



Curriculum vitae  
(Last updated on date 01/05/2025)

**Dr Bhaven N Tandel,**  
**Associate Professor,**  
**Department of Civil Engineering,**  
**S. V. National Institute of Technology, Surat**

Date of Birth: 14-04-1974

Date of Joining: 01-01-2007

### **EDUCATIONAL QUALIFICATIONS:**

B. E. (Civil Engineering)	June-1996	S. V. Regional College of Engineering & Technology, Surat
M. E. (Civil) in Environmental Engineering	June-1998	S. V. Regional College of Engineering & Technology, Surat
Ph. D. (Civil Engineering)	April-2015	S. V. National Institute of Technology, Surat

### **PROFESSIONAL EXPERIENCE: (as on date – 01/05/2025)**

Sr. No	Organization	Designation	From	To	Years
(1)	Industrial experience before joining SVNIT		01/09/1998	31/12/2006	8 years 04 months
(2)	S. V. National Institute of Technology, Surat	Assistant Professor (Level-10)	01/01/2007	31/12/2018	12 years 00 months
(3)	S. V. National Institute of Technology, Surat	Assistant Professor (Level-12)	01/01/2019	20/12/2023	5 years 00 months
(4)	S. V. National Institute of Technology, Surat	Associate Professor (Level-13A2)	21/12/2023	CONTD.	1 years 04 months
<b>Total Experience</b>					<b>26 years 08 months</b>

### **MAJOR AREAS OF RESEARCH**

- Noise pollution modelling, mapping and mitigation
- Cross sectional & longitudinal studies on health impacts of noise pollution
- Air quality modelling and mapping
- Indoor air quality
- Odour pollution

<b><u>Research Work:</u></b>		
<b>Details</b>	<b>Numbers</b>	
	<b>Completed</b>	<b>Ongoing</b>
Ph. D. Thesis	04	05
M. Tech. Dissertations	38	03
B. Tech. Final Year Projects	11	--

### **PUBLICATIONS:**

SCI / SCIE / Scopus journals	<b>Nos</b>
Published	21
Accepted / Under Review	06

**Ph.D. Thesis supervision Completed / Submitted / Ongoing:**

Sr. No	Name of the student	Category	Title	Status
(1)	Dipesh R. Sonaviya	FIR	Integrated road traffic noise mapping in urban Indian context.	PhD completed on date 05/09/2020.
(2)	Manoj M. Yadav	FIR	Structural Equation Model-Based Variable Selection for ANFIS Prediction Modelling of Human Work Efficiency in Traffic Noise Environment	PhD completed on date 09/06/2021.
(3)	Ramesh B. Ranpise	FIR	Strategic Noise Barrier Design Optimization Under Heterogeneous Urban Road Traffic Condition for Silence Zones of Surat City	PhD completed on date 31/01/2024.
(4)	Pathan Mohsinkhan G.	PEC	Mapping PM <sub>2.5</sub> and PM <sub>10</sub> for an Indian urban city using real time data from low cost sensor network	Ongoing (Since July 2018)
(5)	Avnish Shukla	FIR	A Comprehensive study of Traffic Noise Impact on Students' Cognitive Learning & Teachers' Well-being in Roadside Schools	PhD completed on date 23/04/2025.
(6)	Anirudh Mishra	FIR	A correlational study on driver behaviour and noise pollution.	Ongoing (Since July 2021)
(7)	(Ms) Deepali Jadhav	PEC	Polymer based composite materials for the acoustic improvement of noise barriers	Ongoing (Since Dec 2021)
(8)	Bhanu Chaudary	FIR	Development of a Wellbeing Index for Traffic Policemen Exposed to Urban Road Noise.	Ongoing (Since July 2022)
(9)	Hansraj Gautam	FIR	Doing Course Work	Ongoing (Since July 2024)

**Research publications:**

Sr No	Title of paper	Name of Journal / Conference	Page Nos, Volume, Issue No & Year
(a)	<b>International Journal (SCI/eSCI/Scopus)</b>		
(1)	Auditory and Mental Well-Being of Teachers in Urban Noise Environment: A Partial Least Square Structural Equation Model Approach	Applied Acoustics ( <i>Elsevier</i> ) <a href="https://doi.org/10.1016/j.apacoust.2024.110417">https://doi.org/10.1016/j.apacoust.2024.110417</a>	Nov-2024 Vol 230 (110417) pp: 1-12
(2)	A comprehensive study on impact of noise exposure on roadside school childrens' cognitive performance	Ergonomics ( <i>Taylor &amp; Francis</i> ) DOI: <a href="https://doi.org/10.1080/00140139.2024.2435062">10.1080/00140139.2024.2435062</a>	Dec-2024 pp : 1 - 15
(3)	Effect of indoor air quality on respiratory health of children: An MPPD approach	Aerosol Science and Engineering DOI: <a href="https://doi.org/10.1007/s41810-024-00253-5">https://doi.org/10.1007/s41810-024-00253-5</a>	Aug-2024
(4)	Cognitive task and ambient noise-based investigation on cognitive development of roadside school children	<i>Cognition, technology and work</i> DOI: <a href="https://doi.org/10.1007/s10111-024-00768-4">https://doi.org/10.1007/s10111-024-00768-4</a>	June-2024
(5)	Seasonal analysis of particulate matter and its exposure on urban bikers in Nashik city, India	<i>Journal of Air Pollution and Health</i>	59–74 Vol. 9(1), Mar 2024
(6)	Association of road traffic noise exposure and school childrens' cognition - A structural equation model approach	<i>Environmental Research (Elsevier)</i> DOI: <a href="https://doi.org/10.1016/j.envres.2023.117388">https://doi.org/10.1016/j.envres.2023.117388</a>	Volume 240, Part 1, 117388, 2024
(7)	Effects of PM <sub>2.5</sub> , PM <sub>10</sub> , and Environmental Factors in Spreading COVID-19: A Case Study of Delhi, India	<i>Journal of Environmental Engineering</i> DOI: <a href="https://doi.org/10.1061/JOEEDU.EEENG-7463">https://doi.org/10.1061/JOEEDU.EEENG-7463</a>	Vol. 150, No. 3, March 2024

(8)	Evaluation and ANN Modelling of Traffic Noise on BRTS Corridors with Different Median Vegetation: A case study of Surat city (Western India)	<i>Journal of Institution of Engineers (India), Series A (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1007/s40030-022-00689-3">https://doi.org/10.1007/s40030-022-00689-3</a>	1325–1339, Vol: 103(4), Dec 2022
(9)	Urban Road Traffic Noise Monitoring, Mapping, Modelling, and Mitigation: A Thematic Review	<i>Noise Mapping (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1515/noise-2022-0004">https://doi.org/10.1515/noise-2022-0004</a>	48-66, Vol.-9 Mar 2022
(10)	Noise Monitoring and Perception Survey of Urban Road Traffic Noise in Silence Zones of a Tier II City - Surat, India	<i>Journal of Institution of Engineers (India), Series A (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1007/s40030-021-00598-x">https://doi.org/10.1007/s40030-021-00598-x</a>	155–167, Vol: 103(1), Mar 2022
(11)	Assessment and Appraisal of Morning Peak Time Urban Road Traffic Noise at Selected Locations of Major Arterial Roads of Surat City, India	<i>Asian Journal of Water, Environment and Pollution (Scopus indexed)</i> DOI: <a href="https://doi.org/10.3233/AJW220012">10.3233/AJW220012</a>	81-86, Vol.-19, Issue-1, 2022
(12)	Appraisal of Urban Road Traffic Noise in tier-II City (Surat City), India	<i>Sound and Vibration (Scopus indexed)</i> DOI: <a href="https://doi.org/10.32604/sv.2022.014334">https://doi.org/10.32604/sv.2022.014334</a>	77-88, Vol-56,Issue-1, 2022
(13)	Work Efficiency Prediction of Persons Working in Traffic Noise Environment Using Adaptive Neuro Fuzzy Inference System (ANFIS) Models	<i>Archives of acoustics (SCI Indexed)</i> DOI: <a href="https://doi.org/10.24425/aoa.2021.139644">https://doi.org/10.24425/aoa.2021.139644</a>	677–683, Vol. 46, No. 4, 2021
(14)	Noise abatement approach using computer simulation model for urban India road of Tier-II city	<i>Archives of acoustics (SCI Indexed)</i> DOI: <a href="https://doi.org/10.24425/aoa.2021.138145">https://doi.org/10.24425/aoa.2021.138145</a>	531–537, Vol. 46, No. 3, 2021
(15)	Development of traffic noise prediction model for major arterial roads of tier-II city of India (Surat) using artificial neural network	<i>Noise Mapping (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1515/noise-2021-0013">https://doi.org/10.1515/noise-2021-0013</a>	172-184, Vol.-8 2021
(16)	Structural Equation Model-Based Selection and Strength Co-Relation of Variables for Work Performance Efficiency Under Traffic Noise Exposure	<i>Archives of acoustics (SCI Indexed)</i> DOI: <a href="https://doi.org/10.24425/aoa.2021.136569">https://doi.org/10.24425/aoa.2021.136569</a>	155–166, Vol. 46, No. 1, 2021
(17)	Prediction and Limitations of Noise Maps Developed for Heterogeneous Urban Road Traffic Condition: A Case Study of Surat City, India	<i>Sound and Vibration (Scopus indexed)</i> DOI: <a href="https://doi.org/10.32604/sv.2021.010715">https://doi.org/10.32604/sv.2021.010715</a>	57-68, Vol-55,Issue-1, 2021
(18)	Integrated road traffic noise mapping in urban Indian context	<i>Noise Mapping (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1515/noise-2020-0009">https://doi.org/10.1515/noise-2020-0009</a>	99-113, Vol.-7, Issue-1, June-2020
(19)	2-D noise maps for tier-II city of urban Indian roads	<i>Noise Mapping (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1515/noise-">https://doi.org/10.1515/noise-</a>	1-7, Vol.-6, Issue-1, April-2019

		<a href="#">2019-0001</a>	
(20)	Exposure effect study of traffic noise on roadside shopkeepers in Surat city, India	<i>Indian Journal of Environmental Protection (Scopus Indexed)</i>	1038-1045, Vol. 19, Issue 11, 2019.
(21)	Road Traffic Noise Exposure and hearing impairment among policemen in Surat, Western India	<i>Journal of Institution of Engineers (India), Series A (Scopus indexed)</i> DOI: <a href="https://doi.org/10.1007/s40030-017-0210-6">https://doi.org/10.1007/s40030-017-0210-6</a>	101–105, Vol: 98, June 2017

**(b) Books / Book Chapters, Monographs, Lab or Design Manuals – Authored:**

Sr. No.	Authors	Title of the Book Chapter	Name of the Book	Year of Publication	ISBN/ISSN No.	Publisher
(1)	Tandel B. N., SindhavDhaval, Ranpise R. B.	Assessment and mapping of urban road traffic noise at hospital buildings: The case of Surat city, India	Emerging Technology and Management Trends in Environment and Sustainability	2023	eISBN 978-1-003-35623-3	Routledge (Taylor & Francis)
(2)	Tandel B. N., Yadav M. M., Ahammed M. M.	Advance soft computing techniques in modelling noise pollution health impacts	Current Trends and Advances in Computer-Aided Intelligent Environment Data Engineering	2022	ISBN 978-0-323-85597-6	Elsevier (Academic Press)
(3)	Tandel B. N., Suresh B. K.	An Experimental Study on Integrated Power-Free Shock Electro-dialysis for Desalination DOI - <a href="https://doi.org/10.1007/978-981-15-6887-9_9">https://doi.org/10.1007/978-981-15-6887-9_9</a>	Sustainability in environmental engineering & science, Lecture notes in Civil Engineering, Vol. 93	2021	ISSN 2366-2565 (electronic) ISBN 978-981-15-6887-9 (eBook)	Springer
(4)	Ranpise R.B., Tandel B. N., Darjee C.	Assessment and MLR Modeling of Traffic Noise at Major Urban Roads of Residential and Commercial Areas of Surat City DOI - <a href="https://doi.org/10.1007/978-981-15-6887-9_21">https://doi.org/10.1007/978-981-15-6887-9_21</a>	Sustainability in environmental engineering & science, Lecture notes in Civil Engineering, Vol. 93	2021	ISSN 2366-2565 (electronic) ISBN 978-981-15-6887-9 (eBook)	Springer
(5)	B. K.Suresh, N. Moondra, B. N. Tandel	Assessment of Carbon Foot Print: A Case Study of SVNIT Campus DOI – <a href="https://doi.org/10.1007/978-981-15-5195-6_75">https://doi.org/10.1007/978-981-15-5195-6_75</a>	Recent Trends in Civil Engineering, Lecture Notes in Civil Engineering, Vol. 77	2021	ISBN: 978-981-15-5195-6 (eBook)	Springer

**CONSULTANCY:**

- 1) Co-ordinator of Environmental Audit - Approved by GPCB as Schedule-I Environmental Auditors in the state of Gujarat. (2016 to 2019).
- 2) CPCB waste inventory audits.
- 3) Environmental Damage Calculations (EDC) consultancies for accidents / hazards in industries.
- 4) Conducting noise surveys, generation of noise maps and design of noise barriers.

**DETAILS OF ADMINISTRATIVE DUTIES:**

- 1) Professor In-Charge (MIS & NAD) from April-2023 to April-2025.
- 2) Departmental Co-ordinator (DoCE) of Time Table Committee. (From July-2015 to Mar-2025)
- 3) Co-chairman of Institute Level Social and Cultural Committee.
- 4) Carried out the scrutiny of applications for the recruitment of Assistant Professors, Associate Professors and Professors for multiple times, both at Institute and Department level.
- 5) Preparation of the Accreditation report of M. Tech (Civil) in Environmental engineering programme.