Analysis of Reactor Vessel used in Chemical Refinery Application  
(At: Godrej Limited, Mumbai)

Project 2: Vibration Analysis of Containerized Engine Test bed to avoid Failure of Damper  
(At: Kirloskar Oil Engines Limited, Pune)

Project 3: Design and Analysis of Tie-in connection system components for subsea laboratory  
(At: Aker’s Solutions Limited Pune)

Project 4: Noise and vibration analysis of Diesel Engine  
(At: Kirloskar Oil Engines Limited, Pune)

Project 5: Study and Analysis of slurry erosion wear of engineering material  
(At: National Chemical Laboratory, Pune)

## Consultancy

1. Research Project: from Alfa Laval Limited

Title : Experimental modal analysis of Engine Frame

2. Post graduate Project:

Title: Wear Testing Analysis of brake liner Friction material.

3. Project by Ideamap Limited:

Title: Noise analysis of silencer

4. Training and Assessment of Engineers of Mahindra Heavy Engines Limited, Chakan Pune

5. Conducted UG/PG practical related to Mechanical vibrations and noise analysis for various colleges of SPPU Pune.

## Special Achievement in Current Academic Year

- Secured Toppers position at national level with 83% marks for 8 week NPTEL Course on “Vibrations and structural dynamics”.

## Faculty Development Programme / Courses attended in current year:

1. Completed 8 Week NPTEL course on “Vibrations and structural dynamics” from August 2019-October 2019, and scored 83% and secured first rank amongst all the candidates who appeared for this course at national level.
2. Participated in 2 days faculty development workshop on "Advances in Measurement and Analysis of Vibration and Noise" from 9<sup>th</sup> January-10<sup>th</sup> January 2020 at VIIT Pune.
3. Participated in international spiritual retreat “ Designing Destiny through Heartfulness”, From 7<sup>th</sup> February to 9<sup>th</sup> February 2020 at Kanha Shanti Vanam, Hyderabad.
4. Participated in one week TEQUIP sponsored online FDP on “Computational tools and Techniques: MATLAB, Ansys” from 27/04/2020 to 01/05/2020.
5. Participated in one week TEQUIP sponsored online FDP on “Computational tools and Techniques: MATLAB, Ansys” from 27/04/2020 to 01/05/2020.
6. Participated in one week online FDP on “OBE- A step towards excellence” from 11<sup>th</sup> May 2020- 14<sup>th</sup> May 2020.

## Workshops/conferences/training programmes attended till previous year

1. Participated in three week workshop on “Recent trends in computer visual aids for effective teaching” during the period 22/10/2001 to 9/11/2001 at SSVPS COE Dhule.
2. Participated in two week workshop on “Condition monitoring of plant equipments” during the period 23/12/2002 to 4/1/2003 at NIT Ahmedabad (Gujarat).
3. Participated in one week workshop on “Theory and applications of vibrations” from 15/12/2003 to 19/12/2003 at IIT Bombay.
4. Participated in two week workshop on “AutoCAD 2000 and its applications” from 16/06/2003 to 28/06/2003 at SSVPS COE Dhule.
5. Attended two days training programme on “High Impact Presentation Skills (Dale Carnegie Training)” from 23/06/2008 to 24/06/2008 conducted by WIPRO at MIT Pune
6. Participated in five days workshop on “Mission 10X” from 23/06/2008 to 27/06/2008 at MIT Pune.



7. Attended one day workshop on “Detailing and implementation of syllabus for subject Theory of machines and Mechanisms-I at SE Mechanical” on 7/02/2009 at Army Institute of Technology, Pune.
8. Attended two days workshop on on “Building a winning team for BAJA 2009” from 11/10/2008 to 12/10/2008 at A.D. Patel Institute of Technology, Anand (Gujarat)
9. Attended one day training programme on “Enabling FEA into Curriculum” on 12/10/2009 conducted by Altair at COEP Pune.
10. Attended two days workshop on “Validating Products for real world usage” from 22/09/2009 to 24/09/2009 at Mahindra & Mahindra Development Center, Nashik
11. Attended one day training programme on “Finite element analysis using Hyperworks” from 28/07/2010 to 30/07/2010 at SCOE Pune.
12. Attended two days workshop on “Vibration Diagnostics & Condition Monitoring Of Machine Elements 2011(ViDCoME 2011)” from 7/10/2011 to 8/10/2011 at MIT College of Engineering Pune.
13. Attended one day training programme on “MSC Nastran, Patran and ADAMS Level-I” on 29/03/2012 at MIT Pune.
14. Attended one day national level workshop on “Recent trends in Industrial Tribology” on 20/03/2013 at MIT Pune.
15. Participated in three days workshop on “Advances in Analysis, Measurement and control of Noise, Vibration and Harness” from 19/06/2013-21/06/2013 at Cummins COE Pune.
16. Attended one day workshop on “Revised syllabus implementation of S.E. Mechanical, Mechanical sandwich and Automobile Engg (2012 pattern) “ 25/06/2013 at MIT Pune.
17. Attended two days workshop on “Introduction to Noise and Vibration Control”, from 16/09/2013 to 17/09/2013 at COEP Pune.
18. Participated in three days workshop on “Fault Diagnosis and its condition monitoring using FFT and DWT techniques”, from 21/10/2013 to 23/10/2013 at SKN COE Vadgaon Pune.
19. Participated in three days workshop on “Design of Experiments (DOE) and Taguchi Methods”, from 19/01/2015 to 21/01/2015 at VIT Pune.
20. Attended one day workshop on “Syllabus revision of Dynamics of Machinery (BE Mechanical 2012 course) pattern on 26/03/2015 at Cummins COE Pune.
21. Participated in three days workshop on “Advances in Analysis , Measurement & control of noise, vibration & Harshness”, from 10-06-2015 to 12-06-2015 at Cummins COE Pune.
22. Attended one day workshop on “Syllabus implementation of Dynamics of Machinery (BE Mechanical 2012 course) pattern on 10/07/2015 at Cummins COE Pune.

23. Attended two days workshop on “Automotive NVH”, from 25-02-2016 to 26-02-2016 at AISSM Pune.
24. Attended one day certified training programme on “Design for Manufacturing (DFM) and Tolerance stack up Analysis” on 5-1-2016 at Geometric Pune.
25. Participated in three days Elsevier sponsored International conference on “Advances in material and manufacturing Applications” on 17/08/2017 to 19/08/2017 at Amrita Vishwa Vidyapeetham University, Bangaluru.

## **Academic Projects**

### **1. M.Tech. (Machine Design) :**

- **Project Title** : “Finite element analysis of multi utility vehicle chassis”
- **Company** : Kinetic communications limited, Chinchwad, Pune.
- **Project Details** :

Finite element model of the chassis assembly of one of the multi utility vehicle (MUV) is developed using computer aided design software (Pro/Engineer) and CAE software (Hyper mesh 7.0). The Finite element analysis is carried out to determine the von mises stresses in the existing chassis assembly for the given loading conditions using ANSYS. Further the analysis is carried out for safe design and weight reduction by geometrical modification of the model. The results for the safe final dimensions of chassis frame are then presented in the report for which the von mises stresses are found to be well with in yield point stress.

### **2. B.E.(Mech.)**

- **Project Title** : Automation of Sand Filter Back Flushing System.
- **Company** : At Jain Irrigation Systems Limited, Jalgaon.

Design and development of pilot solenoid valve for the sand filter and automation for sand filter was carried out. Cost saving back flushing system for sand filter was developed.

## **Professional Memberships**

1. Member of Society of automotive engineers (S.A.E)
2. Member of Indian Society for Technical Education.(I.S.T.E.)
3. Member of youth hostel association of India ( Y.H.A.I.)

## **Academic Achievements**

1. Qualified with Second rank in class at M.Tech. (Machine design) in VJTI, Mumbai.
2. Throughout First rank holder in the school.



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Time: 9:00 AM to 10:30 AM

AT THE AUSPICIOUS HANDS OF

 **CHIEF GUEST** 

**MR. SHREEKANTH MOORTHY**

Chief Information officer & Global VP-PLM, Tata Technologies Ltd., Pune.

 **PATRONS** 

**PROF. PRAKASH JOSHI**

Founder, Joint Managing Trustee,  
MAER'S MIT Pune

**RAHUL V. KARAD**

Executive President,  
MIT-WPU, Pune

 **COORDINATORS** 

**MR. PUSHKRAJ KAULGUD**

Global Director, EESS COE,  
Tata Technologies Ltd., Pune.

**PROF. DR. SANDIP CHAVAN**

HOS, School of Mech Engg,  
MIT-WPU, Pune

**PROF. DR. DEEPAK HUJARE**

Coordinator, TVC,  
MIT-WPU, Pune

**PROF. GANESH BORIKAR**

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MANAJI NAGAR, OFF SINHGAD ROAD  
NARHE BK PUNE  
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with a consolidated score of **83** %

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Total number of candidates certified in this course: 92

Aug-Oct 2019  
(8 week course)

A. Goswami

Prof. Adrijit Goswami  
Dean, Continuing Education & NPTEL Coordinator  
IIT Kharagpur



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