

# PROFILE

## BHANUDAS D. BACHCHHAV

B. E., M. Tech., Ph. D.

MECHANICAL ENGINEERING DEPARTMENT

ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S COLLEGE OF ENGINEERING

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### EDUCATION:

- **Ph. D. Mechanical-Production Engineering (2013)**  
Swami Ramanand Teerth Marathwada University, Nanded
- **M. Tech. Production Engineering (2006)**  
Govt. College of Engineering, Pune
- **B. E. Production Engineering (2000)**  
Shram Sadhana Trust's College of Engineering, Jalgaon

### EXPERIENCE: (Teaching: 16 Yrs, Industry: 1 Yr)

- **Professor (9 June 2013 till date)** (CCO/APP Camp/1684, Dt. 30/09/2016)  
Department of Mechanical Engineering, AISSMS College of Engineering, Pune
- **Associate Professor ( 1 July 2015 to 31 May 2016)** (CCO/355, Dt. 12/03/2016)  
Department of Mechanical Engineering, AISSMS College of Engineering, Pune
- **Assistant Professor (1 April 2010 to 30 June 2015)** (CCO/3004, Dt. 14/05/2004)  
Department of Production Engineering, Sinhgad College of Engineering, Pune
- **Senior Lecturer (1 April 2008 to 31 March 2010)** (CCO/3004, Dt. 14/05/2004)  
Department of Production Engineering, Sinhgad College of Engineering, Pune
- **Lecturer (10 November 2003 to 31 March 2008)** (CCO/3004, Dt. 14/05/2004)  
Department of Production Engineering, Sinhgad College of Engineering, Pune
- **Lecturer (2 August 2001 to 8 November 2003)** (CCO/4609, Dt. 19/11/2001)  
Department of Production Engineering, Amrutvahini College of Engineering, Sangamner

### RESEARCH AND TEACHING INTERESTS:

- Manufacturing Engineering, Material Forming, Metrology and Quality Control, Reliability Engineering, Process Planning and Tool Selection, Non-conventional Machining, Tribology

### RESEARCH RECOGNITION:

- Recognition as a **Ph.D. Guide** in the subject of **Mechanical & Materials Technology**, Department of Technology, **Savitribai Phule Pune University**, with effect from 22/09/2014.
- Recognition as a **PG Teacher** in the subject of **Mechanical Engineering & Production Engineering**, Science and Technology Board, **Savitribai Phule Pune University**.

### ACHIEVEMENTS AND APPRECIATION:

- **Member**, Board of Studies (Production and Industrial Engineering), Savitribai Phule Pune University.
- **Outstanding Performance** during the academic year 2007-08, 2008-09 (Based on teaching)

## SPONSORED RESEARCH PROJECTS:

1. Experimental Investigation into Electrochemical Discharge Machining of Ceramics/Glass (**Rs. 1.5 Lakh**) (Funded by- Savitribai Phule Pune University) (2007-2009) (**Principle Investigator**) (Completed)
2. Characterization of Metal Working Lubricants (**Rs. 2.0 Lakh**) (Funded by- Savitribai Phule Pune University) (2009-2011) (Co-Investigator) (Completed)
3. Performance Evaluation of Cold Rolling Oils (**Rs. 2.85 Lakh**) (Funded by- Savitribai Phule Pune University) (2012-2014) (**Principle Investigator**) (Completed).

## PUBLICATIONS:

### International Journals: 06

1. Bachchhav B. D., Lathkar G. S., Bagchi H., "Tribology of drawing lubricants for low carbon steel", *Industrial Lubrication and Tribology*, Vol: 66, Issue: 6, (2014), pp. 640-644. [ISSN 0036-8792], Emerald Group Publishing Limited. [DOI 10.1108/ILT-10-2012-0105].
2. Bachchhav B. D., Lathkar G. S., Bagchi H., "Frictional characteristics of cold rolling oils", *Journal of Tribology and Surface Engineering*, Vol. 3, Issue: 3-4, Jul-Sept. 2014, pp.177-185. [ISSN: 1949-4866], NOVA Science Publishers, Inc., USA.
3. Bachchhav B. D., Lathkar G. S., Bagchi H., "Criticality assessment in lubricant selection for metal forming processes by AHP", *International Journal of Manufacturing Technology and Industrial Engineering*, Vol. 3, Issue: 1, Jan-June 2012, pp. 31-35. [ISSN: 0976-6251].
4. Bachchhav B. D., Lathkar G. S., Bagchi H., "Tribology of ester added lubricants", *Journal of Tribology and Surface Engineering*, Vol. 3, Issue: 1-2, Jul-Sept. 2012, pp.87-94. [ISSN: 1949-4866], NOVA Science Publishers, Inc., USA.
5. S. A. Patil, B. D. Bachchhav, C. S. Choudhari, "Strength analysis of adhesively bonded AA6082-T6 Al alloy lap joint", *International Journal of Scientific Research in Science, Engineering and Technology*, Vol. 2, Issue: 4, July-August 2016, pp. 327-330 [Print ISSN:2395-1990; Online ISSN: 2394-4099]
6. Harshal A. Arekar, S. V. Kshirsagar, B. D. Bachchhav "Effect of Injection Pressure on Vibration Performance of IC engine by using Diesel-Biodiesle Fuel", *International Journal of Scientific Research in Science, Engineering and Technology*, Vol. 2, Issue: 4, July-August 2016, pp. 273-276 [Print ISSN:2395-1990; Online ISSN: 2394-4099]

### National Journals: 06

7. Bachchhav B. D., Bagchi H., "In-situ strain evaluation during cold rolling of AL 1100 H14", *Journal of Manufacturing Engineering*, Vol: 12 Issue: 4, (2017), pp. 203-207. [ISSN: 0973-6867].
8. Bachchhav B. D., Naole D. R., "Tribo-performance of wire drawing lubricants", *Journal of Manufacturing Engineering*, Vol. 11, Issue 1, March 2016, pp. 051 -054. [ISSN: 0973-6867].
9. Bachchhav B. D., Lathkar G. S., Reddy Y. P., Bagchi H., "Wear under lubricated sliding contacts- A dimensional analysis model", *Journal of Manufacturing Engineering*, Vol. 8, Issue 3, September 2013, pp. 139 -144. [ISSN: 0973-6867].
10. Bachchhav B. D., Lathkar G. S., Bagchi H., "A study of tribo-characteristics of deep drawing oils", *Journal of Manufacturing Engineering*, Vol. 6, Issue 3, September 2011, pp. 147-152. [ISSN: 0973-6867].
11. Bachchhav B. D., Lathkar G. S., Bagchi H., "General tribological evaluation of deep drawing oils", *Journal of Manufacturing Technology Today*, Vol. 10, Issue 9, September 2011, pp. 12-16. [ISSN: 0972-7396].
12. Bachchhav B. D., Zope S. B., Navale L. G., "Parametric optimization of rotary electrochemical discharge machining (RECDM) on glass", *Journal of Manufacturing Technology Today*, Vol. 6, Issue 8, August 2007, pp. 4-8. [ISSN: 0972-7396].

### International Conferences: 02

13. Bachchhav B. D., Lathkar G. S., Bagchi H., “Frictional characteristics of lubricants for 1010 low carbon steel/steel in sliding contact”, *International Conference on Materials Processing and Characterization (ICMPC-2012)*, pp. 479-483. March, 8-10, 2012, Hyderabad, India.
14. Bachchhav B. D., Lathkar G. S., Bagchi H., “Lubricant selection for metal forming processes by subjective and objective integrated multi-attribute decision making method”, *International Conference on Industrial Tribology (ICIT-2012)*, TSI 812543, Dec., 7-9, 2012, Pune, India.

### National and Regional Conferences: 05

15. Bachchhav B. D., Katikar R. S., Shinde B. M., “Hydro-forming of light weight components at elevated temperature”, *National Conference On Recent Advances in Manufacturing Engineering(RAIME-04)*”, at National Engineering College, Kovilpatti, Tamilnadu, Jan., 30-31, 2004.
16. Bachchhav B. D., Zope S. B., “An experimental study of rotary electrochemical discharge machining (RECDM) on glass”, *National Conference On Emerging Trends in Mechanical Engineering(ETME)*”, at SVNIT Surat, June., 4-5, 2007.
17. Bachchhav B. D., Reddy Y. P., “Experimental Investigations into electrochemical discharge machining of ceramics/glass”, *Regional Conference of Pune University College Teachers (Innovation 2008)*, at SRES’s College of Engineering, Kopargaon, Nov., 24-25, 2008.
18. Bachchhav B. D., Reddy Y. P., “Experimental Investigations into electrochemical discharge machining of ceramics/glass”, *Regional Conference of Pune University College Teachers (Innovation 2009)*, at Amrutvahini College of Engineering, Sangamner, Dec., 11-12, 2009.
19. Bachchhav B. D., “Performance evaluation of cold rolling oils”, *Regional Conference of Pune University College Teachers (Innovation 2013)*, at Rajarshree Shahu College of Engineering, Tathawade, Pune., April, 18-19, 2013.

### RESOURCE PERSON:

#### Invited Talks:

- Expert Lecture delivered on, “Tribological Aspects in Sheet Metal Rolling” at two day workshop on “Industrial Tribology”, held at All India Shri Shivaji Memorial Society’s College of Engineering Pune, on 6<sup>th</sup> Oct. 2015.
- Lecture delivered on, “Developing Good Presentation Skills” to Faculty of Sau. Shantidevi Chavan Institute of Engineering & Technology (Polytechnic) on 29<sup>th</sup> Oct. 2014.

#### Workshop / Seminar / Conferences Organised:

- **Coordinator** for two day state level seminar on “Achieving Make-in-India Through Manufacturing Advancement”, at All India Shri Shivaji Memorial Society’s College of Engineering Pune, Funded by Savitribai Phule Pune University, Pune, January 20-21, 2017.
- **Coordinator** for two day workshop on “Industrial Tribology”, at All India Shri Shivaji Memorial Society’s College of Engineering Pune, in Association with TSI- Mumbai-Pune Chapter, on October 5-6, 2015.
- **Coordinator** for State level paper presentation competition (PRODZINE-02), On August 26-27, 2014 at SCOE, Pune.

**Sessions Chaired:**

- Session Chairman for a National Conference on “Modeling, Optimization and Control” (NCMOC 2015) on 6<sup>th</sup> March 2015, organized by Vishwakarma Institute of Technology, Pune.
- Session Chairman for a National Conference on “Innovations in Mechanical Engineering, on 10<sup>th</sup> January 2015, organized by Sinhgad Institute of Technology, Lonavala.

**MEMBERSHIPS OF PROFESSIONAL BODIES:**

- Life member of Indian Society for Technical Education. LM-35483
- Member of Tribology Society of India. LM 4140

**ADMINISTRATIVE DUTIES & RESPONSIBILITIES PERFORMED****Department Level:**

- Mentor
- Guardian Faculty
- NBA Co-ordinator
- Alumni Co-ordinator
- Research Co-ordinator
- TNA co-ordinator TEQIP-II
- Member- cultural and social events
- Liaison Officer for STES Staff selection interviews
- Organized various work-shops, industrial visits for faculty as well as for students

**Institute Level**

- ERP Coordinator
- Industry Institute Interaction Co-ordinator
- Member - Academic Monitoring committee
- Internal Squad for SPPU Examinations
- Internal Sr. Supervisor, SPPU Examinations
- Asst. Director., ME-CAP, SPPU Examinations
- Industry Institute Interaction Co-ordinator
- Member - Academic Monitoring committee
- Panel Member – Faculty recruitment 2016-17
- College Examination Officer (CEO) SPPU, Pune Examinations at SCOE, Pune

**University Level:**

- **Member - BOS** Production and Industrial Engineering, SPPU, Pune
- Subject chairman and Paper setter for various courses for UG and PG
- Participation in Syllabus Framing of Production and Mechanical Sandwich courses

**FDP/STTP/SUMMER SCHOOLS Attended [1 week and more duration]**

- Industrial Tribology, TEQIP- II, at VJTI Mumbai, 07-11 December 2015
- Advances in Micro-manufacturing, AICTE, at COEP Pune, 01-12 June 2015
- Fundamentals of Material Processing (FMP-2013), TEQIP-II, SVNIT Surat, 10-14 June 2013
- Recent Trends in Precision Mechanical Measurements, TEQIP-II, SCOE Pune, 26 Nov - 01 Dec 2012
- Excellence in Maintenance Engineering, AICTE, COEP Pune, 12-24 December 2011
- Summer School in Tribology, TSI, IIPM Gurgaon, 21-24 January 2010
- Metallurgical Aspects of Tribology, AICTE, SVNIT Surat, 30 Nov. To 4 Dec. 2009
- General Research Methodology, MHRD, NITTTR Pune, 19-23 January 2009
- Reliability and Failure Analysis of Engineering System, AICTE, SCOE Pune, 22 Oct. - 3 Nov. 2007
- Nano-Technology: opportunities and Challenges, AICTE, BATU Lonere, 19-31 Dec. 2005

#### CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

1. One day workshop on syllabus implementation of TE Mechanical Engineering 2015 course, on 21<sup>st</sup> October 2016, held at Ramkrishna College of Engineering, Pune.
2. Two day staff development program on “Personality Development”, 25-26, August 2016, held at AISSMSCOE Pune.
3. Two day seminar on “Zero defect- Quality Improvement in Industries”, 3-4 March 2016, held at AISSMSCOE Pune.
4. Two day workshop on “Automotive NVH”, 27-28 Feb. 2016, held at AISSMSCOE Pune.
5. One day FDP on “Reliability Engineering In Practice”, 11<sup>th</sup> September 2015, held at PES Modern College of Engineering, Pune.
6. One day workshop on syllabus implementation of B.E. Mechanical Engineering 2012 course, on 1<sup>st</sup> August 2015, held at Bharati Vidyapeet’s COE for women Pune.
7. Innovation- 2014, Regional Research Conference, 2<sup>nd</sup> May 2014, at Amrutvahini College of Engineering, Sangamner.
8. One day workshop on syllabus implementation of S.E. Production/Production Sandwich/Industrial Engineering 2012 course, on 21<sup>st</sup> June 2013, held at SCOE Pune
9. Innovation- 2013, Regional Research Conference, 18<sup>th</sup> April 2013, at JSPM’s RSCOE, Pune.
10. 8<sup>th</sup> International Conference on “Industrial Tribology”, 7<sup>th</sup> to 9<sup>th</sup> Dec, 2012, at The Westin Pune Koregaon Park, India.
11. Annual International Conference on, “Materials Processing and Characterization” 8<sup>th</sup> to 10<sup>th</sup> March 2012 at GRIET, Hyderabad.
12. One day workshop on, “BE Production Engg. Syllabus Implementation” 17<sup>th</sup> Jan 2012, at AVCOE, Sangamner.
13. Two day National Workshop on, “Recent Advances in Eco-Friendly Lubricants (RAIEFL-2010)”, 8<sup>th</sup> to 9<sup>th</sup> April 2010 at IISC Bangalore.
14. Innovation- 2009-10, Regional Conference for Pune University College Teachers, 11<sup>th</sup> & 12<sup>th</sup> Dec. 2009, at AVCOE, Sangamner.
15. Innovation- 2008-09, Regional Conference for Pune University College Teachers, 12<sup>th</sup> & 25<sup>th</sup> Nov. 2008, at SRES, College of Engineering, Kopergaon.
16. One day workshop on “Optimization Methods for Research and Industrial Problems” on 21<sup>st</sup> March 2009 at Mechanical Engineering Dept. COEP Pune.
17. One day workshop on “SE Production Engineering Syllabus Setting” on 27<sup>th</sup> Jan. 2009. at Production Engineering Department, AISSMS College of Engineering, Pune.
18. One day seminar on “Micro & Nano-Manufacturing” at COEP, Pune. 4<sup>th</sup> Feb. 2008.
19. Two day workshop on “Advanced Gear Manufacturing.” at AVCOE Sangamner. 24-25 Aug. 2007.
20. National Conference on “Emerging Trends in Mechanical Engineering (ETME)”, at SVNIT Surat, 04-05 June 2007.
21. One day workshop on “TE syllabus implementation of Manufacturing Processes-II and Machine tool and advanced manufacturing systems” at SCOE Pune. 11<sup>th</sup> March 2006.
22. Two day Workshop on “Tribology” at SCOE Pune. 10 - 11 Feb. 2006.
23. National Conference on “Advances in Manufacturing Technology in the Era of Globalization (AIMTEG 2005)” at PIET’s COEP Pune. 21 -22 Jan. 2005.
24. Two day CEP Course on “Sheet Metal Formability Application” at IIT Bombay, 22- 23 Nov. 2004.
25. One day workshop on “ 3D Modeling using MSBTECAD3D & AUTOCAD” at ISTE chapter SVCP, Pune. 5<sup>th</sup> March 2004.
26. National Conference on “Recent Advances in Manufacturing Engineering (RAIME-04)”, at National Engineering College, Kovilpatti, Tamilnadu, 30-31 Jan., 2004.