

Name : **Dr. Madhuri N. Mangulkar**
Designation : Associate Professor
Date of Joining : 6th Nov. 2017
Education : Ph.D (Civil Structure)
Government College of Engineering,
Aurangabad.
Dr. Babasaheb Ambedkar Marathwada
University Aurangabad.



Name of the institute : Marathwada Institute of
Technology,Aurangabad

Area of Research : Structural Engineering , Concrete Technology.

Area of Specilazation : **Concrete Technology**

Working experience : **20 Years till date**

Educational Qualification:

1. B.E. (Civil Engineering) (1998), Karmaveer bhaurao college of Engineering and polytechnic Satara, affiliated to shivaji university,Kholapur, Maharashtra India.
2. M.E (Civil-Structue) (2006), Government college of Engineering Aurangabad, affiliated to Dr.Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra India.
3. PhD. (Civil - stucture), (2016), Government college of Engineering Aurangabad, affiliated to Dr.Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra India.

Sr.No	Educational Qualification	Year of Passing	University	Percentage	Remark
1	B.E.(Civil Engineering)	May1998	Shivaji university,Kholapur,	67.14	Distinction
2	M.E(Civil-Structue)	Aug2006	Dr.Babasaheb Ambedkar Marathwada University Aurangabad	63.14	First class
3	PhD. (Civil - stucture),	Oct2016	Dr.Babasaheb Ambedkar Marathwada University Aurangabad		

Working Experience

1. As lecturer in Government college of Engineering Aurangabad, affiliated to Dr.Babasaheb Ambedkar Marathwada University Aurangabad Maharashtra, India, from August 2001 to November 2004. (visiting)
2. As Assistant Professor in Civil Engineering Department Jawaharlal Nehru engineering college Aurangabad, Maharashtra, India, from Aug. 2005 to 6 Nov 2017
3. As Associate Professor in Civil Engineering Department , Marathwada Institute of Technology,Aurangabad, from 6 Nov 2017 to Till Date.

Publications:

1. Mangulkar, Madhuri N and Ghosh, Suddhasheel and Jamkar, Sanjay S, “Identification of Dominant Shape Characteristic for Particle Packing Models using an Imaging Technique for Aggregates”, Global Journal of Research In Engineering, Vol.22(1), Year 2021.
2. Anagha D. Satbhai1, M.N. Mangulkar2, B.G. Thoksha3, “Study of Nano-additives in Concrete Mix Proportioning using Nano-particle,”Journal of Construction Engineering, Technology \& Management, Volume 10, Pages 37—48, Year 2020,
3. M. N. Mangulkar1, Nisha Paikrao2, *, “Seismic Performance of RC Elevated Liquid Storage Tank Supported on Partial Shaft Type and Full Shaft Type Staging,” International Journal of Structural Engineering and Analysis, Volume 6, Pages 1—9, Year 2020.
4. Satbhai, Anagha D. and Mangulkar, Dr M. N. and Thoksha, Dr B. G., “Nano-additives in Concrete: Present Scenario and Challenges, Recent Trends in Civil Engineering \& Technology, Volume 9, Year 2019, Pages 11--20
5. Mangulkar M.N., Ghosh S., Jamkar S.S. (2020) Estimation of Aggregate Characteristics Using Digital Image Processing. In: Gunjan V., Singh S., Duc-Tan T., Rincon Aponte G., Kumar A. (eds) ICRRM 2019 – System Reliability, Quality Control, Safety, Maintenance and Management. ICRRM 2019. Springer, Singapore. https://doi.org/10.1007/978-981-13-8507-0_2.
6. Nisha Paikrao1,*, Madhuri N. Mangulkar2, “Review on Seismic Analysis of Overhead Storage Reservoir,” International Journal of Structural Engineering and Analysis, Volume 5, Year 2019, Pages 25--33
7. Kala, Akash and Mangulkar, Madhuri and Jain, Indrajeet, “The use of outrigger and belt truss system for high-rise RCC building”, International Journal of Civil Engineering and Technology, Volume 8, Year 2017, Pages 1125-1129.

8. Mangulkar M. N., Jamkar S.S., “Digital Image Processing Based System for the Characterization of Coarse Aggregate”, *Jordan Journal of Civil Engineering*, Vol. 10 (1), 2016.
9. Rampure, Aarti Baburao and Mangulkar, Madhuri Nilesh, “Comparison between response spectrum and time history method of dynamic analysis of concrete gravity dam”, *Open Journal of Civil Engineering*, Volume 6, Year 2016, Pages 329—334.
10. Ramchandani, Jaya Rajkumar and Mangulkar, Madhuri Nilesh, “ Comparison between different shapes of structure by response spectrum method of dynamic analysis”, *Open Journal of Civil Engineering*, Volume 6, Year 2016, Pages 131—138.
11. Akash Kala, Madhuri Mangulkar, Indrajeet Jain, “Optimum position of outrigger with belt truss in tall building under horizontal load”, *International Journal of Recent Advances in Engineering & Technology*, Volume 4, Year 2016, Pages 2347—2812.
12. Ali, Danish and Madhuri, NM, “Evaluation of angle of excitation for torsion by using irregularities in RCC frame,” *IOSR J. Mech. Civ. Eng.*, Volume 13, Year 2016, Pages 46—52.
13. Samudre, Mohini P and Mangulkar, MN and Saptarshi, SD, “A review of emerging way to enhance the durability and strength of concrete structures: microbial concrete”, *International Journal of Innovative Research in Science, Engineering and Technology*, ISSN, Year 2014, Pages 2319—8753.
14. Mangulkar M.N., Jamkar S.S., “Review of Particle Packing Theories Used For Concrete Mix Proportioning,” *Proceedings of International conference on ‘Innovations in Civil Engineering’*, Organized by Indian Concrete Institute, Chennai and *International Journal of Scientific and Engineering Research*, 9-10 May 2013.
15. Jatale, Vinayak B and Mangulkar, MN, “Performance of self compacting high strength fiber reinforced concrete (SCHSFRC),” *Journal of Mechanical and Civil Engineering*, Volume 7, Year 2013, Pages 37—41.
16. Jatale, Vinayak B and Mangulkar, MN, “Flexural Behavior of Self Compacting High Strength Fibre Reinforced Concrete (SCHSFRC),” *International Journal of Engineering Research and Applications (IJERA)* ISSN, Year 2013, Pages 2248- -9622
17. Mangulkar Madhuri. N., Gaikwad Madhukar V., “Review on seismic analysis of elevated water tank,” *International Journal of Civil Engineering and Technology (IJCIET)*, ISSN 0976 -- 6308, Volume 4, Year 2013, Pages 288—294.

18. Gaikwad Madhukar, V and Mangulkar Madhuri,N, “Comparison Between Static And Dynamic Analysis Of Elevated Water Tank” International Journal of Scientific & Engineering Research, Volume 4, Issue 6, June-2013. ISSN 2229-5518.
19. Misam Abidi, Mangulkar Madhuri. N., “Review on Shear Wall for Soft Story High-Rise Buildings”, International Journal of Engineering and Advanced Technology (IJEAT), Volume 1, Year 2012.
20. Pawade, Rupesh R and Mangulkar, MN, “Influence of Combine Vertical Irregularities in the Response of Earthquake Resistance Rc Structure,” IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) Volume, Volume 14.
21. Kulkarni, Reshma and Mangulkar MN, “Design of intze water tank using java program”, International Journal Of Scientific & Engineering Research, Volume 7, Issue 7, July-2016 1487 ISSN 2229-5518
22. M S Dixit, M N Mangulkar, “Comparison of Safe Bearing Capacity Based on Laboratory and Field Tests” Earthquake Geotechnics: Select Proceedings of 7th ICORAGEE 2021, 435-448
23. [Dinesh Rathod](#), [Madhuri N. Mangulkar](#) and [Bhagwan Ghanshamji Toksha](#) Polymer Composites for Construction Applications, Industrial Applications of Polymer Composites, benthem publication ,pp, 1-19,(19) book chapter/ **DOI:** [10.2174/9789815124811123010004](https://doi.org/10.2174/9789815124811123010004)

Patent (Technology)

National Patent registered vide Application No. 1454/MUM/2014 dated 10/05/2022.

Title of the patent: Method and Apparatus for Measuring Characteristics of Aggregates of Concrete Mass by Using Digital Image Processing

Applicants: Dr. S.S. Jamkar, Ms. M.N. Mangulkar, and Md. Vazeeruddin.

Patent (Design)

National Patent has registered vide Design Application No. 265756 in class 10-04 Dated 18/09/2014.

Title of the patent: Apparatus for Determining Dimensions of Aggregate Particles Used in Concrete in the name of Government College of Engineering, Aurangabad Applicants: Dr. S.S. Jamkar, Ms. M.N. Mangulkar, and Md. Vazeeruddin.

Research Project

1. Research Project titled “Evaluation of Shape Characteristics of Coarse Aggregates using Digital Image Processing” is sanctioned for Rs. 1.46 Lakh under Seed money grant scheme of TEQIP Phase II.

2. Minor research project by Dr. Babasaheb Ambedkar Marathwada University

Aurangabad, “The use of cementitious nano particles in production of ecofriendly concrete”, funded for 35000/-

Workshop Conducted

“Research Methodology and Data analysis Techniques ,” two days workshop at 29 -30th march 2018 sponsored by Dr. Babasaheb Ambedkar Marathwada University by funding grant of 20000/-

Workshops Attended.

1. Numerical methods with MATLAB/ OCTAVE for engineers, january2-6 2017,MGM Jawaharlal Nehru Engineering college.
2. Foundation program in ICT for Education conducted by Indian institute of technology Bombay from march 8-12 ,2018.
3. NPTEL-AICTE,, July to October 2018,faculty development program for advanced concrete technology.
4. NPTEL-AICTE,, Feb to march 2018,faculty development program for Engineering mechanics: statics and dynamics.
5. Virtual lab development and certification program, 6-11 feb 2019, conducted by Indian institute of technology, Bombay.
6. Innovation and upgradation in infrastrucral Technology, STTP,27th May to 2 june2020 conducted by Terna Engineering College and ASTR krishna Conchem Products.
7. Concrete Technology and sustainable construction Practices STTP, 1sep 2020 to 25 sep 2020conducted by ATAL Academy and GECD.
8. Industrial IOTs and Industry 4.0 and disruptive Technologies STTP, 5may to 10 May 2020, Dr Babasaheb Ambedkar Technological University, Lonere.
9. FDP on "Novel Materials" from 2021-1-4 to 2021-1-8 at Malaviya National Institute Of Technology Jaipur.
10. FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education (AICTE) from 14 December, 2020 to 18 December, 2020.

11. International web Conference on impact of covid 19 on library resource sharing 12-13 june 2020.
12. Importance of Geotechnical Investigations for Civil Engg. June 13, 2021, MIT and IGS Aurangabad Chapter on 29th May 2021
13. “NDT Techniques” 05th June 2021 arranged by CED, MIT and IGS Aurangabad Chapter on 29th May 2021
14. Recent Trends in Deep Foundation Testing, arranged by CED, MIT and IGS Aurangabad Chapter on 29th May 2021.

Professional Body Membership:

1. Institution of Engineers(India) lifetime membership number-M1563992
2. Indian Geotechnical Society lifetime membership number-LM4634
3. Indian Society for Technical Education lifetime membership number-LM77147.

Administrative Duties allotted by Head of the Department:

1. Departmental Coordinator for National Board of Accreditation.
2. Departmental Coordinator for virtual lab

Administrative Duties allotted by Director

1. Institute level portfolios for academic year 2018-19 and 2019-2020, Central coordinator for Ranking and institute level surveys and feedback.
2. Member at admission facilitation center Mtech-FC/738
3. Committee members for write-off of available resources for civil engineering department.

Administrative Duties allotted by University

1. Paper setter for summer winter examination from 2005 to 2021
2. External Examiner for M tech dissertation for MGM college, nanded, 2020-2021.
3. Invigilator for exam duties for university examination.

