

Veermata Jijabai Technological Institute (VJTI), Matunga, Mumbai-400019

Civil and Environmental Engineering Department

Name of the faculty	Dr. Vikas B. Varekar	
Designation	Assistant Professor	
Qualification	PhD Environmental Engg., IIT Bombay [July '10 – March '16]; M. Tech Civil- Environmental Engg. (Walchand College of Engg. Sangli) Maharashtra [July '07- June '09]; B. E. Civil Engg. (Shivaji University Kolhapur) [July '03-May '07]	
Date of Joining VJTI	04-07-2016	
Previous Experience	Research Associate IIT Bombay [March, 2016 to July, 2016] Research Scholar IIT Bombay [July, 2010 to February, 2016] Assistant Professor, Department of Civil Engg., Walchand College of Engg., Sangli [January 2010, to May, 2010]	
Contact No. / E-mail Personal website link	Mobile no. 9082684705/ 9860460202; Email ID- vbvarekar@ci.vjti.ac.in ; vbvarekar@gmail.com Website: https://www.drvikasvarekar.com	
Area of Research	Environmental Sustainability; Air Pollution and Control; Solid Waste Management; Waste to Energy; Environmental Management; Environmental laws and policies; Environmental Impact Assessment; Sustainable Development; Environmental Monitoring; Water and Wastewater Treatment; Ecology and Environment; GIS and Remote Sensing Applications in Environmental engineering; Water treatment and distribution; Urban Water Resilience, and Urban Planning; Environmental System Modelling and Optimization; River Water Quality Monitoring and Management; Water Resources Systems; Infrastructure planning and Management; Public Private Partnership Models; Construction Materials; Construction Project Management; AI and IOT applications in Civil Engineering; Construction Material;	
Subjects Taught	Water and Wastewater Engineering; Air and Noise Pollution Control; Solid and Hazardous waste Management; Industrial Wastewater treatment; Unit Operations and Process; Advanced Wastewater Treatment; Environmental Engineering; Geographic Information System; Sustainable Development; Risk and Value Engineering; Hydrology and water Resources Engineering; Research Methodology; Water and Wastewater Laboratory; Industry Internship; Construction Management laboratory; Advanced Project Management Laboratory; Computer Application Laboratory; Building Drawings and services laboratory;	

Publications	<table border="1"> <thead> <tr> <th colspan="2">Journal Publication</th> <th colspan="2">Conference Publication</th> <th rowspan="2">Book Chapters</th> </tr> <tr> <th>International</th> <th>National</th> <th>International</th> <th>National</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>01</td> <td>60</td> <td>10</td> <td>Book chapters-04, Book Edited -01</td> </tr> </tbody> </table>					Journal Publication		Conference Publication		Book Chapters	International	National	International	National	10	01	60	10	Book chapters-04, Book Edited -01
	Journal Publication		Conference Publication		Book Chapters														
	International	National	International	National															
10	01	60	10	Book chapters-04, Book Edited -01															
H Index: Google Scholar: 5 Scopus: 3																			
Research Guidance	(i) M.Tech Guided: Completed: 33; Ongoing : 05 (ii) Ph.D Guided.-: Completed: 01 , Ongoing : 04																		
Patent	01 Patent filed																		
Collaboration/Interaction with outside word	<ol style="list-style-type: none"> 1. Municipal Corporation of Greater Mumbai (MCGM), Mumbai Technical Advisory Committee (TAC) member for Dharavi STP 2. Technical Third Party Auditor for Kalyan Dombivali Municipal Corporation (KDMC), Kalyan 3. Deputed as an Officer for verification of UG admission by Department of Technical Education (DTE), Government of Maharashtra 4. Appointed as a Venue Officer for MAH MARCH/MHMCT CET 2024 by State CET cell, Maharashtra State, Government of Maharashtra 																		
Consultancy works undertaken	<ol style="list-style-type: none"> 1. Consultancy service for third-party project engineering firm/unit for Development and Operation of Integrated Solid Waste Processing Facility on Design-Build-Operate-Transfer (DBOT) basis for Ambarnath Municipal Council (AMC), Kulgaon-Badlapur Municipal Council (KBMC) and Ulhasnagar Municipal Corporation (UMC) Consultancy service for reliability study of Sewage treatment plant with capacity 4 MLD located at Dombivli (east) owned by Dombivli MIDC 2. Feasibility study for Implementation of Bioremediation and Phytoremediation technology to treat the dry weather flow entering into the drains of Mumbai in city area, for Municipal Corporation of Greater Mumbai (MCGM), Mumbai 3. Vetting of Design for 500 KLD Sewage Treatment Plant with MBR Technology at Ratnagiri Gas and Power Pvt. Ltd. (RGPPL) (A subsidiary of NTPC Ltd.) Ratnagiri. 4. Third party audit for Construction of sewer conveyance system- 81.3 Km. pumping station-14 Nos and Rising Main-16.05Km. in 14 different sewer zones in 12 sectors of KDMC and construction of sewer property connection for different parts of KDMC area under AMRUT MISSION, Kalyan, Maharashtra, Kalyan Dombivali Municipal Corporation, Kalyan, Maharashtra, India. 5. Third party audit for Construction of vegetable market at reserved plot near golden park in Kalyan west, Maharashtra, Kalyan Dombivali Municipal Corporation, Kalyan, Maharashtra, India. 6. Third party auditor for Design, Construction, and Development of Integrated Solid Waste Management including Sanitary Landfill along with O&M for Municipal Solid Waste at reserved site 																		

	<p>Umbarde, Kalyan –West, Maharashtra, Kalyan Dombivali Municipal Corporation, Kalyan, Maharashtra, India.</p> <ol style="list-style-type: none"> 7. Third party auditor for Designing, Providing, Constructing and Commissioning 10.00 M.T. capacity biogas plant at Ayare road, Dombivli, (East) in Kalyan Dombivali Municipal Corporation Area, with Operation, maintenance and repairs for 5 years after Commissioning of plant, Kalyan Dombivali Municipal Corporation, Kalyan, Maharashtra, India. 8. Third party auditor for Designing, Providing, Constructing and Commissioning 10.00 M.T. capacity Biogas plant at Barave, Kalyan (West) in Kalyan Dombivali Municipal Corporation Area, with Operation, maintenance and repairs for 5 years after Commissioning of the plant, Kalyan Dombivali Municipal Corporation, Kalyan, Maharashtra, India 9. Third party auditor for Designing, Providing, Constructing and Commissioning 10.00 M.T. capacity Biogas plant at Umbarde, Kalyan (West) in KDMC Area, with Operation, maintenance and repairs for 5 years after Commissioning of the plant, Kalyan Dombivali Municipal Corporation, Kalyan, Maharashtra, India 10. Expert opinion about Flux Magnnatometer on Potable drinking water quality of Ulhas River, for STEM Thane 11. Water quality monitoring and expert opinion on identification of cause of pollution for Ulhas River basin, for STEM Thane
<p>Honors and Awards Received</p>	<p>Awarded with Shr. S. V. Patwardhan Memorial prize (2015) for best research article by Indian Water Works Association (IWWA) India.</p>
<p>Membership of Professional Body/ NGO</p>	<p>Lifetime member of Indian Water Works Association (IWWA), India; Member of Indian Society for Technical Education (ISTE); Member of Institution of Engineers, India</p>
<p>Training Programmes /Courses/workshops Organized</p>	<p>International Conferences organized:</p> <ol style="list-style-type: none"> 1. <u>International Conference on Environmental Sustainability (ICES)-2023</u> at VJTI Mumbai during March 16-17, 2023 in the capacity of principal convener. Total 300 research articles were presented in 25 parallel sessions in two days by participants from across the globe <p>Faculty Development Programme Organized:</p> <ol style="list-style-type: none"> 1. Faculty development programme entitled “<u>Innovative Technologies for Sustainable Environmental Sanitation</u>” organized during 22 to 27 July 2023, at VJTI Mumbai, Sponsored by SFC ENVIRONMENTAL TECHNOLOGIES PRIVATE LIMITED India, Metrohm India Pvt. Ltd., Analytik jena India Pvt. Ltd. Approved by DTE Maharashtra, Govt. of Maharashtra and AICTE Govt. of India 2. Faculty development programme entitled “<u>Innovative Technologies for Sustainable Water Resources Management</u>” organized during 10 to 15 June 2019, at VJTI Mumbai, Sponsored by TEQIP-III, Government of India and DHI (India), Environment and Water Pvt. Ltd. New Delhi. 3. Online Faculty development programme entitled “<u>Recent Advances in Civil Engineering</u>” jointly organized with Engineering College Ajmer

under TEQIP-III Twinning activity, during 02 to 07 June 2020, at VJTI Mumbai, Sponsored by TEQIP-III, Government of India

STTPs/workshops attended

1. Successfully completed Five days training course on **Prospects of Infrastructure Development in the Construction Sector during 22-26 May 2023** Organised by Department of Civil Engineering **Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab India**
2. Successfully completed Five days training course on **“Quality Assurance through NAAC Accreditation Process” during 21-25 February 2023** organized by **National Institute of Technical Teacher Training and Research Centre Chennai**
3. Successfully completed Five days training course on **“Advanced Computational Techniques in Water Resources Engineering and Management (ACT-WREM : 2021)** organized by Department of Civil Engineering, **National Institute of Technology, Hamirpur Himachal Pradesh, during 01 – 05 March 2021.**
4. Successfully completed Three days short term training course on **Introduction to Life Cycle Assessment: From Theory to Practical Applications** held at IIT Kharagpur during 14th – 16th September, 2016 as part of TEQIP-II program, organized by the **Environmental Engineering and management division of Department of Civil Engineering, IIT Kharagpur.**
5. Successfully completed Five days short term training course on **Environmental Air and Noise Pollution: Measurements and Monitoring organized** by **Civil Engineering Department IIT Guwahati** at IIT Guwahati during 22-26 April 2019.
6. Successfully completed two days training course on **River Basin Planning using MIKE BASIN Software organized by DHI India**, at DHI India office New Delhi during 10-12 July 2013.
7. Successfully completed two days **international training course on Significance of Constructed Wetland Technology for Treatment and Reuse of Sewage and Industrial Wastewater** jointly organized by Centre for Environmental Science and Engineering, **IIT Bombay and NIH Roorkee**, Ministry of Water Resources, Government of India at IIT Bombay during 20 to 21 November, 2013.
8. Successfully completed Five days training course on **Soil and Water Assessment Tool (SWAT) Modelling organized by National Institute of Hydrology Roorkee** at Roorkee Uttarkhand, India during 16 to 20 December 2013.
9. Successfully completed Three days training course on **Hydrological Investigations for Conservation and Management of Lakes organized by National Institute of Hydrology Roorkee** at Roorkee Uttarkhand, India during 1 to 3 March 2011.

Conference Attended :

1. International Conference on Environmental Sustainability (ICES)-2023 at VJTI Mumbai during March 16-17, 2023

STTPs/workshops /
conferences Attended

	<ol style="list-style-type: none"> 2. AOGS-AGU joint assembly 2012, Resorts World Convention Centre, Singapore. ISBN 978-981-07-2049-0. Held on August 13-17, 2012. 3. International Symposium on Water Urbanism and Infrastructure Development in Eco Sensitive Zones 6-7 January 2017 Kolkata, India. 4. International Conference on Sustainable Technologies for Intelligent Water Management during February 16-19, 2018 at IIT Roorkee.
<p>NPTEL/MOOCs Courses undertaken</p>	<p>Following courses were successfully completed offered by AICTE, under National initiative for technical teacher training on online platform SWAYAM</p> <ol style="list-style-type: none"> 1. Module 1_ Orientation Towards Technical Education and Curriculum Aspects 2. Module 2_ Professional Ethics & Sustainability 3. Module 3_ Communication Skills, Modes & Knowledge Dissemination 4. Module 5_ Technology Enabled Learning & Life Long Self Learning 5. Module 7_ Creative Problem Solving , Innovation and Meaningful R & D 6. Module 8_ Institutional Management & Administrative Procedures
<p>Other Notable Achievements</p>	<ol style="list-style-type: none"> 1. Appointed as a Member of “Peer Review Committee” by Municipal Corporation of Greater Mumbai (MCGM), Mumbai Sewerage Disposal Project Department for peer review of the evaluation of the tenders received for the work of Design, Build, Operate and Maintenance of Wastewater Treatment Facilities (WwTFs) at Versova and Dharavi, Mumbai. These are Prestigious and High Value Projects for MCGM. 2. A project proposal entitled “Low Cost Community Toilets for Sustainable Energy Generation” submitted to Department of Science & Technology (DST), Govt. of India, New Delhi for financial assistance under Scheme for Young Scientists & Technologists (SYST) was shortlisted for presentation in the Expert Committee (EC) meeting held on dated 14.10.2019 at Indian Institute of Technology Delhi (IITD), Hauz Khas, New Delhi.