



## **BIO-DATA**

**NAME:** Dr. Bhalerao Yogesh Jayant

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**ADDRESS:** Flat No. - 9, Gulmohar Glades Apt. Condominium, Near Agakhan Palace,  
Nagar Road, Pune- 411 006. India **Contact No.** 98230 15289

**Date of Birth-** 17.08.1976

**Category – Open (Hindu – Brahmin)**

**Educational Qualification:** BE (Mechanical), ME (Mechanical), **PhD (Mechanical) Post Doc**

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|--|--|--|---|
| S.S.C. (JUNE-1992)   | Bhauasaheb Firodiya High School, A’Nagar     | Pune Board   | 88 %<br>First Class Dist.   |
| H.S.C. (JUNE-1994)   | Bhauasaheb Firodiya High School, A’Nagar     | Pune Board   | 82 % PCM-93 %<br>First Class Dist.                                |
| BE (JUNE-1998)   | MIT, PUNE-38                                 | Pune University  | 66 % First Class Dist.  |
| ME (Heat-Power)<br>2000-2001                               | VIT, Pune-37                                 | Pune University  | 70.50 %<br>First Class Dist.<br><b>First Rank.</b>                |
| PhD (Mechanical<br>Engineering)<br><b>Dec – 2008</b>       | Government College of<br>Engineering, Pune-5 | Pune University  | <b>Guide: DR.S.R.Kajale</b><br>Dean, R and D,<br>Govt.COE, Pune-5 |
| Post PhD (Mechanical<br>Engineering)<br>May – 2012 onwards | General Engineering<br>Research Institute    | Liverpool John Moores<br>University, Liverpool<br>United Kingdom | <b>Guide: Dr. Michael<br/>Morgan</b>                              |

## LIST OF PUBLICATIONS

### International Journals –09

1. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Surface Grinding Process by using Design of Experiments” at International Journal of Applied Engineering Research, Volume 2, Number – 3, 2007.
2. R.G. Tated, Y.J. Bhalerao and Dr. S.R. Kajale “Development of an empirical mathematical model for evaluating wear of T42 HSS due to turning parameters using Taguchi method” at International Journal of Engineering Research and Industrial Applications, Volume 1, No.V (2008), pp 39 – 52.  
<http://www.ascent-journals.com/IJERIA/Vol1No5/Paper3.pdf>
3. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Surface Grinding Process by using Design of Experiments (Part – I)” Technical Paper, Society of Manufacturing Engineers, USA.  
<http://www.sme.org/ProductDetail.aspx?id=46982>
4. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Surface Grinding Process by using Design of Experiments Part – II” at International Journal of Engineering Research and Industrial Applications. Volume – I, No. – 1, 2008 pp 13 – 29.  
[www.ascent-journals.com/IJERIA/Vol1No1/Paper-2.pdf](http://www.ascent-journals.com/IJERIA/Vol1No1/Paper-2.pdf)
5. Prafulla Hatte and Dr. Y. J. Bhalerao “Mathematical Modeling of variable compression ratio engine operating on gasoline ethanol blend” International Journal of Computer Applications, Proceedings of International Conference in Computational Intelligence, March 2012, ISBN: 978-93-80866-61-4. <http://www.ijcaonline.org/proceedings/iccia/number3/5110-1022>
6. Akhil Garg, Yogesh Bhalerao and Kang Tai “Review of Empirical Modeling techniques in modeling of turning process” International Journal of Modeling, Identification and Control, Vol. 20, No.2, 2013. Pp. 121 – 129, Inderscience Enterprises Ltd., UK  
<http://www.inderscience.com/info/inarticle.php?artid=56184>
7. Venkatesh Vijayaraghavan, Akhil Garg, Yogesh Bhalerao, Chee How Wong and Kang Tai “A hybrid MD-ANN simulation approach for predicting the mechanical characteristics of hydrogen functionalized graphene sheets” Journal of Nanostructure in Chemistry, Springer Publication, 10.1186/2193-8865-3-83. Page 1 – 5, 2013.  
<http://www.jnanochem.com/content/3/1/83>.

8. Sachin Ghalme, Dr. Y.J. Bhalerao and A. Mankar “Effect of Lubricant Viscosity and Surface Roughness on Coefficient of Friction in Rolling Contact ” J of Tribology in Industry Vol. 35, No. 4. 2013 pp 330 – 336.  
[www.tribology.fink.rs/journals/2013/2013-4/9.pdf](http://www.tribology.fink.rs/journals/2013/2013-4/9.pdf)
9. A. Garg, V. Vijayaraghavan , C.H. Wong, K. Tai, Pravin M. Singru, L. Gao and Y.Bhalerao “General regression neural network model for the evaluation of geometry dependent mechanical characteristics of carbon nanotubes” Journal of Zhejiang University SCIENCE A, Springer Publication. **Accepted.**  
<http://www.springer.com/engineering/mechanical+engineering/journal/11582>

### **International Conferences – 13**

1. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Dry Grinding Process” at International Conference on Advances in Mechanical Engineering, SRM Institute of Science and Technology, Chennai.
2. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Grinding Process” at 5<sup>th</sup> International Conference on Computational Heat and Mass Transfer, Canmore, June 18 – 22 2007, Canada.
3. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Surface Grinding Process by using Design of Experiments (Part – I)” at SME International Grinding Conference, Dearborn, Michigan, Sept 25 – 28, 2007, USA.
4. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal modeling of wet grinding process by using design of experiments” at 2<sup>nd</sup> International & 23<sup>rd</sup> All India Manufacturing Technology, Design and Research Conference, IIT Madras, Chennai, December – 2008.
5. Y.J. Bhalerao and S.R. Kajale “Thermal Analysis of wet grinding process” International Conference of Industrial Tribology, 2008, Key Note Paper, New Delhi, 4 – 6<sup>th</sup> November 2008.
6. Y. J. Bhalerao “Thermal Analysis of Wet Grinding Process by using Design of Experiments” 5<sup>th</sup> International Conference on Diffusion in Solids and Liquids, 24 – 26 June, 2009, Rome, Italy
7. Dr. S.R. Kajale and Y.J. Bhalerao “Thermal Analysis of Grinding Process” at 18<sup>th</sup> National & 7<sup>th</sup> ISHMT-ASME Heat and Mass Transfer Conference, IIT, Guwahati. January – 2006.  
[www.iitg.ac.in/hmtc/asme\\_figures/abstract\\_status\\_a\\_to\\_m.pdf](http://www.iitg.ac.in/hmtc/asme_figures/abstract_status_a_to_m.pdf)

8. Dr. S.R. Kajale and Y.J. Bhalerao “Thermal Analysis of Surface Grinding Process by using Design of Experiments (Part-II)” at 19<sup>th</sup>National & 8<sup>th</sup> ISHMT-ASME Heat and Mass Transfer Conference, JNTU, Hyderabad. January – 2008.
9. Y. J. Bhalerao “Thermal modeling of Wet Grinding Process by using Design of Experiments” 20<sup>th</sup> National and 9<sup>th</sup> International ISHMT – ASME Heat and Mass Transfer Conference, 4 – 6 January, 2010, IIT, Powai, Mumbai, India
10. Anita Nene and Dr. Y. J. Bhalerao “Design and performance characterization of a scheffler reflector for medium temperature applications” International Conference on Product Development and Renewable Energy Resources, February 19 – 20, 2011, Hyderabad, India.
11. Prafulla Hatte and Dr. Y. J. Bhalerao “Experimental Investigation of performance of single cylinder VCR engine using ethanol gasoline blends” International Conference on Sunrise Technologies, 13 – 15 January 2011, SSVPS’s B.S. Deore College of Engineering and Polytechnic, Dhule
12. Sanjay Patil and Dr. Yogesh Bhalerao “Effect of dressing parameters on surface roughness and grinding ratio in surface grinding operation” 8<sup>th</sup> International Conference on Industrial Tribology, December 7 – 9, 2012, Pune, India.
13. Sanjay Patil and Dr. Yogesh Bhalerao “Determining of optimum level (conditions) of dressing parameters for work piece surface roughness in surface grinding operation” International Conference on Advances in Tribology, 21<sup>st</sup> – 24<sup>th</sup> February 2014, National Institute of Technology, Calicut, Kerala, India, Technology Letters pp. 168 – 171.  
[www.icat14.com/pdf/Programme%20Schedule.pdf](http://www.icat14.com/pdf/Programme%20Schedule.pdf)

### **National Conferences – 02**

1. Dr. S.R. Kajale and Y.J. Bhalerao “A Simple Energy partitioning Model Between The Work piece And Abrasive Wheel For Dry Grinding” at AIM – 2005, Vasavi College of Engineering. 2005.
2. Y.J. Bhalerao and Dr. S.R. Kajale “Thermal Analysis of Dry Grinding Process using Moving Heat Source Theory” at National Conference on Recent Developments in Mechanical Engineering, Thapar Institute of Engineering and Technology, Patiala.

## **TOTAL RESEARCH GRANTS -**

1. Rs. 2 Lakhs, BCUD, University of Pune for the project “Thermal Analysis of Surface Grinding Process” for the year 2007 – 08 and 2008 – 09. Status of the Project – **Completed.**
2. Rs. 30 Lakhs, as a **Young Scientist Award** from Department of Science and Technology (DST) under the FASTTRACK Scheme for young scientist for the project “Thermal Analysis of combined Face and Shoulder Cylindrical Grinding”. Status of the Project – **Ongoing.**
3. Seminar Grant – Jointly submitted the proposal along with Dr. Michael Morgan to Royal Society, UK and Department of Science and Technology, DST – India. (**In Process**).

**Research Collaborations** – Dr. M.N. Morgan, AMTReL, General Engineering Research Institute, Faculty of Technology and Environment, Liverpool John Moores University, Byrom Street, Liverpool, L3 3AF, UK. Jointly working on thermal analysis of various grinding processes.

**PhD THESIS TOPIC** – A Thermal Analysis of Grinding Process.

**ME Dissertation Topic** – Analysis of solar flat plate collector with variable glazing

**Working as an Assessor for National Assessment and Accreditation Council.**

<http://www.naac.gov.in/>

**Recognized PG Teacher / Guide** – University of Pune.

**Recognized Ph.D. Guide** –

1. **Bharati Vidyapeeth Deemed University, Pune – 01 student**
2. **University of Pune, Ganeshkhind, Pune – 04 students**
3. **RTM Nagpur University – 01 student**

**EXPERIENCE:** **Total Years Of Experience: - 16 years.**

**INDUSTRIAL: - 01 year & 01 month**

One month training in **Kinetic Engg. Ltd.** A’Nagar.

One year working in Business Electronics Dept. as a Logistics Engineer.

**PHILIPS INDIA LTD.** BHOSARI, PUNE-26

Working Period from 14<sup>th</sup> July 1998 to 13<sup>th</sup> July 1999.

**TEACHING: - 15 years (Research Experience – 06 years)**

Currently working as **Principal, and Professor** of Mechanical Engineering Department of MIT Pune’s MIT Academy of Engineering, Alandi, Pune. ([www.mitaoe.ac.in](http://www.mitaoe.ac.in))

(Working Since April 2004 till date)

MIT AOE is a leading engineering college in Pune city and it offers various UG,PG and PhD courses in engineering. All the courses are accredited by National Board of Accreditation (NBA – Member of Washington Accord) and “A” grade by National Assessment and Accreditation Council (NAAC).

#### **LIFE MEMBER OF PROFESSIONAL BODIES:**

1. ISTE, India
2. TSI, India
3. ISHMT, India
4. AES, USA
5. MIAENG, Hong Kong
6. MIACSIT, Singapore

#### **Computer Background:**

**Languages Known:** -Auto lisp, TurboC,

**Operating Systems:** - Windows 2000, MS DOS,

**CAD CAM Packages:** - Catia, I-deas 8 M, Ansys 5.4, Auto CAD –2007.

**Software Testing Manual Testing & Automated Testing :** - Learning manual testing of software and Automated tools like Win runner & Web Application Stress tool.

**MS Office** (Word, Excel, Power Point, Explorer)

ADOBE Photo-shop, GIF Animator, HTML,

Java-Script, VB-Script, ASP, Java, XML, WAP, Internet Programming.

Completed **09 months** certificate course of Web Page Designing & E-Commerce From **ZAP InfoTech Pune-1**.

#### **ACHIEVEMENTS: -**

1. Ranked first in ME (Heat Power) in Pune University .
2. Completed following test rigs as a project work from Part time degree students and full time degree students.

Francis Turbine, Pelton wheel, Nozzle Test Rig, Gear Pump Test Rig, Vane Pump Test Rig, Cam Jump Phenomenon Test Rig, Flat Plate Collector Working Apparatus, Vibration Test Rig (Can Conduct 12 practicals), Air Blower Test Rig, Refrigeration Test Rig, Heat Exchanger Test Rig (Parallel flow and Counter flow), Engine Smoke meter Analyzer, Hydraulic Power Plant Working Model, Hydraulic Brakes working model, Transparent Hydraulic Trainer, Air Conditioning Test Rig, Gear Pump Test Rig (Digital Electronic Control), Forced Convection Pin Fin Apparatus, Stefan Boltzman Apparatus , Emissivity Apparatus, Geothermal Power Plant Working Model. by using these test rigs @ **15,00,000/- rupees** of the college have been saved.

3. Youngest Professor in Mechanical Engineering .

4. Worked as a member on the International Scientific Committee of the 6<sup>th</sup> International Congress on Precision Machining, Liverpool John Moores University, UK, 13-14 September 2011.