



Akhil Bharatiya Maratha Shikshan Parishad's  
**Anantrao Pawar College of Engineering & Research**

Sr. No. 103, Parvati, Pune - 411 009.  
Tel.: 020-24218901/8959 Tele Fax: 020-24213929  
Web.: <http://www.abmspcoerpune.org>  
Email: [abmspcoe@yahoo.com](mailto:abmspcoe@yahoo.com)



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Savitribai Phule Pune University Identification No. PU/PN/Engg. /441/2012, DTE CODE:- EN 6794

## **Research and Development Profile**



**Prof. (Dr.) Kashinath H. Munde**

**Experience: 19 Years**

**Email : [kashinath.munde@abmspcoerpune.org](mailto:kashinath.munde@abmspcoerpune.org)**

**Contact No.: + 91 9890821782**

**Department of Mechanical Engineering**

Prof. (Dr.) K. H. Munde has completed his Ph.D. in Vibration Analysis (Mechanical Engineering) from PREMIT, Badnera, Amaravati (affiliated to Sant Gadge Baba Amravati University, Amravati). His areas of interest are Mechanical Design and Vibration Analysis. He is involved with the course of Dynamics of Machinery, Kinematics of Machinery, Solid Mechanics, Systems in Mechanical Engineering and Engineering Graphics. He has various institutional responsibilities as Research and Development Co-ordinator, Incubation Centre Co-ordinator, PG Co-ordinator (ME, Department of Mechanical Engineering) and Worked at university level on various committees for developing policies to final implementation at various stages, Examination work and Syllabus development.

### **PATENTS:**

1. Title of the Invention: **“A COMPOSITION METHOD OF AN AL-SIC METAL MATRIX COMPOSITE MATERIAL”**

Application No. 202221023897 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: C22C0032000000, G01N0003560000, G01N0003080000, G01N0003060000, G01N0003420000

2. Title of the Invention: **“A METHOD FOR STRUCTURAL ANALYSIS AND WEIGHT OPTIMIZATION OF INTEGRATED STEERING KNUCKLE”**

Application No. 202221023896A, Publication Date: 27/05/2022, INDIA



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The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: G06F0030230000, G06F0030000000, G06F0030170000,  
G06F0030200000, B62D0007180000

3. Title of the Invention: **“A COMPOSITION METHOD OF AN AL-SIC METAL MATRIX COMPOSITE MATERIAL”**

Application No. 202221023897 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: C22C0032000000, G01N0003560000, G01N0003080000,  
G01N0003060000, G01N0003420000

4. Title of the Invention: **“A METHOD FOR FRONT AXLE DESIGN WITH DIFFERENT MATERIALS”**

Application No 202221023898 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: G06F0030230000, G06F0030170000, G06F0119060000,  
G06F0111100000, G01M0005000000

5. Title of the Invention: **“A METHOD TO REDUCE THE NUMBER OF SPOT WELDS FOR A PASSENGER CAR WHEEL”**

Application No. 202221023899 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: C22C0038280000, G01N0003000000, B23K0031120000,  
B29C0065000000, C22C0038060000

6. Title of the Invention: **“A DESIGN OPTIMIZATION AND VALIDATION FOR A VACUUM CHAMBER”**

Application No. 202221023900 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: G06F0030000000, G06F0030150000, G06F0030170000,  
G06F0030200000, G06F0030367000

7. Title of the Invention: **“A METHOD FOR DESIGN OF A PASSIVE SUSPENSION SYSTEM BY USING GA/ANN”**

Application No. 202221023901 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: G06F0030130000, G06F0030360000, B60G0017015000,  
A63C0017000000, G06F0030200000



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8. Title of the Invention: **“A METHOD AND FORMULATION OF AGAVE FIBRE REINFORCED COMPOSITES”**

Application No. 202221023903 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: C08J0005040000, B82Y0030000000, B29C0043000000, B29K0105160000, A61K0036880000

9. Title of the Invention: **“A METHOD AND FORMULATION OF JUTE FIBER COMPOSITE AT DIFFERENT PLY ORIENTATIONS”**

Application No. 202221023904 A, Publication Date: 27/05/2022, INDIA

The Patent Office Journal No. 21/2022 Dated 27/05/2022

International classification: C08J0005040000, B29C0070080000, B29K0311100000, B29C0043000000, B32B0009040000

**PUBLICATIONS (Research Papers):**

**Link of Google Scholar:**

<https://scholar.google.co.in/citations?user=f631j7gAAAAJ&hl=en>

**Link of Research Gate:**

[https://www.researchgate.net/profile/Kashinath\\_Munde2](https://www.researchgate.net/profile/Kashinath_Munde2)

**International Journal Publication:**

1. M. P. Dale ; K. H. Munde ; R. M. Bodade ; Natasha Kapoor, “ Information System View of Biometric Analysis” 2006 IEEE ICMIT, IEEE Xplore Digital Library. (<https://ieeexplore.ieee.org/document/4037162/authors#authors>).
2. Mr. K H Munde , Dr. S B Thakre “A Review on Bearing Fault Detection by Vibration Signature Analysis”, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 4, Issue 6, June 2015
3. Mr. K H Munde , Dr. S B Thakre, “An Improved Approach on Ball Bearing Characteristic Frequencies” International Journal of Research in Engineering, Science and Technologies – Mechanical Engineering, Vol. 1, No. 3, August 2015
4. Pravin Z. Lokhande, Kashinath H. Munde, Ganesh E., “Fem Analysis of Deep Groove Ball Bearings with Various Defects”, International Engineering Research Journal (IERJ) Special Issue 2 Page 2148-2154, 2015, ISSN 2395-1621
5. Prof. K H Munde, Kundan Kumar “Condition Monitoring Vibration Analysis of Default Shaft” International Journal of Science, Engineering and Technology Research, 2015



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---

6. Mr. V A Shedge, Prof. K H Munde, "Fatigue Analysis Correlation and Failure Analysis of Optimized Connecting Rod" IPASJ International Journal of Mechanical Engineering (IJME), Volume 3, Issue 5, May 2015.
7. Vaibhav G. Patange, K. H. Munde, "Design & Development of Vibration Test Rig to Study Bolt Preload Decay in Flanged Threaded Fasteners" International Engineering Research Journal (IERJ) Special Issue 2 Page 424-429, 2015, ISSN 2395-1621
8. A. A. Sayyad, Prof. K. H. Munde, "Modification of Root Fillet Profile for Optimum Gear Life", International Engineering Research Journal (IERJ) Special Issue 2 Page 840-845, 2015, ISSN 2395-1621
9. Sharad U. Jagtap, Kashinath H. Munde, Ganesh E. Kondhalkar, "Vibration Analysis of Defective Rolling Contact Bearings" International Engineering Research Journal (IERJ) Special Issue 2 Page 5192-5196, 2015, ISSN 2395-1621
10. V.A. Shedge, C. Prof. K. H. Munde, Prof. G.E. Kondhalkar, "Optimization of Connecting Rod on the basis of Static & Fatigue Analysis" International Engineering Research Journal (IERJ) Special Issue 2 Page 5430-5434, 2015, ISSN 2395-1621
11. P. S. Gorane, Prof. K. H. Munde, "Use of optimization techniques And finite element analysis of connecting rod" International Engineering Research Journal (IERJ) Special Issue 2 Page 5849-5852, 2015, ISSN 2395-1621
12. Mr. Uday Thakare , Prof. K. H. Munde, "Cockpit Parts Projection Optimization in Head Impact area as per ECE-R21 & IS 15223 Regulation" International Engineering Research Journal Page No 1009-1013, 2015
13. M H Thakare, K H Munde, "Defect Analysis of plastic Utility Bin by using Mold Flow Analysis" International Engineering Research Journal, Page No 1862-1867, 2015
14. Vishwanath Patil, K H Munde, "Stress Analysis and Weight Reduction of Roller Of Roller Conveyor" International Engineering Research Journal, Page No 776-779, 2015
15. Pravin R Ahire, KH Munde, " Design and analysis of front axle for heavy commercial vehicle" International Journal Of Engineering And Computer Science, Volume-5, Issue-7, July2016, ISSN: 2319-7242.
16. Mr. K H Munde, Mr. Pradeep Chaudhari, "Review of Design for Protective Structure of Operator Cabin Against Roll Over [ROPS] & Falling Object [FOPS] for Construction Equipments", International Journal of Innovative Research in Science, Engineering and Technology, Vol. 1, No. 7, March 2016
17. Vishwanath Patil, KH Munde, "Stress Analysis and Weight Reduction of Roller Of Roller Conveyor" International Research Journal of Engineering and Technology (IRJET) Volume: 03 Issue: 08 | Aug-2016.
18. K H Munde, Rakesh R Pandri, Nikhil B Gawari, Nikhil D Gaikwad, Abhaysinh V Rajebhosale, "Vibration Analysis of Roto Dynamic Model: Foundation", International



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Journal of Engineering Science and Computing, Volume 6 Issue No., May 2016, ISSN 2321 3361, DOI 10.4010/2016.1342

19. Ms. Nileshta Patil, Mrs. Sayli M.Sable, Mr. Kashinath Munde, “Static Structural Analysis Of Knuckle Joint” International Journal of Advanced Technology in Engineering and Sciences, Vol. No. 4, Issue No. 12, December 2016, ISSN 2348-7550.
20. Gnaesh D Shinde , K H Munde, “Fatigue Analysis of Epoxy Composite Material Reinforcement on Propeller Shaft”, International Journal of Research in Engineering, Science and Technologies (IJRESTs), Vol.: 02 No.: 07 February 2017 ISSN 2454-5392
21. Ishwar Botre, Bipin Birajdar, Parag Thakare, Kashinath Munde, “Review and Modeling of Aluminium Can Recycling System Using Pneumatic System” International Research Journal of Engineering and Technology (IRJET), Volume: 04 Issue: 05 | May -2017.
22. Ms. Kamal M. Dalvi, Prof. K.H. Munde, Prof. S.P. Chaphalkar, “Strength Analysis of Hybrid Joint by FEA”, International Conference on Ideas, Impact and Innovation in Mechanical Engineering, Volume: 5 Issue: 6, June 2017, ISSN: 2321-8169
23. Ms. Nileshta U. Patil\*, Mrs. Rupali S. Sewane, Mr. Kashinath H. Munde, “Optimization of Knuckle Joint by using FEA”, International Conference on Ideas, Impact and Innovation in Mechanical Engineering, Volume: 5 Issue: 6, June 2017, ISSN: 2321-8169
24. Mr. Dnyaneshwar Bagde, Dr. K. H. Munde, Mr. Ashish Pawar “Design and Optimization of Process Parameter Causing Crack Defect in Draw Component of Sheet Metal Forming By Using FEA” IJRMPS | Volume 5, Issue 6, 2017, [ISSN: 2349-7300]
25. Mr.Suyog R. Patil, Mr.Kashinath H. Munde, “FEA And Experimental Investigation of Deep Draw Component Using Design of Experiment (DOE)”, IJSART - Volume 3 Issue 9 – September 2017, ISSN [Online]: 2395-1052
26. Sagar B. Chavan, K. H. Munde, G. E. Kondhalkar, “Structural Behaviour of Fillet Weld Joint for Bimetallic Curved Plate using Finite Analysis (FEA)”, IJSART - Volume 3 Issue 9 – September 2017, ISSN [Online]: 2395-1052
27. Kishor Gheware, K. H. Munde, G. E. Kondhalkar, “ Static Structural Analysis & Optimization of Concept Automotive A-arm”, IJSART - Volume 3 Issue 9 –September 2017, ISSN [Online]: 2395-1052
28. Mr. K H Munde, “Experimental Analysis Of Damping Capacity And Effect Of Thermal Change On Shock Absorber” International Journal of Research Publications in Engineering & Technology, IJPET, Volume-3, Issue- 9, Sep. -2017 ISSN No-2454-7875, Impact Factor- 5.765.
29. Vijay Kalantre, K. H. Munde, Ashish Pawar, “Topology Optimization of Driver cabin Mounting Bracket of Heavy Commercial Vehicle”, July 2018 IJSDR | Volume 3, Issue 7, ISSN: 2455-2631.



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---

30. V Kalantre, KH Munde, A Pawar, "Topology Optimization of Front Leaf Spring Mounting Bracket", International Journal of Scientific Development and Research (IJS DR), July 2018 IJS DR | Volume 3, Issue 7, ISSN: 2455-2631
31. Madhavi N. Wagh, Kashinath Munde, "Design and Analysis of River Water Cleaning Machine" July 2018 IJS DR | Volume 3, Issue 7, ISSN: 2455-2631.
32. K H Munde, MN Wagh , " Design and Analysis of River Water Skimmer" International Journal of Recent Trends in Engineering & Research (IJRTER), Volume 04, Issue 07; July - 2018 [ISSN: 2455-1457]
33. Abhijeet Rajendra Pimple , Prof. G.E.Kondhalkar , Prof. K.H.Munde , Mr. A.R.Pawar "Fea Based Static Structural Analysis Of Corroded Expansion Bellow Based On Asme And Rcb 8 Code" International Journal of Science & Engineering Development Research, IJS DR, Vol.3, Issue 7, July-2018, ISSN:2455-2631.
34. K H Munde, "Thermal Fatigue FE Analysis of Brake Disc under Different Parameters" International Journal of Research in Engineering, Science and Technologies (IJRESTs), Vol.: 03 No.: 01 February 2018
35. K H Munde, M P Mestry, "Pre stressed modal FE Analysis of bolted joint", International Journal of Recent Trends in Engineering & Research (IJRTER), Volume 04, Issue 01; January - 2018 [ISSN: 2455-1457]
36. Mayur Kutwal, Dr K H Munde, Swapnil Pawar, "Correlation Kano's Model with Phases in Product Design and Development", IJRAR, Vol. 5, Issue 3, June-2018, [ISSN-2349-5138].
37. Mayur Kutwal, Dr K H Munde, Swapnil Pawar, "Re-Design and Development of Submerged Arc Welding Head for Minimizing Weight and size", IJRAR, Vol. 5, Issue 3, July-2018, [ISSN-2349-5138].
38. Ms. V M Wagh Dr K H Munde & Mr. A R Pawar, "Stress Analysis of crank Hook with Different Cross Section using Finite Element Method" International Journal of Emerging Technologies and Innovative Research (JETIR), Vol. 6, Issue 1, Page no. 79-83, January-2019 [ISSN:2349-5162]
39. Ms. V M Wagh Dr K H Munde, "Fatigue Analysis of Automotive Door Hinge to Avoid Sagging of Doors" International Journal of Emerging Technologies and Innovative Research(JETIR), Vol. 6, Issue 1, Page no. 65-69, January-2019 [ISSN:2349-5162]
40. Tejas Rathod, Mandar Shinde, Yogesh Naral, Chaitanya Garud, Dr. Kashinath H. Munde, "A Review On Application Of Kaizen In Industry", 2019 JETIR May 2019, Volume 6, Issue 5, (ISSN-2349-5162)
41. Dr Kashinath H Munde ,Prof. Chetan E Kolambe, Akshay M Jadhav, Amol S Kajave ,Ajay K Kale, Vinayak U Kulkarni, "Development And Application Of Rotorcraft -Unmanned Aerial Vehicle" International Research Journal of Engineering and Technology (IRJET), Volume: 06 Issue: 05 | May 2019, e-ISSN: 2395-0056, p-ISSN: 2395-0072



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---

42. Tejas Rathod, Mandar Shinde, Yogesh Naral, Chaitanya Garud, Kashinath H Munde' "A Case Study On Application Of Kaizen In Industry" International Research Journal of Engineering and Technology, Volume: 06 Issue: 06 | June 2019, e-ISSN: 2395-0056, p-ISSN: 2395-007
43. Mr. Shivam Kanthale, Dr. Munde K.H., "An Experimental Investigation of Laser welding Process Parameter for Titanium Material" IJRAR June 2019, Volume 6, Issue 2, [(E-ISSN 2348-1269, P- ISSN 2349-5138].
44. Prashant M Khirapate1, K.H.Munde, "FE Analysis of Centrifugal Pump Shaft with Induction Hardening", IJRAR, Volume 6, Issue 2, June 2019 [E-ISSN 2348-1269, P- ISSN 2349-5138]
45. Namdev Savandkar, K.H.Munde, "Effect of Second Order Actuator on Performance of Anti-lock Braking System with Multiple Sliding Surface Controller", IJRAR, Volume 6, Issue 2, June 2019 [E-ISSN 2348-1269, P- ISSN 2349-5138]
46. Keval M Devare, Dr. Kashinath.Munde, "Fatigue Analysis of parking Brake Assembly for Passenger Vehicles", IJRAR, Volume 6, Issue 2, June 2019 [E-ISSN 2348-1269, P- ISSN 2349-5138]
47. Mr. Tamanappa V Inde, Dr. Kashinath H. Munde, "Fatigue Analysis of Crank Pin web Fillet Region of Two Wheeler Crankshaft", IJRAR, Vol. 6, Issue 2, June-2019, [ISSN-2349-5138].
48. Keval Devare, Dr K H Munde, "To Evaluate the structural performance of Parking Brake Assembly as per IS 11852 for Passenger Vehicle and Calculate the fatigue cycles", IJRAR, Vol. 6, Issue 2, June 2019.
49. Namdev Savandkar, K.H.Munde, "Effect of Second Order Actuator on Performance of Anti-lock Braking System with Multiple Sliding Surface Controller", IJRAR, Volume 6, Issue 2, June 2019 [E-ISSN 2348-1269, P- ISSN 2349-5138]
50. Pushkar P. Sangale, Prof. Dr. Kashinath Munde, "Experimental And FEA Analysis Of Different Grade Oil Damping Using Shock Absorber" International Research Journal of Modernization in Engineering Technology and Science Volume:02/Issue:08/August-2020, [e-ISSN: 2582-5208].
51. DSR KIRAN, Dr. K. H. Munde, Dr. S. B. Thakre, "Design Of Experimental Setup For Machinery Component Failure Diagnostics And Dynamic Life Prediction By Signal Acquisition" IOSR Journal of Engineering (IOSRJEN), 9 Vol. 10, Issue 1, January 2020, ||Series -IV|| PP 01-10 [ ISSN (e): 2250-3021, ISSN (p): 2278-871]
52. Kashinath Munde, Ganesh Kondhalkar, "Condition Monitoring of Rolling Contact earing by Vibration Signature Analysis", Proceedings of the 6th National Symposium on Rotor Dynamics. Lecture Notes in Mechanical Engineering. Springer, Singapore., October-2020, [https://doi.org/10.1007/978-981-15-5701-9\\_32](https://doi.org/10.1007/978-981-15-5701-9_32), [Print ISBN978-981-15-5700-2 Online ISBN978-981-15-5701-9]



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53. Mr. Gorane Prathamesh S., Dr. Kashinath Haribhau Munde, "Analysis and Optimization of a Connecting Rod" International Journal for Scientific Research & Development| Vol. 8, Issue 9, 2020 | ISSN (online): 2321-0613.
54. Mr. Gorane Prathamesh S., Dr. Kashinath Haribhau Munde, "Finite Element Analysis of Optimised Connecting RoD" International Journal for Scientific Research & Development| Vol. 8, Issue 9, 2020 | ISSN (online): 2321-0613.
55. Mr. Roundal Vijay Baburao, Dr. Kashinath Haribhau Munde, "Dynamic Formulation of Stiffness Matrix for Free Vibration Analysis" International Journal for Scientific Research & Development| Vol. 8, Issue 9, 2020 | ISSN (online): 2321-0613.
56. Mr. Roundal Vijay Baburao, Dr. Kashinath Haribhau Munde, "Methodology for Dynamic Stiffness Matrix Formulation" International Journal for Scientific Research & Development| Vol. 8, Issue 9, 2020 | ISSN (online): 2321-0613.

### **Papers Presented**

#### **Technical Papers: Inter-National**

1. Presented paper on, "Automatic Analysis of Isochromatic Fringes in White Light", at International Conference IMAE-05 held at Le-Meridian, Pune, on 7th & 8th Jan. 2005.
2. Presented paper on, "Information System View of Biometric Analysis", at International Conference ICMIT 2006 held at Singapore on 21st June to 23rd June 2006. [<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=4037162>]
3. Presented Paper on, "Digital Photoelastic Analysis of Ring under Compressive Load", at International Conference ICAMDIA-07, PIET's COE, Pune, on 11th to 13th Jan. 2007.
4. Presented Paper on, "Active Vibration Control Using Piezoelectric Actuator", at International Conference ICAMDIA-07, PIET's COE, Pune, on 11th to 13th Jan. 2007.
5. Presented Paper on, "Design and Control of Multi-DOF Autonomous Robotic Arm Assembly using Low Cost Alternatives", at International Conference ICAMDIA-07, PIET's COE, Pune, on 11th to 13th Jan. 2007.
6. Presented Paper on -"Mathematical Modeling of Cantilever Beam to Control Vibration by Fuzzy Logic." at International Conference on Fuzzy Mathematics & Its Applications organized by New Arts, Commerce & Science College, Ahmednagar, Maharashtra, India. January 27-29,2007
7. Presenting Paper on, "Role of Information in System Design – Case Study : Digital Photoelasticity", at International Conference QIK-2007, to be held at New-Delhi on 11th Feb. to 15th Feb. 2007





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### **Technical Papers: National**

1. Presented paper on, "Image Processing in automatic analysis of Isochromatic fringes in White Light", at National Conference NCAETE 2005 held at TPCT's College of Engineering, Osmanabad, on 25th & 26th Feb. 2005.
2. Presented paper on, "Trioological Analysis of Problems in Gear Box and Gear System", at National Conference YANTRA 2005 held at SVERI's College of Engineering, Pandharpur, on 23rd & 24th Dec. 2005.
3. Presented paper on, "Intensity Independent Image Analysis in Photoelasticity", at National Conference TSYGECA 2006 held at Government College of Engineering, Aurangabad, on 23rd & 24th Jan. 2006.
4. Presented paper on, "Photoelastic Analysis of Ring Using Image Processing", at National Conference NCIP held at SVERI's College of Engineering, Pandharpur, on 23rd & 24th Dec. 2006.
5. Presented paper on, "Vibration Control by Fuzzy Logic Controller", at National Seminar on Vibration held PREC , Loni, on 21st & 23rd March 2006.
6. Paper selected and published on "Intelligent Approach to Biometric System", at National Conference SIT, Lonavala during April 2007.
7. Paper selected and published on "Vibration Analysis of Defective Rolling Contact Bearing", at National Conference on Technical Revolution [NCRT], ABSM Anantrao Pawar COE, Parvati-09, 9-10 January 2015.
8. Paper selected and published on "FEM Analysis of Deep Groove Ball Bearing with various Defects", at National Conference on Technical Revolution [NCRT], ABSM Anantrao Pawar COE, Parvati-09, 9-10 January 2015.
9. Paper selected and published on "Performance of CI Engine by using Castor Biodiesel", at National Conference on Technical Revolution [NCRT], ABSM Anantrao Pawar COE, Parvati-09, 9-10 January 2015.
10. Paper selected and published on "Analysis of Performance Characteristics of Casement Type Vertical Axis Wind Turbine", at National Conference on Technical Revolution [NCRT], ABSM Anantrao Pawar COE, Parvati-09, 9-10 January 2015.
11. Mr. K H Munde, "Review on Analysis of deep groove ball bearing with various defects", National Conference on Innovations in Mechanical Engineering,[NICIME-2015], 6-8 April 2015.
12. Mr. K H Munde, Ms. Kamal Dalvi"A Review on Vibration Analysis of a Rotating Shaft with transverse crack" NCTR-2016.
13. Mr. K H Munde, Ms. Nileha Patil"Analysis Of Spur Gear Defect Using Vibration Parameter: A Review" NCTR-2016.



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Tel.: 020-24218901/8959 Tele Fax: 020-24213929

Web.: <http://www.abmspcoerpune.org>

Email: [abmspcoe@yahoo.com](mailto:abmspcoe@yahoo.com)



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15. Mr. K H Munde, Mr. P S Gorane "Finite Element Analysis Of Connecting Rod Along With Weight Reduction By Geometry Optimization" NCTR-2016.
16. Mr. K H Munde, Mr. A A Sayyad "Tensile Strength Analysis Of Hybrid Joints (Adhesive And Rivet) – Single Lap Joints" NCTR-2016.
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19. Mr. K H Munde, Mr. V V Kolage "Virtual Analysis of Engine Mount Stiffness Tuning for Better NVH Performance" NCTR-2016.
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**Non-Technical: National**

1. Presented paper on, “*Potential Role of ICT in Supporting Technical Education*”, at National Conference ISTE 2006 to be held in December 2006.
2. Presented paper on, “*Quality Issues in Technical Education*”, at National Conference NCBPEE-2007 at STES’s Smt. Kashibai Navale College of Engineering, Pune on 2nd & 3rd Feb. 2007.
3. Published Paper on, “ Effective Use of Teaching Aids: Blended Learning Pros and Cons”, Indian Society for Technical Education, Volume 42, No. 4, OCT-DEC 2019.