

Name of Teaching Staff : Dr. Vinayak H. Khatawate  
Designation : Associate Professor  
Department : Mechanical Engineering  
Date of Joining the Institution : 02.07.2018



Qualifications with Class / Grade :  
PhD Mechanical Engineering, Veermata Jijabai Technological Institute (VJTI) Mumbai, 2017  
M.E. Mechanical Engineering with Machine Design, First Class with Distinction 74%, SPCE Andheri, Mumbai University, 2006.  
B.E Mechanical Engineering, First class with Distinction, 77%, Karnataka University Dharwad, 1997

Total Experience in Years : Teaching: 20 years  
1.Worked as an Assistant professor in the department of Mechanical Engineering at Pillai College of Engineering, New-Panvel, Navimumbai from August-2006 to June-2018.  
2.Worked as a lecturer in Agnel Polytechnic, Vashi, Navimumbai from Sept 1998 to July 2006.  
Industry: 01 year  
Worked as an Asst. manager in “SUNIL ENGINEERING” at Hubli from Aug-1997 to Sept-1998

Research :

*Papers Published:*

**International: ---**

- 1) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy, “Analysis of stress and strain concentration factors on notched plate beyond yield point of the material”, Australian Journal of Mechanical Engineering, 2017, Vol., pp.1-14. (Taylor and Francis Publishers).
- 2) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy,

“Estimation of the Effective Notch Root Stresses and Strains for Plate with Opposite U-shaped Notches by Nonlinear Analysis”, International Journal of Design Engineering, 2016, Vol.6, No.4, pp.326-350. (INDERSCIENCE Publishers).

- 3) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy, “Stress and strain concentration factors for flat plate with opposite side U-shaped notches under tension”, International Journal of Design Engineering, 2016, Vol.6, No.3, pp.173-195. (INDERSCIENCE Publishers).
- 4) Bhavesh Pasi, Vinayak H. Khatawate “Structural Analysis of Inflatable Cylinder by using ABAQUS”, Journal of Basic and Applied Research International, Vol.16, Issue-2, Feb-2016, pp.109-115.
- 5) Bhavesh Pasi, Vinayak H. Khatawate " Buckling Analysis of Inflatable Cylinder by using Experimental Setup", International Journal of Advanced Engineering Research and Applications (IJAERA), Vol.1, Issue-8, Dec-2015, pp.315-319.
- 6) Abhijeet Rane, Gajendra V. Patil, Gajanan Thokal & Vinayak H. Khatawate “Design and Optimization of Electrostatic Precipitator using Finite Element analysis Tool”. International Journal of Mechanical Engineering & Technology (IJMET), Volume 5, Issue 1, January 2014, pp.90-97.
- 7) Manoj Nikam, Gajendra V. Patil, Vinayak H. Khatawate “Estimation of stress intensity factor (sif) on crack component by using finite element analysis” International Journal of Mechanical Engineering & Technology (IJMET), Volume 5, Issue 1, January 2014.
- 8) Mukund Kavekar, Vinayak H. Khatawate & Gajendra V. Patil “Weight Reduction of Pressure Vessel using FRP Composite Material”, International Journal of Mechanical Engineering and Technology( IJERA), Vol.4, Issue-4, July-Aug-13. pp.300-310.
- 9) Gautam Ghedmal, Vinayak H. Khatawate “Productivity Improvement in Automated Material Handling System of Liquor Manufacturing Plant” International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622, Vol. 3, Issue-4, Jul-Aug-2013, pp.2530-2537.
- 10) Swati Chougule, Vinayak H. Khatawate “Piston Strength Analysis piston Using FEM” International Journal of Engineering and Research Applications (IJERA), ISSN:2248-9622, Vol.3, Issue2, March-April 2013, pp.1724-1731.

- 11) Momin Muhammad, Vinayak H. Khatawate “Optimization Of Crankshaft Using Strength Analysis”, International Journal of Engineering and Research Applications ( IJERA), ISSN:2248-9622, Vol.3,Issue3, May-June 2013, pp.252-258.
- 12) Giridhar Chavan, Vinayak H. Khatawate “Artificial Intalligence System For Remotely Controlled Wheeled vehicle System For Disabled Person”, International Journal of Engineering and Research Applications (IJERA), ISSN:2248-9622, Vol.2, Issue4, June-July 2012, pp.738-741.
- 13) Amreen Shaikh, Vinayak H. Khatawate “Design and Energy Optimization of Z-Type Chain Conveyor”, International Journal of Engineering and Research Applications( IJERA),ISSN:2248-9622,Vol.2,Issue4,Jul-August2012,pp.1421-1424.

**National: ---**

*Papers Presented in Conferences:*

**Workshop/ STTP/FDP Attended:**

1. Attended one week AICTE-QIP sponsored short term course on “Fundamentals and Applications of Fracture Mechanics” organized by Department of Mechanical Engineering, Veermata Jijabai Technological Institute (VJTI) Mumbai from January 22nd to 27th 2018.
2. Attended INUP (Indian Nanoelectronics users program) Familiarization workshop on “Nanofabrication Technologies” conducted by Indian Institute of Technology Bombay from 29th Nov to 01st Dec-2017.
3. Attended Two week ISTE approved workshop on “Engineering Mechanics” conducted by Indian Institute of Technology Bombay from 26th Nov to 06th Dec-2013.
4. Attended Two week ISTE approved workshop on “Engineering Mechanics” conducted by Indian Institute of Technology Bombay from 26th Nov to 06th Dec-2013.
5. Attended Two week ISTE approved workshop on “Introduction to Research Methodologies” conducted by Indian Institute of Technology Bombay from 25th June to 04th July-2012.
6. Attended Two week ISTE approved workshop on “Computational Fluid Dynamics” conducted by Indian

- Institute of Technology Bombay from 12th to 06th June-2012.
7. Attended Two days ISTE approved workshop on “Writing Effective conference Papers” conducted by Indian Institute of Technology Bombay on 18th and 19th Feb-2012.
  8. Attended Two week ISTE approved workshop on “Heat Transfer” conducted by Indian Institute of Technology Bombay from 29th Nov to 10th Dec-2011.
  9. Attended One week ISTE approved, STTP on “Research Methodology, Mathematical Modelling and Research Based Industry Institute Interaction Activities In Engineering and Technology” conducted by Shivajirao S. Jondale College Of Engineering Dombivli, Mumbai from 19th to 23rd July-2011.
  10. Attended Two week ISTE approved workshop on “Thermodynamics” conducted by Indian Institute of Technology Bombay from 14th June to 24th June-2011.
  11. Attended Two week ISTE approved STTP on “Finite Element Analysis using NASTRAN-PATRAN software” conducted by Pillai’s Institute of Information Technology NewPanvel from 4th to 15th Jan-2011.
  12. Attended one week ISTE approved workshop on “Computer Aided design and drafting Tools” conducted by Agnel Polytechnic Vashi, from 15th to 19th Feb-2011.
  13. Attended “Workshop on Mechatronics” at Fr.C.R.I.T Vashi Navimumbai from Oct 28- 30, 2004.
  14. Attended training on “Pro-E” at Rolta Mumbai from 03rd to 06th August 05.

#### **Doctoral Consortium /Colloquium/ Poster Presentation:**

- 1) Participated in **Poster Presentation** Organized by Veermata Jijabai Technological Institute (VJTI), Mumbai on 29<sup>th</sup> Feb 2012.
- 2) Participated in **Doctoral Consortium and Poster Presentation** Organized by Veermata Jijabai Technological Institute (VJTI), Mumbai on 16<sup>th</sup> March 2012.
- 3) Participated in a National level **Doctoral Consortium and Poster Presentation** Organized by Veermata Jijabai Technological Institute (VJTI), Mumbai on 11<sup>th</sup> January 2013.

- 4) Participated in TEQIP-II sponsored **Phd Colloquium** for Research Scholars Organized by Veermata Jijabai Technological Institute (VJTI), Mumbai on 15<sup>th</sup> and 16<sup>th</sup> April- 2013.
- 5) Participated in **Poster Presentation** Organized by Veermata Jijabai Technological Institute (VJTI), Mumbai on 5<sup>th</sup> Apr 2016.

**FDP/Workshop/ STTP conducted:**

- 1) Co-ordinator for one week FDP on “**Digital Prototyping for Product Design**” from 06<sup>th</sup> to 10<sup>th</sup> July 2015 conducted jointly by Pillai Institute of Information Technology, Newpanvel and Fr.C Rodrigues Institute of Technology, Vashi in association with AUTODESK.

**Invited/ Guest Lectures:**

- 1) Delivered Guest lecture on “**Design of Screw Press**” to Mechanical Engineering Students at Saraswati college of Engineering, Kharghar, Mumbai on 04<sup>th</sup> April-2014.
- 2) Delivered Guest lecture on “**Deflection of Beams**” to Mechanical Engineering Students at Saraswati college of Engineering, Kharghar, Mumbai on 07<sup>th</sup> Oct-2013.

**International: ---**

- 1) Avinash Shaligram, Vinayak H Khatawate, Pruthviraj Rahane, “Bridging the Gap between Knowledge Imparted in UG Curriculum of Mechanical/Automobile Engineering and Industry Work Environment”, Fifth International Conference on Transformations in Engineering Education (ICTIEE 2018) organized by Indo Universal Collaboration for Engineering Education at Madurai 8-9th Jan-2018.
- 2) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy, “Validation of stress concentration factor and estimation of local stresses beyond yield point of the material for notched specimens”, International Conference on Advances in Thermal systems, Materials and Design Engineering (ATSMDE 2017) organized by Veermata Jijabai Technological Institute (VJTI) Mumbai, 21-22nd Dec-2017.
- 3) Avinash Shaligram, Vinayak H Khatawate, Divya Padmanabhan, “Reaffirming Core Technical Knowledge of Fresh Mechanical Engineers: Need of the Hour”, Fourth International Conference on Transformations in Engineering Education (ICTIEE 2017) organized by Indo Universal Collaboration for Engineering Education and

Manipal University Jaipur, 11-12th Jan-2017.

- 4) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy, "Numerical Validation of Theoretical Stress Concentration Factor and Investigation of Inelastic Stresses for Notched Specimens", International conference on current research topics in Power, Nuclear, Fuel and Energy (PNFE-2016), during 25<sup>th</sup> to 27<sup>th</sup> October-2016 at St.Peter's Engineering College, Hyderabad.
- 5) Aditya A. Shinde, Vinakay H. Khatawate, S.N. Kadam, GopikaVinod, "PSA modeling of multi-unit nuclear power plant", International conference on current research topics in Power Nuclear and Fuel Energy (PNFE-2016), during 25<sup>th</sup> to 27<sup>th</sup> October-2016 at St. Peter's Engineering College, Hyderabad.
- 6) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy, "Validation of Theoretical Stress Concentration Factor for Varying Notched Geometries Using FEA", Proceedings of International Congress on Computational Mechanics and Simulation (ICCMS-2016), IIT Bombay, Mumbai, June 27- July 1-2016, pp.1248-1251.
- 7) Vinayak H. Khatawate, M.A.Dharap, R.I.K.Moorthy, "Estimation Of Local Stresses And Strains For Notched Geometries Using Non-Linear Analysis", Proceedings of International Congress on Computational Mechanics and Simulation (ICCMS-2016), IIT Bombay, Mumbai, June 27- July 1-2016, pp.881-884.

PhD Guide? Give field & : Field: ----  
University : University: ----  
PhDs / Projects Guided : PhDs : ----  
Projects at Masters level: 02 Guided  
Books Published / IPRs / Patents :  
Professional Memberships :

Consultancy Activities : --  
Awards : --  
Grants fetched :  
Interaction with : --  
Professional Institutions :

1) ISTE (Indian Society of Technical Education)  
Life membership. Membership  
No: LM-52590 from 01<sup>st</sup> May 2007.

2) IIIE (Indian Institution of Industrial Engineering,  
Navimumbai), Life membership. Membership No:  
SMIIE 10625 (21) from 30<sup>th</sup> Sept-2014.