

FACULTY DETAILS

Faculty Name:

VISHAL R KHANDAGALE

Assistant Professor, Department of Civil Engineering

Education Details:

- **M.Tech. (Environmental Engineering), Pursuing Ph.D**

Contact Details

Email ID: vishalrkait@gmail.com

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=57214675535>

Google Scholar ID: <https://scholar.google.com/citations?user=AH11IzgAAAAJ&hl=en>

Orcid ID: <https://orcid.org/0000-0001-9569-7848>

Professional Experience

Teaching Experience:

- **Working as Assistant Professor in Department of Civil Engineering, AIT from August 2013 to till date.**

Research Experience: 0 Year

- **Scopus Indexed preview:**
<https://www.scopus.com/authid/detail.uri?authorId=57214675535>

Publication Details:

SCOPUS INDEXED JOURNALS:

1. Groundwater Vulnerability Assessment in Pavagada taluk, Tumakuru district, Karnataka, India using a GIS-based DRASTIC model, Tuijin Jishu/Journal of Propulsion Technology, ISSN: 1001-4005, Vol. 44 No. 5 (2023). SCOPUS INDEXED, Q3.
2. Identification of the factors governing quality of groundwater in hard rock region using multivariate and spatial analysis, Water and Energy International, ISSN: 0974-4711, Vol. 65, 16-22 (2022). SCOPUS INDEXED, Q4.
3. Assessment of groundwater quality and its hydrochemical studies in hard rock terrains of Pavagada taluk, Tumkur district of Karnataka, India for drinking and agricultural uses, Indian J. Environmental Protection, IJEP 40(10): 1033-1043 (2020). SCOPUS INDEXED, Q4.
4. Assessment of groundwater quality by integration of Water quality index and GIS techniques, AIP Conference Proceedings 2204, 020026(2020) <https://doi.org/10.1063/1.5141563>. SCOPUS INDEXED, Q4

INTERNATIONAL CONFERENCES:

1. "Assessment of groundwater quality by integration of Water Quality Index and GIS techniques" International Conference on Emerging Research in Civil, Aeronautical and Mechanical Engineering, organized by NITTE Meenakshi, Institute of Technology, Bengaluru. 25th & 26th July, 2020.
2. "A study of groundwater quality in Granitic and Gneissic rock terrain of Pavagada taluk, Tumkur district, Karnataka" International conference on chemical sciences and nanomaterials, organized by Department of chemistry, School of Advanced sciences, VIT- Vellore. 7th -9th March 2019.

3. “GIS based groundwater quality mapping in southwestern part of tumakuru district, karnataka, india” International Conference on Impact of global atmospheric changes on natural resources, organized by Department of CIVIL ENGINEERING, UVCE, Bangalore university, Bengaluru. 19th – 20th Nov 2018.
4. “Water Quality analysis of Northern part of Pavagada taluk, Tumkur District, Karnataka” International Conference on Science, Technology, Engineering and Management Organized by IRAJ RESEARCH FORUM, BANGALORE. 25th June 2017.

NATIONAL CONFERENCES:

1. **“Identification of suitable sites for artificial Groundwater recharge structures in semi-arid region of Kotagudda watershed of Pavagada taluk: AHP approach”** *National Conference on “Recent trends in Earth science and Geo-informatics application in Engineering practices,* organized by Department of Studies in Earth Science, University of Mysore, Mysore, Karnataka state. 9th - 10th Mar 2022.
2. **“Groundwater quality and its suitability for irrigation and domestic purposes: A case study in Dodda timmayana playa, Tumakuru district, Karnataka”** *National Conference on Water, Environment and Society,* organized by Center for water resources, *Institute of Science and technology, JNTU, Hyderabad, Telangana state.* 5th -7th June 2019.
3. **“Fluoride toxicity of Ground Water in Pavagada Taluk, Tumkur District, Karnataka”** *National Conference on Water, Environment and Society,* organized by Center for water resources, *Institute of Science and technology, JNTUH, Hyderabad, Telangana state.* 5th -7th June 2019.
4. **“Correlation and Regression study on Physicochemical parameters of groundwater in Pavagada taluk, Karnataka”** *National Conference on Recent advances in engineering ,Technology and science-2019,* organized by Department of Civil Engineering, *Sridevi Institute of Engineering and Technology Tumakuru.* ISBN: 978-93-88805-39-1, pp 47-51, 26th -27th April 2019.
5. **“Water quality index for assessment of groundwater sources in Dodda timmayana playa, Tumakuru”** *National Conference on Recent advances in engineering,Technology and science-2019,* organized by Department of Civil Engineering, *Sridevi Institute of Engineering and Technology, Tumakuru.* ISBN: 978-93-88805-39-1, pp 42-46, 26th -27th April 2019.
6. **“Groundwater quality & its suitability for Irrigation purposes: A Study in Southern part of Tumakuru district, Karnataka”** *National Conference on Advances in Civil Engineering* organized by Department of Civil Engineering, East West Institute of Technology, Bengaluru. 28th and 29th of September, 2018.
7. **“Correlation study and ground water quality assessment of Turvekere Taluk, Tumkur district, Karnataka”** *National Conference on Recent Advances in Civil Engineering* organized by Department of Civil Engineering at KLECET Chikodi. 9th to .10th March 2018.
8. **“Assessment of Water quality index for the groundwater in Turvekere taluk, Tumakuru district, Karnataka”** *National Conference on Water conservation and Management in the Coastal region,* organized by Department of CIVIL ENGINEERING at *Vivekananda college of engineering and Technology, Puttur.* ISBN: 978-81-934333-0-0, pp 35-42, 12th to 14th October 2017.
9. **“Fluoride contamination status of Groundwater in Pavagada Taluk, Karnataka, India: Correlation of Fluoride with other physic-chemical**

parameters” *National Conference On Recent trends in Geo-Science, Material Science and Civil engineering, Organized By Department Of Civil Engineering, ATME college of Engineering Mysuru.* ISBN: 978-93-86256-67-6, pp 222-228. 23rd and 24th of March 2017.

10. “Water Quality Assessment in part of Pavagada taluk, Tumkur district, Karnataka using Geomatics” *National Conference On Emerging trends in Engineering Science and Management, Organized By Department Of Civil Engineering, Sridevi Institute of Engineering and Technology Tumakuru.* ISBN: 978-81-923066-6-7, pp 93-100. 23rd march 2016.

Conferences/Workshop/FDP’s/Short Term Training Programs attended:

1. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Capacity Building through Academic and Research Writing" from 10/09/2021 to 14/09/2021 at Indian Institute of Technology Tirupati.
2. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Research and Innovation for Growth" from 23/08/2021 to 27/08/2021 at BNM Institute of Technology.
3. One week (Online) Short Term Training Programme on “Water Quality Complication, Restoration and Environmental Conservation of Existing Water Bodies” Module-I (2nd Aug to 7th Aug 2021) sponsored by AICTE, New Delhi and organized by Civil Engineering Department, IPS Academy, Institute of Engineering and Science, Indore.
4. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on “Foundation Course On Fundamentals Of Geomatics (Remote Sensing, GIS, GNSS)" from 2021-7-6 to 2021-7-10 at Jawaharlal Nehru Technological University Hyderabad.
5. “Handson Training on FEFLOW Advanced Groundwater Modelling Techniques” Organized by Dept. Of Civil Engineering, Centre for Remote Sensing & Geoinformatics & Centre for Earth and Atmospheric Sciences in association with ISRS Chennai(Chapter), Sathyabama Institute of Science and Technology, Chennai, TamilNadu, INDIA conducted on 17thJune2021–23rdJune2021.
6. AICTE Training And Learning (ATAL) Academy Online short term training program on "Recent trends and applications in Arc GIS" from 21st June to 26th June at Sri Venkateshwara College of Engineering Bangalore.
7. AICTE Training and Learning (ATAL) Academy Online short term training program on "Arc GIS Training on Environment and Watershed Management" from 7th June to 12th June at Sri Venkateshwara College of Engineering Bangalore.
8. AICTE Training And Learning (ATAL) Academy Online short term training program on "Basics of Arc GIS for Civil Engineering Applications” from 24th May to 29th May at Sri Venkateshwara College of Engineering Bangalore.
9. Short term course on “Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials” which was conducted by Indian Institute of Remote Sensing (IIRS),ISRO Dehradun, during 13-06-2020 to 01-07-2020.
10. Five days online Faculty Development Program on “Application of Artificial Intelligence in Civil Engineering - AAICE 2020” conducted by J.N.N College of Engineering, Shivamogga, in association with Indian Society for Technical Education (ISTE) during 20th July 2020 to 24th July 2020.
11. Five Day Online Faculty Development Program on “Water and Environmental Modelling using MIKE, Remote Sensing and GIS Applications”, organized by

Department of Civil Engineering, SITAM, from 13th to 17th July, 2020.

12. Five Day Online Faculty Development Program on “Research opportunities in Civil Engineering”, organized by Department of Civil Engineering, The National Institute of Engineering, Mysuru, from 7th to 11th September, 2020.
13. 5-days Online training course on “Data Processing for Water Quality” organized by NIH, Roorkee during 05th -09th October 2020.
14. One Week Faculty Development Program on “Advanced Surveying and Geo-Informatics” organized by Department of Civil Engineering in association with IQAC-MSRIT sponsored by AICTE from 24th to 29th August, 2020 at Ramaiah Institute of Technology, Bengaluru.
15. One Week Faculty Development Program on “Advances in Water Resources Management and Sustainable Environment” organized by Department of Civil Engineering in association with IQAC-MSRIT sponsored by AICTE from 17th to 21st August, 2020 at Ramaiah Institute of Technology, Bengaluru.
16. One Week Online Faculty Development Programme On “Research Opportunities in Environmental Engineering” organised by the Department of Civil Engineering, Bharati Vidyapeeth (Deemed to be University), College of Engineering, Pune from 20th July 2020 to 25th July 2020.
17. National Level Faculty Development Program on “Groundwater Assessment Modeling and Management” organized by Centre for Remote Sensing and Geo-informatics & Department of Civil Engineering, Sathyabama Institute of Science and Technology in association with National Institute of Technology Calicut & Indian Society of Remote Sensing, Chennai-Chapter, TamilNadu, India, from 17th to 22nd August 2020.
18. Faculty Development Program on “Software Applications in Water Resources Management” organized by Centre for Remote Sensing and Geo-informatics & Department of Civil Engineering, Sathyabama Institute of Science and Technology in association with National Institute of Technology Calicut & Indian Society of Remote Sensing, TamilNadu, India, from 16th to 21st November 2020.
19. One Week Online Short Term Training Programme on “Applications of GIS & Remote sensing in Civil Engineering” Organized by Department of Civil Engineering, Sri Siddhartha Institute of Technology, during October 19-24, 2020.
20. Attended Workshop on "Securing water for agricultural and food sustainability: Developing Tran disciplinary approach to groundwater management" organized by IIT Kharkpur and G.B.Pant University of Agriculture and Technology, On 20th January 2020.
21. Attended workshop on "Recharge process of springs and its management to mitigate anthropogenic and climate change impact for water security: A Case study in part of Kumaun lesser Himalaya, India" organized by G.B.Pant University of Agriculture and Technology, during 21st -22nd January 2020.
22. Attended Faculty development programme on “Remote sensing and GIS” conducted at Channabasaveshwara Institute of Technology, Gubbi, during 29th - 30th July, 2019.
23. Attended one week short term course on “GIS for civil engineers” conducted by Department of Civil engineering, IIT Bombay, during 15th to 19th May,2017.
24. Attended short term course on “Remote sensing GIS & GPS Application in Engineering”, organized by National Institute of Technical Teachers Training and Research at S.P.F.U Directorate of technical education, Bangalore, during 03-10-2016 to 07-10-2016.
25. Attended 3 days workshop on “Water Quality Assessment & Management of

Lentic water bodies”, organized by National Institute of Hydrology, Belagavi, during 9th and 11th March 2016.

26. Attended 5 days workshop on “Aquifer Management and groundwater issues”, organized by Central Groundwater Board at Siddaganga Institute of Technology, Tumakuru, during 20th to 24th July 2015.

Current involvement in the research projects:

1. “An Assessment of Aquifer Characteristics and Hydrochemistry of Groundwater Using Isotopes Techniques in Pavagada Taluk of Tumkur District, Karnataka” as a research assistant, sponsored by **VGST, total sanctioned amount 20 lakhs.**

Sponsored research Projects Guided:

1. “Geographical Analysis of Disappearing Lakes Around Tumakuru City Through Spatial Technologies” Sponsored by **KSCST** (2020-2021).

Expert Lectures Delivered:

1. **Delivered lecture on “Pollution Control”** organized by **Indian Society for Technical Education Students chapter “ABHIMAAN”** in Department of Civil Engineering, Aryabharathi Polytechnic, Sep, 2017.

Roles and Responsibility

- NBA Criteria 3 Coordinator,
- Placement Coordinator,
- Hostel Committee member,
- Student Counsellor,
- Semester Coordinator,
- Anti-Ragging Committee member,
- Extensive survey project (Water supply) in Siddarabetta.

Professional body membership

- Nil

Achievements:

1. **Received BEST PAPER AWARD** in International Conference on ‘Emerging Research in Civil, Aeronautical & Mechanical Engineering’ NITTE Meenakshi Institute of Technology, **Bengaluru**, July 2020.
2. Successfully completed course on “**Remote Sensing & GIS Technology**” and Applications for University Teachers & Government Officials” which was conducted by Indian Institute of Remote Sensing (IIRS), ISRO Dehradun, during 13-06-2020 to 01-07-2020.
3. **Successfully completed Certificate course on “GIS for Civil Engineers”** Department of Civil Engineering, held at **IIT, Bombay**, May, 2017.
4. **Successfully completed Diploma in “Rainwater Harvesting and Groundwater Exploration”** Add on course under the UGC Career Oriented Programme, by **Kuvempu University**, July-2010.

Ph D Guidance

- Nil

Research Area of Interest

- **Groundwater studies & Water Treatment**
- **Remote sensing and GIS**