

PROFILE



Dr. BHANUDAS D. BACHCHHAV

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

HEAD OF DEPARTMENT, FIRST YEAR ENGINEERING

PROFESSOR IN MECHANICAL ENGINEERING

ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S COLLEGE OF ENGINEERING, PUNE

CELL NO: 09850172628 E-mail: bdbachchhav@aissmscoe.com; bhanudas2k@gmail.com

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: **24 Yrs**, Industry: **1 Yr**)

- **Professor (9 June 2016 to 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:

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

RESEARCH RECOGNITION:

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

PHD GUIDANCE:

- PhD Scholars (Presently Pursuing): **02**
- PhD Completed: **01**

ACHIEVEMENTS AND APPRECIATION:

- **Member, BOS**, Mechanical and Materials Technology, Savitribai Phule Pune University.
 - **Former Member, BOS**, Production and Industrial Engineering, Savitribai Phule Pune University.
 - **Certificate of Appreciation** from KoneCranes Finland for mentoring students.
 - **Appreciation for Outstanding Performance** during the academic year 2007-08, 2008-09.
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EDITORIAL BOARD MEMBER:

1. International Journal of Advanced Manufacturing Processes (IJAMP)
2. Journal of Modern Mechanical Engineering and Technology (JMME&T)

REVIEWER FOR:

1. Tribology in Industry
2. Materials Today: Proceedings
3. Industrial Lubrication and Tribology
4. Australian Journal of Mechanical Engineering
5. Journal of Institution of Engineer (India) series D
6. Journal of Advanced Manufacturing Technology (JAMT)
7. Journal of Basic and Applied Research international (JBARI)

RESEARCH GRANTS: Total Grants: 25,78,500/-

(Research: Rs. 6,60,000/- QIP: 1,00,000/- SPICES: 1,00,000/- MODROB-ASP: 17,18,500/-)

1. Experimental Investigation into Electrochemical Discharge Machining of Ceramics/Glass (**Rs. 1.5 Lakh**) (Funded by- Savitribai Phule Pune University) (2007-2009) (**PI**) (Completed)
2. Characterization of Metal Working Lubricants (**Rs. 2.0 Lakh**) (Funded by- Savitribai Phule Pune University) (2009-2011) (**Co-PI**) (Completed)
3. Performance Evaluation of Cold Rolling Oils (**Rs. 2.85 Lakh**) (Funded by- Savitribai Phule Pune University) (2012-2014) (**PI**) (Completed).
4. Received a Grant of **Rs. 1,00,000/-** under QIP scheme to conduct National Level Seminar on, 'Achieving Make-In-India through Manufacturing Advancements'
5. Tribological Performance Evaluation of Non-Asbestos Organic Brake Pad Materials, (**Rs. 25,000**), Institution of Engineers, IEI (R&D), Kolkata, (**PI**).
6. Received a Grant-in-Aid of Rs. **1,00,000/-** under AICTE-SPICES (Scheme for Promoting Interests, Creativity, and Ethics among Students) for the year 2021-22. (Co-coordinator) (ongoing).
7. Received a Grant Grant-in-Aid of **Rs. 17,18,500/-** under the Modernization and Removal of Obsolescence Aspirational (MODROB- ASP) scheme, for Project: "Modernisation of Tribology Laboratory for Performance Evaluation of Nano/Bio Lubricants".

PUBLICATIONS:

BOOKS:

1. A text book on "Quality and Reliability Engineering" First Edition: February 2023; TechKnowledge Publications, Pune.

JOURNALS PUBLICATIONS: ORCID iD: <https://orcid.org/0000-0002-7409-4746>

1. Kathamore, P.S., Bachchhav, B.D. and Bachchhav, M.B. (2025), "Oil film strength analysis under boundary lubrication in TMPTO-based biolubricant", Industrial Lubrication and Tribology, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/ILT-01-2025-0004>.
2. Kiran G. Sirsath, Bhanudas D. Bachchhav; (2025), "Wear Behaviour of Cu-Cr-Zr Ternary Alloy for Fin-Tube Resistance Welding Electrode Material", Tribology in Industry, Vol. 47, No. 2, pp. 217-227, DOI: 10.24874/ti.1797.11.24.02.

3. Kathmore PS, Bachchhav BD, Kaya D, Salunkhe S, Cepova L, Mizera O, et al. (2024), "Analyzing the efficacy of trimethylolpropane trioleate oil for predicting cutting power and surface roughness in high-speed drilling of Al-6061 through machine learning", *PLoS ONE* 19(12): e0312544. <https://doi.org/10.1371/journal.pone.0312544>.
4. Mannan Sayyad, Bhanudas Bachchhav, Sachin Salunkhe, Lenka Cepova, Jiri Struz, Emad Abouel Nasr, Khaled M.S. Gad El Mola, "Stiffness and stability of bamboo stem- A optimal design perspective", *Heliyon*, Vol. 10, Issue 16, 2024, e35403, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2024.e35403>.
5. Bachchhav, B.D. (2023) 'Tribological behaviour of Al6061-SiC hybrid MMC reinforced with 4% MoS₂/Cu/Gr', *Int. J. Materials Engineering Innovation*, Vol. 14, No. 4, pp.297–314.
6. Sirsath, K.G. and Bachchhav, B.D. (2023), "Tribo-mechanical characterization of Cu-Cr-Zr ternary alloy aimed at fin-tube resistance welding electrode material", *Industrial Lubrication and Tribology*, Vol. 75 No. 8, pp. 942-949. <https://doi.org/10.1108/ILT-04-2023-0092>.
7. Kathmore, P.; Bachchhav, B.; Nandi, S.; Salunkhe, S.; Chandrakumar, P.; Nasr, E.A.; Kamrani, A. Prediction of Thrust Force and Torque for High-Speed Drilling of AL6061 with TMPTO-Based Bio-Lubricants Using Machine Learning. *Lubricants* 2023, 11, 356. <https://doi.org/10.3390/lubricants11090356>
8. Bachchhav, B.D.; Chaitanya, S.V.; Salunkhe, S.; Chandrakumar, P.; Pagáč, M.; Nasr, E.A. "Wear Performance of Cu–Cd, Cu–Be and Cu–Cr–Zr Spot Welding Electrode Materials". *Lubricants* 2023, 11, 291, pp. 1-15. <https://doi.org/10.3390/lubricants11070291>
9. Bachchhav, B.D., Gadakh, V.S. "Relative Tool Wear and Metal Removal Studies in Electric Discharge Machining of AISI D2 Die Steel Using Cu-Cr-Zr, Cu-Cd, and Cu-Be Electrode Materials". *J. of Materi Eng and Perform* (2023). <https://doi.org/10.1007/s11665-023-08264-y>.
10. Bachchhav, B. D. and Hendre K. N., (2022), "Wear Performance of Asbestos-Free Brake Pad Materials", *Jordan Journal of Mechanical and Industrial Engineering*, Volume 16, Number 4, pp. 459-469. **[Scopus and WoS Indexed]**.
11. Bachchhav, B. D. and Kathmore, P. S. (2022), "Wear behavior of environment friendly trimethylolpropane trioleate-based lubricant", *Industrial Lubrication and Tribology*, Vol. 74 No. 5, pp. 557-563. <https://doi.org/10.1108/ILT-12-2021-0469>. **[Scopus Index]**.
12. B. D. Bachchhav and H. Bagchi, "Tribological Performance of Copper-Titanium Alloy under Dry Sliding Contact," *Materials Performance and Characterization* 10, no. 1, (2021): 739–750. <https://doi.org/10.1520/MPC20200177>. **[Scopus Index]**.
13. Kathmore, P.S. and Bachchhav, B.D. (2021), "Tribological investigations of trimethylolpropane trioleate bio-based lubricants", *Industrial Lubrication and Tribology*, Vol. 73 No. 7, pp. 1074-1083. <https://doi.org/10.1108/ILT-05-2021-0157>. **[Scopus Index]**.
14. B. Bachchhav, S. Salunkhe, and V. Naranje, "Drilling of High Volume Fraction Al₂O₃ Metal Matrix Composites," *Materials Performance and Characterization* 10, no. 1 (2021): 317-327. <https://doi.org/10.1520/MPC20200053>. **[Scopus Index]**.
15. Bachchhav B., Investigation on Abrasive Water Jet Machining of Al-Al₂O₃ MMC. *International Journal of Industrial Engineering and Production Research*. 2021; 32 (1):93-103. DOI: 10.22068/ijiepr.32.1.93. **[Scopus Index]**.
16. 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]. **[Scopus Index]**.
17. Bachchhav M., and Bachchhav B. (2025). Exploration of microalgae for novel functional food ingredients through isolation, cultivation, and metabolite enhancement. *Journal of Applied Biological Sciences*, 19 (2): 70-80. <https://dx.doi.org/10.71336/jabs.1440>.
18. Kishor N. Hendre, Bhanudas D. Bachchhav., "Friction and Wear Characteristics of Rubber Resin-Bonded Metallic Brake Pad Materials", *International Journal of Engineering and Advanced Technology (IJEAT)*, Vol: 8, Issue: 6, (August 2019), pp. 1312-1316. [ISSN 2249 – 8958], [DOI 0.35940/ijeat.F8514.088619] **[Scopus - UGC CARE Listed]**.
19. Kathmore P. S; Bachchhav B. D; "Bio-based Lubricant Selection for Metal Cutting Operations Using MADM Technique", *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)*, ISSN(P): 2249–6890; ISSN(E): 2249–8001, Vol. 9, Issue 6, Dec 2019, 845–858. DOI : 10.24247/ijmperddec201972 **[Scopus - UGC CARE Listed]**.
20. Kishor N. Hendre, Bhanudas D. Bachchhav, Harijan H. Bagchi., "Frictional Characteristics of Brake Pad Materials Alternate to Asbestos", *International Journal of Engineering and Advanced Technology (IJEAT)*, Vol: 9, Issue: 2, (December 2019), pp. 694-698. [ISSN 2249 –8958], [DOI: 10.35940/ijeat.B3170.129219] **[Scopus - UGC CARE Listed]**.

21. Pramod S. Kathmore, Bhanudas D. Bachchhav, Harijan H. Bagchi., "Performance of Additives Concerning Synergistic Effect in Lube Oil", *International Journal of Engineering and Advanced Technology (IJEAT)*, Vol: 9, Issue: 3, (February 2020), pp. 1874-1878. [ISSN 2249 –8958], [DOI: DOI: 10.35940/ijeat.C5714.029320] . [Scopus Index].
22. Chaitanya, S., Bachchhav, B., Mahaske, siddarth, Shaikh, S., Koul, T., & Nandode, K. (2023). Assembly Line Balancing Case study to Reduce Number of Workstations. SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, 14(Spl-3), 397-402. [UGC CARE].
23. Bachchhav, B., & Chaitanya, S. (2023). Selection of Spot Welding Electrode Material by Preference Ranking Organization Method for Enrichment Evaluation, VIKOR and WASPAS Methods. SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, 15(01), pp. 60-66.
24. Bhanudas Bachchhav, Swarali Bharne, Atharva Choudhari, Siddharth Pattanshetti, "Selection of spot welding electrode material by AHP, TOPSIS, and SAW", *Materials Today: Proceedings*, 2023,ISSN 2214-7853, pp. <https://doi.org/10.1016/j.matpr.2023.02.253>
25. B. Bachchhav and H. Bagchi, Effect of surface roughness on friction and lubrication regimes, *Materials Today: Proceedings*, 38 (2021) 169-173.<https://doi.org/10.1016/j.matpr.2020.06.252>. [Scopus Index].
26. Kishor N. Hendre, Bhanudas D. Bachchhav., Tribological behaviour of non-asbestos brake pad material, *Materials Today: Proceedings*, 38 (2021) 2549-2554. <https://doi.org/10.1016/j.matpr.2020.07.560>. [Scopus Index].
27. B. Bachchhav and V. Naranje, Effect of high volume fraction reinforcement on electro-discharge machining of Al-Al₂O₃ MMC, *Materials Today: Proceedings*, 43 (2021) 753-759. <https://doi.org/10.1016/j.matpr.2020.06.004>. [Scopus Index].
28. P. S. Kathmore and B. D. Bachchhav, Grade classification of bio-based lube oil by multi-attribute decision making methods, *Materials Today: Proceedings*, 43 (2021) 760-768. https://doi.org/10.1016/j.matpr.2020.06.027_2. [Scopus Index].
29. 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] [ICI and UGC Listed].
30. 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] [ICI and UGC Listed].
31. Naranje V., Chidambaram T.V.S., Garg R.B., Bachchhav B.D. (2021) Use of Sustainable Practices in Cement Production Industry: A Case Study. In: Kumar S., Rajurkar K.P. (eds) *Advances in Manufacturing Systems. Lecture Notes in Mechanical Engineering*. Springer, Singapore. PP. 181-192. https://doi.org/10.1007/978-981-33-4466-2_16. [Scopus Index].
32. Naranje V., Sankar A.R., Salunkhe S., Bachchhav B.D. (2021) Experimental Evaluation of Mechanical Properties of Epoxy Based Composite Material Using Taguchi Method. In: Dave H.K., Nedelcu D. (eds) *Advances in Manufacturing Processes. Lecture Notes in Mechanical Engineering*. Springer, Singapore. Pp. 381-395. https://doi.org/10.1007/978-981-15-9117-4_28. [Scopus Index].
33. Hendre K. N., Bachchhav B. D., "Screening of organic brake pad materials using MADM Technique", *Advances in Intelligent Syst., Computing*, Vol. 949, : *Advanced Engineering Optimization Through Intelligent Techniques*, https://doi.org/10.1007/978-981-13-8196-6_40, 2020, *Springer Nature* [Scopus Indexed].
34. Bhanudas Bachchhav, "Process Capability Improvement for Swingarm Boring Operation: A Case Study", *International Journal for Quality Research*, 2(4), 345-352. DOI: 10.24874/PES02.04.001 [Scopus Index].
35. Bhanudas Bachchhav, Abhishek Kumbhare, Chinmay Hoonur, Sharayu Kulkarni and Jaydeo Kalankar, "Grading of Spot Welding Electrode Material Properties Using AHP", *Journal of Modern Mechanical Engineering and Technology*, 2020, 7, 59-65. ISSN (online): 2409-9848. DOI: <https://doi.org/10.31875/2409-9848.2020.07.8>
36. Bachchhav B. D., "Challenges in formulating Vegetable Based Metalworking Lubricants: A Review", *International conference on Tribology- TriboIndia-2018*, Dec. 13-15, 2018, VJTI, Mumbai, India. Electronic copy available at: <https://ssrn.com/abstract=3332391> [SSRN Indexed]
37. 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]

38. 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**] .
39. 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.
40. 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.
41. 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**].
42. Bhanudas Bachchhav, Manisha Bachchhav, (2025), "Evaluation of Flash Temperature Parameter in TMPTO-Based Nano-lubricants", *Journal of Manufacturing Engineering*, March2025, Vol.20, Issue.1, pp020-024, DOI: <https://doi.org/10.37255/jme.v20i1pp020-024>.
43. Bhanudas Bachchhav, Yash Anecha, Balraj Waghmare., Tribological Performance Evaluation of TMPTO based Nano-Lubricants", *Journal of Manufacturing Engineering*, Vol. 18, Issue 3, September 2023, pp. 091-095. [**SME- Society of Manufacturing Engineers**].
44. Hendre K. N., Bachchhav B. D., "Critical property assessment of novel brake pad materials by AHP, *Journal of Manufacturing Engineering*, Vol: 13 Issue: 3, (Sept. 2018), pp. 148-151. [**SME- Society of Manufacturing Engineers**].
45. 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. [**SME- Society of Manufacturing Engineers**].
46. 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. [**SME- Society of Manufacturing Engineers**].
47. 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. [**SME- Society of Manufacturing Engineers**].
48. 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. [**SME- Society of Manufacturing Engineers**].

CONFERENCE PUBLICATIONS:

49. Sandip K Bidgar, B U Sonawane, B D Bachchhav, "A Review on Machinability of Difficult to Machine (DTM) Materials Using Cryogenically Treated Cutting Tool Inserts", RAMTM-II 2025 Proceedings of 2nd National Conference on Recent Advancements in Manufacturing Technology & Management.
50. Bhanudas Bachchhav, Suhani Pawar, Manthan Muke, Pravin Ingle, "Tribological evaluation of sunflower oil as an environment-friendly lubricant", International Conference on Sustainable Industry 4.0: Innovations for a Greener Future (ICSI 2025)" April 2025, Pune, India.
51. Kathamore P. S., Bachchhav B. D., "A Bio-based lubricant selection using Complex Proportional Assessment method", *International Conference on Mechanical Engineering for Sustainable Development-2020 (ICMESD-2020)*, pp.104-108. February, 17-18, 2020, Pune, India.
52. Kale K. P., Hendre K. N., Bachchhav B. D., "Tribological evaluation of non-asbestos brake pad materials", *International Conference on Mechanical Engineering for Sustainable Development-2020 (ICMESD-2020)*, pp.109 -113. February, 17-18, 2020, Pune, India.
53. 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.
54. 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.
55. 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.

56. 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.
57. 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.
58. 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.
59. 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:

- Resource Person for AICTE - ISTE Approved Two Weeks Short Term Training Program (Online mode) On the topic "Tribology in Metal Working" organized by Department of Mechanical Engineering, Smt. Kashibai Navale College of Engineering, Pune conducted during 15th January to 27th January, 2024
- Expert Lecture on "Major and minor Research Project" Pratibha College of Commerce and Computer Studies, for Institutional Quality Enhancement through NAAC Perspective on 10/12/2020.
- Key note address delivered on, "Metal Working Tribology" at International Conference ICAMBC held at Chennai, August 2020.
- Expert Lecture delivered on, "Tribological in Metal Working" at one week AICTE sponsored FDP on "Advances in Tribology", held at All India Shri Shivaji Memorial Society's College of Engineering Pune, on 7th Nov. 2019.
- Keynote Address National Conference RAES-19, at Bharati Vidyapeeth College of Engineering, Lavale, 26-27 March, 2019.
- 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 6th Oct. 2015.
- Lecture delivered on, "Developing Good Presentation Skills" to Faculty of Sau. Shantidevi Chavan Institute of Engineering & Technology (Polytechnic) on 29th Oct. 2014.

Sessions Chaired:

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

Workshop / Seminar / Conferences Organised:

- One day Syllabus Implementation workshop on "Manufacturing Processes and machine Shop" of Second Engineering in association with Board of Studies, Mechanical Engineering held on February 23, 2021.
- One day Syllabus Implementation workshop on "Systems in Mechanical Engineering" of First Engineering in association with Board of Studies, Mechanical Engineering on July 8, 2019.
- 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.
- 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.

MEMBERSHIPS OF PROFESSIONAL BODIES:

- Fellow Member of The Institution of Engineers (India) F-124183-0
- Life member of Indian Society for Technical Education. LM-35483
- Life Member of Tribology Society of India. LM 4140
- Life Member of Solar Energy Society of India (SESI). LM/2556/2021.
- Society of Automotive Engineers: SAE-7190510205

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

- ATAL FDP Face-to-Face on “Product Design, Development and Manufacturing through a Boot Camp”, 10/01/2022 to 14/01/2022 organized by COEP, Pune.
- AICTE-ISTE approved orientation/refresher program on “Nanotechnology: Applications in Mechanical Engineering”, during 10-16 December 2021, organized by Muffakhan Jha College of Engineering and Technology, Hyderabad, Telangana.
- ATAL Academy online FDP on “3D Printing and Design”, 14-18 December, 2020.
- AICTE sponsored online one week STTP on “Recent Advances in Materials and Manufacturing: Part III”, 5-10 October, 2020 at GVP COE, Madhurwada, Vishakapattanam.
- AICTE sponsored online one week STTP on “Recent Advances in Materials and Manufacturing: Part I”, 3-8 August, 2020 at GVP COE, Madhurwada, Vishakapattanam.
- AICTE Online “Orientation Training Program for Mentors”, 03-10 June, 2020.
- One week online Faculty Development Program on “Promoting Quality Culture in Technical Institutes” 25-29 May 2020, organised by AISSMS COE, Pune.
- One week online Faculty Development Program on “Outcome Based Education: A step towards Excellence” from 11-15 May 2020 under Margdarshan Scheme of AICTE, New Delhi organised by Govt. College of Engineering, Karad.
- Online course offered by TCS iON, Career Edge - Knockdown the Lockdown, 23 April-21 May 2020.
- ISTE sponsored FDP on “Vision-Mission-PO-PSO-Co Framing”, 10-15 June 2019.
- 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

NPTEL CERTIFICATION COURSES

- Manufacturing of Composites, *Successfully completed*, **July-Sept. 2017** (8 Week)
- Failure Analysis and Prevention, *Elite*, **Feb.-March 2018** (8 Week)
- Engineering Metrology, *Elite*, **July-October 2018** (12 Week).
- Design for Quality, Manufacturing and Assembly, *Elite*, **August-Sept. 2018** (8 Week)
- Friction and Wear : Case studies, *Elite*, **Jan.-April 2019** (8 Week).
- Accreditation and Teaching - Learning in Engineering (NATE), **Jan-April 2020** (12 Weeks).
- Data-Enabled Tribological Engineering: From Experiments to Predictive Models, *Elite*, **Jan-April 2024** (12 week).

ADMINISTRATIVE DUTIES & RESPONSIBILITIES PERFORMED

Department Level:

- Head of Department, First Engineering (Since July 2025)
- Institute Academic Coordinator (2022-2025)
- Head of Department, Mechanical Engineering (2019-2022)
- NBA Co-ordinator
- Research Co-ordinator
- TNA co-ordinator TEQIP-II
- Member- cultural and social events
- Liaisoning Officer for Staff selection interviews
- Organized various work-shops, industrial visits for faculty as well as for students

Institute Level

- Institute Academic Coordinator (2022- to till date)
- ERP Coordinator (2015 to 2019)
- 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
- Panel Member – Faculty recruitment 2016-17
- College Examination Officer (CEO) SPPU, Pune Examinations at SCOE, Pune

University Level:

- **Member - BOS**
- **Member- Local Inquiry Committee**
- **Member & Subject Expert- University Selection Panel**
- Act as a Chairman for PhD Viva-Voce of a PhD Scholars
- Subject chairman and Paper setter for various courses for UG and PG
- Participation in Syllabus Framing of Production and Mechanical Sandwich courses

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

1. International conference on Tribology- TRIBOINDIA-2018, 13-15 Dec. 2018, at VJTI Mumbai.
2. Two day state level seminar on “Recent Trends in New Product Development”, 8-9 March 2018, at AISSMSCOE, Pune.
3. One day workshop on, “Detailing of Syllabus for Subject of Advanced Manufacturing Processes (Elective-II) BE Mechanical 2015 Course”, 7th March 2018, at PCCOE, Pune.
4. One day Training on Six Sigma, 28th Sept. 2017, AISSMS COE, Pune.
5. One day workshop on “Virtual Labs”, 4th August 2017, held at AISSMSCOE, Pune.
6. One day workshop on syllabus implementation of TE Mechanical Engineering 2015 course, on 21st October 2016, held at Ramkrishna College of Engineering, Pune.
7. Two day staff development program on “Staff Development Program”, 25-26, August 2016, held at AISSMSCOE Pune.
8. Two day seminar on “Zero defect- Quality Improvement in Industries”, 3-4 March 2016, held at AISSMSCOE Pune.
9. Two day workshop on “Automotive NVH”, 27-28 Feb. 2016, held at AISSMSCOE Pune.
10. One day FDP on “Reliability Engineering In Practice”, 11th September 2015, held at PES Modern College of Engineering, Pune.
11. One day workshop on syllabus implementation of B.E. Mechanical Engineering 2012 course, on 1st August 2015, held at Bharati Vidyapeet's COE for women Pune.

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

PERSONAL INFORMATION:

- Date of Birth 07th July 1978
- Address Flat No: C-204, Avenir, S. No. 8/6, Near Utkarsha School, Dhabhadi, Sinhgad Road, Ambegaon (Bk.) Pune- 411 046
- E-mail ID bdbachchhav@aissmscoe.com bhanudas2k@gmail.com
- Cell No 9850172628
- Category NT-C
- Present Pay Scale Basic Pay = 1,53,000/-

Date: 07/07/2025

Place: Pune



Dr Bhanudas D Bachchhav

Professor and Institute Academic Coordinator
Department of Mechanical Engineering
AISSMS College of Engineering, Pune