


Faculty Profile

Name	Mr. Umesh Tukaram Jagadale					
Department	Civil Engineering					
Designation	Assistant Professor					
Area of Specializations	Structural Health Monitoring					
Date of Joining the Institute	21/07/2014					
Contact Number	8600521804					
Email Id	umesh.jagdale@vpkbiet.org					
Qualifications with class/grade	UG: B.E. (Civil Engineering - 75.06%) – 2012 PG: M.E. (Structural Engineering-VPKBIET, Baramati - 7.25CGPA) - 2014					
Total Experience	Teaching	8 Years	Industry	-	Research	04
Paper Published (Reputed Journals,Scopus, and SCI)	National	09	International	03		
Paper Presented in Conferences /National /International	National	02	International	01		
No. of FDP/Workshops/STTPs attended	11					
Books Published/IPRs/Patents	02					
No. of Projects Guided	UG	10	PG	07	PhD	-----
Professional Memberships	Life Member, Indian Society for Technical Education. (LM 107724)					
Consultancy Activities	Involved in Material Testing (Concrete)					
Awards & Recognition	-----					
Grants Fetched	Received 60000/- Travel Grant from SPPU to Attend and Present Paper at University of Paradeniya, Candy, Sri Lanka in Dec. 2018.					
View Google Scholar, Research Gate, SCOPUS & ORCID Profile	<ul style="list-style-type: none">Google Scholar: https://scholar.google.co.in/citations?user=SdzGYJUAAAAJ&hl=en&authuser=1SCOPUS:https://www.scopus.com/authid/detail.uri?authorId=57213593715Research Gate: https://www.researchgate.net/profile/Umesh-JagadaleORCID: https://orcid.org/0000-0001-7174-5104					

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Journal Publications:

- 1) **Jagadale, U.T.**, Salunkhe, A., Nayak, C. B., (2022). *Blast Load Mitigation of Concrete Bridge Circular Pier by external Strengthening using CFRP Laminates and CNT Rubber Lining*. Journal of Emerging Technology and Innovative Research, Vol. 09(06), ISSN-2349-5162.
- 2) **Jagadale, U.T.**, Jadhav, A. B., Nayak, C. B., (2022). *Behaviour of Ternary Blended Cement in M40 Grade of Concrete*. Journal of Emerging Technology and Innovative Research, Vol. 09(06), ISSN-2349-5162.
- 3) Patil, L., Nayak, C. B., **Jagadale, U.T.**, (2022). *Effect of copper slag and fly ash and Nano Material to strengthen the properties of concrete*. Journal of Emerging Technology and Innovative Research, Vol. 09(06), ISSN-2349-5162.
- 4) C. B. Nayak, **U. T. Jagadale**, S. B. Thakare, N. T. Suryawanshi, G. K. Kate, and W. N. Deulkar (2022). "Seismic Vulnerability Assessment for Various Shapes and Types of Reinforced Concrete Shear Walls in Multi-Storey Buildings", Proc. eng. technol. innov., vol. 21, pp. 44.
- 5) Nayak, C. B., Taware, P.P., **Jagadale, U.T.**, Jadhav, N.A., Morkhade, S.G. (2021). *Effect of SiO₂ and ZnO Nano-Composites on Mechanical and Chemical Properties of Modified Concrete*. Iranian Journal of Science and Technology, Transactions of Civil Engineering, 46 (2), pp. 1-11. (SCI Impact factor = 1.46). <https://doi.org/10.1007/s40996-021-00694-9>.
- 6) **Jagadale, U.T.**, Nayak, C.B., Mankar, A. et al. *An experimental-based python programming for structural health monitoring of non-engineered RC frame*. Innov. Infrastruct. Solut. 5, 10 (2020). <https://doi.org/10.1007/s41062-020-0260-x>.
- 7) **Jagadale, U.T.**, Kharade, R.D., Nayak, C.B., Deulkar, W.D. (2020). Experimental Investigation for Damage Evaluation of Bridges Using Piezo-Transducers. In: Prashant, A., Sachan, A., Desai, C. (eds) Advances in Computer Methods and Geomechanics . Lecture Notes in Civil Engineering, vol 56. Springer, Singapore. https://doi.org/10.1007/978-981-15-0890-5_27.
- 8) Nayak, C. B., **Jagadale, U.T.**, Jadhav, K.M., Morkhade, S.G., Kate, G.K., Thakare, S.B., Wankhade, R.L. (2020). "Experimental, analytical and numerical performance of RC beams with V-shaped reinforcement" Innovative Infrastructure Solutions, Vol 6 (1), pp. 1-13. <https://doi.org/10.1007/s41062-020-00363-2>.
- 9) Kare, V., Nayak, C., **Jagadale, U.**, Deulkar, W. (2020). *Earthquake Response of 3d Frames with Strap Footing Considering Soil Structure Interaction*. In: Pawar, P., Ronge, B., Balasubramaniam, R., Vibhute, A., Apte, S. (eds) Techno-Societal 2018. Springer, Cham. https://doi.org/10.1007/978-3-030-16848-3_81.

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Conference publications:

1. **Jagadale, U. T.**, Nayak C. B., Deulkar W. N. (2018), *"Structural Health Monitoring Using Piezo-Ceramics Smart Material"*, at University of Paradeniya, Srilanka, ISBN 978-955-589-267-4.
2. **Jagadale, U. T.**, Nayak C. B., Deulkar W. N. (2018). *"Structural Health Monitoring Using PZT: A Review"*, in the National Conference on Technological Developments in Civil and Mechanical Engineering TDCME-2K18, SBPCOE, Indapur, March 2018, ISSN No: 2581-4230.
3. **Jagadale, U. T.** (2017), "A Review Paper on Effectiveness of RCC Shear Wall in Seismic Analysis of Multistoried Building" in National Conference on Technical Revaluation at APCOE, Pune.
4. **Jagadale, U. T.** (2016). *"Intelligent Transportation System on Roadways"* in National Conference on "Analysis and Design of Civil Engineering Structures under Static and Dynamic Loading" at ACOE, Sangmner.
5. **Jagadale, U. T.**, Panchal, K. D.(2016), "Corrosion Monitoring of Reinforced Concrete Structure" in National Conference on "Analysis and Design of Civil Engineering Structures under Static and Dynamic Loading" at ACOE, Sangmner.
6. **Jagadale, U. T.**, Nayak, C. B., (2014). *"Effectiveness of Reinforced Concrete Shear Wall in seismic performance of RC Building"*, in CIVIL PGCON- 2014, DYPIET, Pimpri, Pune.

Workshops Organized:

1. Organize one week workshop on "Damage detection and characterization strategy of non-engineering structures using piezoelectric sensors: theory and practice" sponsored by the **Science and Engineering Research Board (DST)** from 23rd to 27th December 2019 at VPKBIET, Baramati.

Workshop/STTP/FDP Attended:

1. Participated in a one-week AICTE-recognized Faculty Development Program on **"Making Villages Smart"** Conducted by Civil Engineering Department from 13/02/2023 to 17/02/2023 at NITTR Chandigarh.
2. Participated in a one-week ATAL FDP on **"Natural Ventilation and Building Design in Tropical Regions"** organized by the School of Planning and Architecture, Vijayawada, Andhra Pradesh. (An Institute of National Importance under the Ministry of Education) from 13/09/2021 to 17/09/2021.
3. Participated in a one-week ATAL FDP on **"Recent Developments in Construction Technology addressing Infrastructure and Coastal Engineering"** organized by Dr. D. Y. Patil Institute of Technology, Pimpri, Pune from 09/08/2021 to 13/08/2021.
4. Participated in a one-week ATAL FDP on **"Structural Dynamics and Earthquake Resistant Design of Structures"** organized by Government College of Engineering-Salem from 24/08/2021 to 28/08/2021.
5. Participated in a one-week AICTE Sponsored FDP on **"Futuristic Trends in Civil Engineering"** organized by New Horizon College of Engineering, Bengaluru from 05/07/2021 to 10/07/2021.
6. Participated in FDP on **"Journey to Research and Beyond"** organized by the Department of Civil

Engineering in a one-week Dr. D Y Patil School of Engineering, Lohegaon, Pune, from 21/05/2021 to 25/05/2021.

7. Participated in AICTE-ISTE approved Orientation/Refresher Programme on **“Innovative Teaching-Learning Methods”** organized by Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati, Pune, Maharashtra from 06/05/2021 to 12/05/2021.
8. Participated in a three-week FDP on **“Outcome Based Education”** at D Y Patil College of Engineering, Akurdi, on March 24 to April 14, 2020.
9. Participated in a one-week FDP on **“MATLAB Applications in Engineering and Science”** at GCOE, Karad on 27 April to 01 May 2020.
10. Participated in a two-week FDP on **‘Renewable Energy Sources: A Way Ahead’** at Cummins College of Engg. For Women Nagpur on 15 -31 May 2020.
11. Participated in Online Syllabus Orientation Workshop for S.E. Civil (2019 Pat.) from 22nd to 26th June 2020.
12. Participated in a one-week FDP on **‘National Board of Accreditation-Process, Systems & Imp: Criteria’** at S. B. Patil College of Engineering, Indapur in association with SPPU on 16-20 Dec. 2019.
13. Participated in a Short-Term Training Programme through ICT Mode on **“Laboratory Safety Management”** organized by the National Institute of Technical teachers training and Research, Kolkata (Established by the Ministry of Human Resource Development, Government of India) from 23-09-2019 to 27-09-2019.
14. Participated in One Week STTP on **“Repair, Retrofitting and Strengthening of Building”** at Dr. J. J. Magdum College of Engineering, Jaysingpur, Sangali held on 7th – 11th Dec 2015.
15. Participated in Two Week ISTE STTP on **“Environmental Studies”** Conducted by the Indian Institute of Technology Bombay from 02-12 June 2015.
16. Participated in Three Days Workshop on **“Seismic Design, Evaluation, Retrofitting and Optimization of Multi-Storied Buildings”** during 27– 29 March 2015 at Vidya Pratishthan’s College of Engineering Baramati.

National/ International Programs/Courses

1. Mr. Umesh T. Jagadale successfully completed a 12-week NPTEL Course on “Design of Steel Structure”, Jul-Oct, 2019.
2. Mr. Umesh T. Jagadale successfully completed a 12-week NPTEL Course on “Design of Concrete Structure”, Jul-Oct, 2019.

MOOC/NPTEL

1. 12-week NPTEL Course on “Design of Steel Structure”, Jul-Oct, 2019.
2. 12-week NPTEL Course on “Design of Concrete Structure”, Jul-Oct, 2019.

Vision Statement

Short Term

a) Teaching

- Short-term teaching goal is to explore students with recent updates on technology and research.

b) Research

- Publish a minimum one research paper per year which comes under Scopus/SCI/web of Science based on own research work.
- Attend and organize different seminars/guest lectures/workshops to update with current technologies.

Long Term

a) Teaching

- To develop a new course and lab.

b) Research

- Submit the research proposal to different funding agencies to attract funding in the institute.
- Work on all emerging areas, and portfolios that help in improving the NAAC/NBA/NIRF/ARRIA ranking of the institute.

Future Plan

- To work for getting the Autonomous status of the Institution.
- To work for getting the National Board Accreditation (NBA) of Civil Engineering Department.
- To work for getting good rank of Institution in National Institutional Ranking Framework (NIRF).