

Name:

Dr. Manmohan M. Bhoomkar

**Designation:**

Head of Department (Mechanical Engg. Dept.) & Associate Professor
Engg. Dept.

Contact Details:

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Educational Qualifications:

- PhD (Mechanical Engg.), Pune University, 2010.
- M.E. (Mechanical Engg), Shivaji University, Kolhapur, 1995.
- B.E. (Mechanical Engg), Marathwada University, Aurangabad, 1991.

Experience:

- Industrial: _ 1 Years
- Teaching: __ 25 Years
- Research: 10 Year (BUTR/Engg1801-170 from 20/04/2011)

Research Interests:

- Design & Manufacturing Engineering, Offset Printing, Theory of Machine & mechanism, Advance Manufacturing Processes, Additive Manufacturing.

Research Projects:

- world class manufacturing in printing industry

Patents: (Details)

A Chilled Roller with Wire Insert For Offset Printing Machine

Details - The present invention refers to a chilled roller with recirculation of water or other suitable fluid used in offset printing machines. The chilled water is circulated through the copper coated rollers which will give the desired surface temperature. The wire insert (5) is added in annular space to have uniform heat transfer distribution across the length of the roller.

Field of Consultancy (Aspiring):

CMM, Hardness Testing

Consultancy offered:

- Company Name: ACCURATE Gauging and Instruments Pvt. Ltd, Pune
 - a. Area: GD&T and Quality Analysis by MINITAB
 - b. Duration: From 24st Sept 2015 to 26th Sept 2015
- Company Name: LASER Automation Pvt. Ltd, Pune.
 - a. Area: Hardness Testing of MS Plate
 - b. Duration: 6 Oct 2012

Number of Publications:

International Journal:

- Experimental investigation and modification in inking rollers of offset printing to achieve WCM approach in printing industry, ARPN Journal of Engineering, ISSN 1819-6608 vol. 2 No. 6, Dec. 2007 PP44 to 48.
- Development of mathematical model Generation to determine the optimum tolerance of quality in Printing Industry, International Journal of Mathematical Science and Engineering Applications, Vol. 2 No. II, 2008, PP. 33-45
- An Integrated Management Information System for Small and Medium Printing Industry, International J. of Engg. Research & Indu. Appls. ISSN 0974-1518, Vol. 1, No. II (2008), PP93-104
- Optimization of Plate Process Parameters to Achive WCM Approach in Small and Medium
- Scale Offset Printing Industry, Journal of Mechanical engineering ,The Institution of Engineers (India), ISSN0020-3408 Vol.91, Oct.2010 PP22 to 27.
- Modak G. S, Bhoomkar M. M, 'Lobe optimization and force analysis at contact point of the conjugate wheel of an innovative stair climbing apparatus', International Conference on Advances in Thermal System, Materials and Design Engineering, VJTI, Mumbai, December 2017. (The conference was approved by AICTE under the TEQIP III program)
- Also published on ELSEVIER SSRN: <https://ssrn.com/abstract=3101357> or <http://dx.doi.org/10.2139/ssrn.3101357>
- Bhoomkar M. M, Modak G. S, 'Innovative stair climber using associated wheels', Frontiers of Mechanical Engineering, a publication by Springer (ISSNPrint: 2095-0233, ISSNelectronic: 2095-0241), Vol. 11, Issue 3, pp 299-310, September 2016.
- Bhoomkar M. M, Modak G. S, 'Review Article: Evolution of a Stair-Climbing Power Wheel-chair', IOSR Journal of Mechanical and Civil Engineering (e-ISSN: 2278-1684, p-ISSN: 2320-334X), Vol. 5, pp 36-41, April 2013
- Bhoomkar M. M, Modak G. S, 'Innovative Design of Staircase Climbing Wheelchair', International Journal of Engineering Research and Technology (ISSN: 2278-0181), Vol. 2, Issue 2, pp 1-6, February 2013.

- Bhoomkar M. M, Modak G. S, 'Staircase Climbing Platform driven by Conjugate Wheels' (Indian Patent Application 132/MUM/2014, year 2014), in Official Journal of The Patent Office, Government of India, Vol 1/2015, pp 18546, January 2015.

International Conference:

- International conference on Advances in Manufacturing at Kumar Guru College of Tech. Coimbatore between 5.1.2205 – 7.1.2005.
- International conference on Advances in Mechanical Engg. At IISC Bangalore July 2-4 2008.
- 9th International Symposium on Measurement and Quality control at IIT,Chennai during Nov. 21-24, 2007.
- National Conference on Advances In Manufacturing in the Era of Globalisation on 21.1.2005 and 22.1.2005 at Govt. College of Engg. , Pune.
- National Conference on World Class Manufacturing at College Of Engg. Vardha in July 2004.
- National Conference on Intelligent Manufacturing System at College Of Tech. Coimbatore in 1998.
- Bhoomkar M. M, Modak G. S, 'Optimization of lobes for a stair climber using associated wheels', International IEEE conference 'SCOPEs 2016' by Centurion University of Technology and Management, Paralakhemundi, Odisha, pp 1134-1138, October 2016.
- Also published on IEEE Explore digital library at INSPEC Accession Number: 16980747 and DOI: 10.1109/SCOPEs.2016.7955618
- Bhoomkar M. M, Modak G. S, 'Conjugate-wheel driven Staircase Climbing Wheelchair', International Conference on Machines and Mechanisms 2013 (iNaCoMM 2013) by Association of Machines and Mechanisms, India. (AMM), IIT Roorkee, pp 444-451, December 2013.
- Bhoomkar M. M, Modak G. S, 'Review Article: Evolution of a Stair-Climbing Power Wheel-chair', in Proceedings on National Conference on Recent Developments in Mechanical Engineering 2013 (RDME-2013), organized by Department of Mechanical Engineering, Modern Education Society's College of Engineering, Pune, pp 36-41, April 2013.

Number of Books / Book chapters Published:

Number of Books – 05

- Mechatronics, Dr. M. M Bhoomkar & Sanket S. Chikshe, Nirali Prakashan, Pune 939050601-8
- Industrial Engineering, Dr. M. M. Bhoomkar & Sanket S. Chikshe, Nirali Prakashan, Pune 939050653-0.
- Metrology and Quality Control, Dr. M. M Bhoomkar & Sanket S. Chikshe, Nirali Prakashan, Pune, 938910875-6.

- Metrology and Quality Control----Dr. M. M Bhoomkar, Dr. A. M Badadhe, Dr. B. Anand, S. G. Shilawant, Nirali Publication, 978-93-5164-133-9
- Mechatronics---Dr. M. M. Bhoomkar, Dr. A. M. Badadhe , Dr. Suhas Deshmukh, Nirali Publication, 978-93-5164-359-3.

Number of PhD students Guided: 02

- Girish Modak
- Deepak Patil

Number of PhD students Evaluated: 01

Recognition/ Awards: 05

- Recognition as Ph. D guide in Mechanical Engineering in SPPU from 2011 to 2027 (BUTR/Engg/1801-170).
- Recognition as Ph. D guide in Printing Engineering in SPPU from 2008 to 2015 (BUTR/Engg/2844).
- PG Teacher in Mechanical Engineering from 20/4/2011-19/4/2016. BUTR/Engg./1801-98
- BOS member of Printing & Communication Engineering from 2011.
- Presented research work on Novel Approach in Printing Technology in 3rd Research convention (West Zone) ANVESHAN 2010 at The Maharaja Sayajirao University of Baroda dated on 23rd June 2010.
- Worked as CEO, PVGCOET from October 2012 to August 2018.

Professional Society Memberships: 03

- ISTE (LM 26386)
- MIE (M123774-2)
- FIE (F-119752-1)

Number of FDPs / STTPs organized: 02

- Organized as Dept. Coordinator One week online FDP on “Python 3.4.3” from 25th may to 30th may 2020.
- Organized as Dept. Coordinator two days FDP on “Implementation of Revised syllabus MQC 2012” on 29th and 30th June 2014.

Number of Workshops organized: 02

- Organized as Coordinator two days international workshop on “Advances in Mechanical engineering” on 1st & 2nd March 2019.

Number of Seminars organized: 03

Number of FDPs / STTPs attended: 13

Number of Conferences / Seminars attended: 23

Number of Online Certification Courses done: 06 NPTEL & 02 COURSERA

Sr. No.	Course Title	Duration	Type of Certificate
1.	Operation Management	12 Weeks	Gold + Elite
2.	Product Design & Development	4 Weeks	Silver + Elite
3.	Work System Design	12 Weeks	Silver + Elite
4.	Fundamental of Manufacturing Processes	12 Weeks	Successfully Completed
5.	Inspection & Quality control in Manufacturing	4 Weeks	Elite
6.	Fundamental of Welding Science & Technology	8 Weeks	Successfully Completed
7.	Design for Quality, Manufacturing & Assembly	8 Weeks	Successfully Completed

Number of Webinar attended: 09

Number of times served as a Resource Person: 07

Number of times served as a Reviewer / Judge: 05

Major Portfolios Handled: (college level and department level)

- Working as Head of Mechanical Engg. Department.
- CEO of Exam Department PVGCOET from 2012 to 2018.
- MESA Staff In-charge 2019-20 & 2020-21.
- Project Coordinator 2019-20 & 2020-21.

Role in University Bodies....

- BOS member of Printing & Communication Engineering from 2011.
- Subject Chairman for Mechatronics, MQC, Operation Research for 2015 pattern.

Any other information which is not covered in above points:

- Attended online workshop on “Inculcating Universal Human Values in Technical Education” on 26th to 30th October 2020.