

CURRICULUM VITAE

Name - Dr. Vijayendra Pratap Dheeraj

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H-Index - 06

i10-Index - 05

Citations - 150

Google Scholar Link - <https://scholar.google.com/citations?user=NsWVxk8AAAAJ&hl=en>

College Website Link - <https://www.recabn.ac.in/en/pages/civil-engineering-2>



ACADEMIC DETAILS

Institute: Indian Institute of Technology (BHU), Varanasi
Specialization: Mine Environment
Course: Ph.D.
Institute: National Institute of Technology Patna
Specialization: Environmental Engineering
Course: M.Tech
DOB: Oct /20/1992
Sex/Age: Male
Languages: Hindi, English

ACADEMIC PERFORMANCES

Examination	College/ University	Subjects/Discipline	Percentage /CGPA	Year
Ph.D.	IIT (BHU), Varanasi	Mine Environment	9.40	2019-2024
M. Tech	NIT Patna	Environmental Engineering	8.21	2016-2018
B. Tech	REC Azamgarh	Civil Engineering	73%	2010-2014
Class XII	SMT. I G H S S Padmidan Ghosi	Science Side (PCM)	67%	2008
Class X	SMT. I G H S S Padmidan Ghosi	Hindi, English, Math, Science, SS, Drawing	71%	2006

MEMBER OF PROFESSIONAL BODIES

S. No.	Professional Bodies	Nature	Date
1.	Indian Water Works Association (IWWA) (ID: L.M No: 11372)	Life Membership	08/09/2025 - Lifetime
2.	International Association of Engineers (IAENG) (ID: 565535)	Life Membership	30/04/2026 - Lifetime
3.	Institute for Engineering Research and Publication (IFERP)	Professional Membership	30/04/2026 - Lifetime

TEACHING EXPERIENCES

S. No.	Designation	College/ University	Session
4.	Guest Faculty	M.M.M University of Technology Gorakhpur	07/2015 to 05/2016
5.	Guest Faculty	Rajkiya Engineering College, Ambedkar Nagar	07/2018 to 06/2019
6.	Guest Faculty	Rajkiya Engineering College, Ambedkar Nagar	08/2024 to 07/2025
7.	Guest Faculty	Rajkiya Engineering College, Ambedkar Nagar	08/2025 to 06/2025

ACADEMIC PROJECTS

Course	Project Title
Ph.D.	Impact assessment of Coal mining on ground and surface water in Korba Coalfield Region, Chhattisgarh, India
M. Tech	Assessing Water Quality Index of River Ganga in Patna, Bihar
B. Tech	Use of waste material in road construction

SEMINARS

Course	Seminar
Ph.D.	System Engineering Approach for Safety Management
M. Tech	Rain Water Harvesting on road side of class "A" road
B. Tech	Disposal and Management of Fly-Ash

B. Tech Summer Training Program (2012-2013)

TRAINING

Organization	AFCONS Infrastructure Ltd.
Duration	Four weeks (May 20 th - June 20 th , 2012)
Project Title	Casting of Girder

COURSE COMPLETED

S. No.	Organization	AUTOCAD DESIGN CENTRE, Gorakhpur
1.	Duration	Three weeks (July 01 st - 21 st , 2012)
	Course Name	AUTOCAD Software
2.	Duration	Two Days (September 4 th - 5 th 2019)
	Course Name	Exploring ArcGIS Pro and Enterprise

RESEARCH PUBLICATIONS

Journals: Research papers in reputed journals: 15

1. **Dheeraj, V. P.**, Singh, C.S. & Sonkar, A.K. Spatiotemporal analysis of land use changes and their impact on surface temperature in Korba coalfield region, India using remote sensing and GIS techniques. *Environ Dev Sustain* (2026). <https://doi.org/10.1007/s10668-026-07376-4>. (SCIE: Q1, IF- 4.9)
2. **Dheeraj, V. P.**, Singh, C. S., Alam, A., & Sonkar, A. K. (2025). Hydrogeochemical quality investigation of groundwater resource using multivariate statistical methods, water quality indices (WQIs), and health risk assessment in Korba Coalfield Region, India. *Stochastic Environmental Research and Risk Assessment*, 39(3), 937-958. <https://doi.org/10.1007/s00477-024-02895-w> (SCIE: Q1, IF- 3.8)
3. **Dheeraj, V. P.**, Kumar, A., Rai, A. K., Yadav, A. K., Chauhan, M. S., Sonkar, A. K., ... & Prasad, A. (2026). Hydrogeochemical characterization and integrated groundwater quality assessment using CCME-WQI, multivariate statistics, and irrigation indices in Ambedkar Nagar Region, India. *Environmental Geochemistry and Health*, 48(10), 441. <https://doi.org/10.1007/s10653-026-03337-y> (SCIE: Q1, IF- 4.3)
4. Sonkar, A. K., Jamal, A., **Dheeraj, V. P.**, Yadav, H. L., & Chandrawanshi, S. (2026). Analysis of land use/land cover changes using remote sensing and GIS techniques in the Singrauli Coalfield, India. *Journal of Earth System Science*, 135(2), 123. <https://doi.org/10.1007/s12040-026-02843-y> (SCIE: Q2, IF- 2.1)

5. Punja V., Pathak V., Shukla S. P., Tripathi R. P. & **Dheeraj. V. P.**, (2026). Spatiotemporal Assessment of Water Quality Parameters and Ecological Health of the Middle Ganga River. *Journal of Earth System Science*. Accepted on 13 July; JESS-D-26-00247_R1. (SCIE: Q2, IF- 2.1)
6. **Dheeraj, V. P.**, Singh, C. S., Sonkar, A. K., & Kishore, N. (2024). Heavy metal pollution indices estimation and principal component analysis to evaluate the groundwater quality for drinking purposes in coalfield region, India. *Sustainable Water Resources Management*, 10(1), 31. <https://doi.org/10.1007/s40899-023-01013-y> (ESCI: Q2, IF- 2.6)
7. **Dheeraj, V. P.**, Singh, C. S., Sonkar, A. K., & Kishore, N. (2023). Assessment of surface and ground water quality around Korba Coalfield, India: an integrated approach of water quality index, multivariate statistics analysis and GIS technique. *Sustainable Water Resources Management*, 9(6), 191. <https://doi.org/10.1007/s40899-023-00973-5> (ESCI: Q2, IF- 2.6)
8. **Dheeraj, V. P.**, Rai, A. K., Yadav, A. K., Sonkar, S., Maurya, A., Chaudhary, A., & Chaudhary, P. (2025). Spatiotemporal analysis and correlation of surface temperature, vegetation cover, and water index using remote sensing and GIS techniques in Ambedkar Nagar, India. *Discover Environment*, 3(1), 232. <https://doi.org/10.1007/s44274-025-00438-w> (ESCI, Q1, IF-4.7)
9. **Dheeraj, V. P.**, Singh, C. S., Sonkar, A. K., & Barman, S. K. (2024). Assessment of Heavy Metal Contaminants in Groundwater Around Mining Area by Using Metal Pollution Indices Multivariate Analysis and GIS Technique. *Journal of Chemical Technology and Metallurgy*, 59(4), 897-910. <https://doi.org/10.59957/jctm.v59.i4.2024.20> (Scopus: Q3, IF- 1.4)
10. Barman, S. K., Tiwari, S. K., Chauhan, M. S., & **Dheeraj, V. P.** (2026). Selective extraction of metals from polymetallic nodules of Central Indian Ocean Basin through chemical partitioning. *Discover Geoscience*, 4(1), 136. (Springer Nature)
11. **Dheeraj, V. P.**, Singh, C. S., Kishore, N., & Sonkar, A. K. (2023). Groundwater Quality Assessment in Korba Coalfield Region, India: An Integrated Approach of GIS and Heavy Metal Pollution Index (HPI) Model. *Nature Environment & Pollution Technology*, 22(1). Original Research Paper <https://doi.org/10.46488/NEPT.2023.v22i01.036> (Scopus: Q3, IF- 2.1)
12. **Dheeraj, V. P.**, Sonkar, A. K., & Singh, C. S. Evaluation of Groundwater Quality and its Suitability for Drinking and Irrigation Purposes in Ambedkar Nagar City, Uttar Pradesh. *Journal of Indian Water Works Association* 52 (4), 305-313.
13. **Dheeraj, V. P.**, Quaff, A. R., Sonkar, A. K., & Singh, C. S. Suitability Assessment of Ganga River Water for Drinking and Irrigation Purposes in Patna Region, Bihar, India. *Journal of Indian Water Works Association* 53 (3), 182-189.
14. **Dheeraj, V. P.**, and Quaff, A. R. Water Quality Index during Pre-monsoon Season of Ganga River. *Indian Journal of Environmental Protection* 39 (9), 812-818. (Scopus: Q4, IF- 0.2)
15. **Dheeraj VP**, Singh, C. S, Sonkar, A. K. Land Use Land Cover (LULC) Study with Different Geospatial Indices of Korba Coalfield Region, Chhattisgarh, India. *Indian Journal of Environmental Protection* 42 (12), 1445-1455. (Scopus: Q4, IF- 0.2)

International & National Conference Proceedings/ Book Chapters

Conference Paper: 16

1. **Dheeraj, V. P.**, Singh, C. S., & Kishore, N. (2024, January). A Study on the Relationship Between Normalised Differential Vegetation Index and Land Surface Temperature in Coalfield Region, India: An Integrated Approach of Remote Sensing & GIS. In *International Conference on Geotechnical Issues in Energy, Infrastructure and Disaster Management* (pp. 163-177). Singapore: Springer Nature Singapore.
2. **Dheeraj, V. P.**, Sonkar, A. K., & Singh, C. S. (2020, May). Evaluation of groundwater quality using water quality index (WQI) in Ambedkar Nagar City, Uttar Pradesh, India. In *International Conference on Advances in Civil Engineering* (pp. 429-441). Singapore: Springer Nature Singapore.
3. **Dheeraj, V. P.**, Singh, C. S., & Kishore, N. (2024, January). A study on the relationship between normalised differential vegetation index and land surface temperature in coalfield region, India: an integrated approach of remote sensing & GIS. In *International Conference on Geotechnical Issues in Energy, Infrastructure and Disaster Management* (pp. 163-177). Singapore: Springer Nature Singapore.
4. Kumar A., **Dheeraj, V. P** & Maurya N. S., (2026, August). Hydrogeochemical analysis of Groundwater, Fluoride contamination and its associated Health Risk Assessment in Bettaih Region, Bihar, India. Book Chapter: Lecture Notes in Civil Engineering. eBook ISBN 978-981-95-8082-8. [International Conference on Innovations and Sustainability in Civil Engineering: Shaping Tomorrow's Infrastructure NIT Patna, Bihar](#) (pp. 1-10). Springer Nature Singapore.
5. **Dheeraj, V. P.**, Quaff A. R, (2019). Water Quality Index at Both Bank of Ganga River During Pre-monsoon Season in Patna, International Conference on River Health: Assessment to Restoration (RHAR-2019), IIT BHU, Varanasi, February 14-16.
6. Sonkar A.K, **Dheeraj V. P.**, Jamal A., Singh C.S, (2019). Assessment of Groundwater Suitability for drinking and irrigation purposes in Singrauli Coalfield Region, Madhya Pradesh, 2th International Conference on Opencast Mining Technology & Sustainability (ICOMS-2019), NCL Singrauli (M.P), December 13-14.
7. **Dheeraj, V. P.**, Quaff A. R, (2020). Water Quality Index of Ganga River During Post-Monsoon Season in Patna, 52nd Annual Convention 2020 (IWWA), NIT Patna, January 10-12.
8. Varshney R., Sonkar A.K, **Dheeraj V. P.**, Jamal A., Singh C.S (2021). Qualitative assessment of Rihand Reservoir water with special reference to multivariate statistical analysis, 3th International Conference on Opencast Mining Technology & Sustainability (ICOMS-2020), NCL Singrauli (M.P), January 20-23.
9. **Dheeraj V. P.**, Sonkar A.K, Varshney R., Singh D.K, (2021). Assessment of Rihand Reservoir water quality using WQI Approach in Sonbhadra district, India, International Conference on Recent advances in science & Engineering, (RASE-2021), REC Sonbhadra, February 26-27.

10. Singh D.K, Kishore N. & **Dheeraj V.P**, (2021). Use of Genetic algorithm and Least Square method for inversion of Aki-Richard and Yanghua Wang approximation of Zoeppritz equation, International Conference on Recent advances in science & Engineering, (RASE-2021), REC Sonbhadra, February 26-27.
11. **Dheeraj V.P**, Ravikant, Sonkar A.K & Singh C.S, (2021). Qualitative assessment of groundwater for drinking and agricultural purposes in Gaya district, Bihar, 53rd Annual Convention 2020 (IWWA), Hyderabad, March 05-06.
12. Ahmed S.I., **Dheeraj V.P**, Sonkar A.K., Kishore N., (2021). Groundwater quality assessment using water quality index in Jampali, coal mine, Chhattisgarh, International Virtual Conference on Innovative Trends in Hydrological and Environmental Systems (ITHES-2021), NIT Warangal, April 28-30.
13. **Dheeraj V.P** & Singh C.S, (2021). Application of Geospatial Indices for mapping & detection of Land use /Land cover changes in Korba Coalfield mine, Chhattisgarh India, 4th International Conference on Opencast Mining Technology & Sustainability (ICOMS-2021), NCL Singarauli (M.P), December 13-14.
14. Singh D.K., Kishore N., Pratap B., Rahi I.C., Sonkar A.K. & **Dheeraj V.P**, (2021). Geoelectrical Sounding for Groundwater Exploration Around Nigahi Colony, Singarauli District, Madhya Pradesh, India, 4th International Conference on Opencast Mining Technology & Sustainability (ICOMS-2021), NCL Singarauli (M.P), December 13-14.
15. **Dheeraj V.P**, Singh C.S & Ravikant, (2022). Spatial And Physicochemical Analysis of Groundwater Quality for Drinking Purpose in Gaya District, Bihar, India, International Conference on Environmental Science & Engineering (ICESE-2022), IIT Bombay, January 20-22.
16. **Dheeraj V.P**, Tripathi P, Mishra R, Dubey V, Chauhan M S, Rai A M, Yadav A K, Kumar A, and Maurya N S (2026). Integration of Landsat satellite data and NDWI approach for Surface Water Delineation in Ambedkar Nagar Region, India, 58nd Annual Convention (IWWA) 2026 at Chhatrapati Sambhajnagar, Maharashtra, January 22-24.

Workshops/ FDP/ STC/ Seminar/Webinar

S No.	Topic	Organised by	Date
1.	Ethical Hacking & Cyber Security (EHCS-2019) (Workshop)	TEQIP-3 and Department of Information Technology (REC Ambedkar Nagar)	June 06 th - 15 th , 2019
2.	Leadership, Management Strategy & Professional Ethics (STC)	NITTTR Chandigarh and Department of Civil Engineering (REC Ambedkar Nagar)	April 08 th - 12 th , 2019
3.	Project Management (STC)	NITTTR Chandigarh and Department of Civil Engineering (REC Ambedkar Nagar)	March 25 th - 29 th , 2019

4.	Development of soft skilled (MATLAB, LATEX & MATHEMATICA) (Workshop)	TEQIP-3 and Department of Applied Science and Humanities (REC Ambedkar Nagar)	March 25 th -29 th , 2019
5.	Essential of Teaching-Learning Process & Research Methodology (FDP)	TEQIP-3 and Department of Electrical Engineering (REC Ambedkar Nagar)	Feb 04 th - 09 th , 2019
6.	Sustainable Environmental Management through ICT (STC)	NITTTR Chandigarh and Department of Civil Engineering (REC Ambedkar Nagar)	Jan 28 th -01 Feb, 2019
7.	Amplifying Proficiency in Advances Civil Engineering (FDP)	Engineering Science Department, AISSMS Institute of Information Technology	July 27 th – 31 st 2020
8.	Developing Effective Writing and Speaking Skills (Webinar)	BIT Institute of Technology, Hindupur	August 05 th – 6 th 2020
9.	Author's Conclave (FDP)	Department of Civil Engineering, SRM Institute of Science & Technology Chennai.	A0ugust 11 th – 17 th 2020
10.	Application of Remote Sensing & in Disaster Management (Workshop)	Vikram Institute of Technology and Management, Gwalior, centre of IIRS, ISRO Dehradun	August 16 th – 17 th 2020
11.	Climate Change and Disaster Risk Reduction (FDP)	National Institute of Disaster Management (Ministry of Home Affair, GOI, New Delhi)	August 18 th – 20 th 2020
12.	Recent Advance in Renewable Energy Technology for Sustainable Development (FDP)	Jaipur Engineering University, Kota	August 21 th – 22 th 2020
13.	Construction Materials and Methods in Civil Engineering (STC)	Department of Civil Engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar	August 25 th – 29 th 2020
14.	Effective Research – Tools, Funding and IPR (FDP)	Department of Mechanical Engineering, Hindustan College of Engineering and Technology, Coimbatore	September 07 th – 10 th 2020
15.	Sustainable Environmental Geotechnics (FDP)	Department of Civil Engineering, SRKR Engineering College, Andhra Pradesh	October 05 th – 09 th 2020
16.	Plagiarism and Academic Integrity: Problem and Solution (Workshop)	Manuscript pedia, Kanyakumari	October 09 th – 10 th 2020

17.	Multidisciplinary Research Innovation in Engineering, Science and Technology for Sustainable Development (FDP)	Department of Computer Science and Engineering, Bipin Tripathi Kumaon Institute of Technology, Almora	October 26 th – November 07 th 2020
18.	How to Write a Research Paper for an International Journal-Tips, Traps & Tricks (Webinar)	Springer Nature	October 08 th 2020
19.	GIS and Remote Sensing Application in Civil Engineering for Sustainable Energy and Climate Management (ATAL FDP)	AICTE Training and Learning (ATAL) Academy, and Department of Civil Engineering, Buddha Institute of Technology, Gorakhpur	January 20 th – 25 th 2025
20.	Environmental Audit: A Tool for Sustainable Industrialization (ATAL FDP)	AICTE Training and Learning (ATAL) Academy, and Pacific School of Engineering	February 03 rd – 08 th 2025
21.	Use and Development of "Virtual Laboratories" with Virtual Reality (VR) Integration (FDP)	Rajkiya Engineering College Kannauj Association with Virtual Labs, IIT Kanpur	February 10 th – 15 th 2025
22.	Effective Solid Waste Management over coming Challenges and Embracing solutions	Government Engineering College West Champaran Association with Department of Science, Technology & Technical Education, Government of Bihar, Patna	March 28 th – 30 th 2025
23.	Transformative Technologies & its Applications (TTA 2025)	Department of Information Technology, REC Ambedkar Nagar, Uttar Pradesh	September 22 nd – 26 th , 2025
24.	Electric Vehicle and Environmental Substantivity (EVES 2026) (STC)	Department of Electrical Engineering, REC Ambedkar Nagar, Uttar Pradesh	February 16 nd – 20 th , 2026
25.	Sustainable Materials and Technology (STC)	NITTTR Chandigarh and Department of Applied Science and Humanities (REC Ambedkar Nagar)	April 06 th - 10 th , 2026

Thesis Supervised (Graduation)

S No.	Institute	Course	Session	Project title
1.	REC Ambedkar Nagar (U.P)	B. Tech, 4 th year	2018-2019	Monthly variation of water quality index of groundwater Ambedkar Nagar
2.	REC Ambedkar Nagar (U.P)	B. Tech, 4 th year	2024-2025	Remote sensing-based correlation analysis of Land Surface Temperature and Water Index (LST-NDWI) of Ambedkar Nagar region, Uttar Pradesh, India
3.	REC Ambedkar Nagar (U.P)	B. Tech, 4 th year	2025-2026	Assessing groundwater quality using CCME WQI and GIS Technique in Ambedkar Nagar region, India
4.	REC Ambedkar Nagar (U.P)	B. Tech, 4 th year	2025-2026	Assessing different spatial indices and their correlation with surface temperature using satellite data and GIS technique in Ambedkar Nagar region, India
5.	REC Ambedkar Nagar (U.P)	B. Tech, 4 th year	2026-2027 (Running)	Land use land cover change analysis of Ambedkar Nagar region application of Remote Sensing and GIS technique

ACADEMIC ACHIEVEMENTS:

Graduate Aptitude Test in Engineering (GATE) Qualified in the year 2016.

Secured 2nd position in M. Tech with 8.21 CGPA

Scholarship from Ministry of Human Resources Development in M.Tech from July 2016 to July 2018.

Scholarship from Ministry of Human Resources Development in Ph.D. from July 2019 to July 2024.

Reviewer for Water Environment Research (Wiley)

Reviewer for Sustainable Water resource management (ESCI-Springer Nature)

Reviewer for International Journal of Environmental Analytical Chemistry (Taylor & Francis)

Reviewer for Journal of Engineering Research and Reviews (Scopus Indexed)

Reviewer for Environmental Geochemistry and Health (SCIE-Springer Nature)

Reviewer for Environmental Monitoring and Assessment (SCIE-Springer Nature)

Reviewer for Environmental Earth Science (SCIE-Springer Nature)

Reviewer for Scientific Reports (SCIE indexed)

Reviewer for Discover Water (Springer Nature)

Reviewer for CLEAN - Soil, Air, Water (Wiley)

Reviewer for Discover Geoscience (Scopus-Springer Nature)

Reviewer for Discover Environment (Scopus-Springer Nature)

Reviewer for Dynamics of Atmospheres and Oceans (SCIE indexed-Elsevier)

Reviewer for Water, Air, & Soil Pollution (SCIE-Springer Nature)

Reviewer for Earth Systems and Environment (Scopus-Springer Nature)

Reviewer for Environment and Natural Resources Journal (Scopus-Springer Nature)

COURSES TOUGHT:

- ❖ BCE 151 Engineering Graphics & Design (EG&D)
- ❖ KCE 603 Environmental Engineering & its Lab
- ❖ BAS 204 Environment and Ecology (E&E)
- ❖ KHU 802 Project Management & Entrepreneurship (PM&E)
- ❖ BVE 301 Universal Human Values & Professional Ethics (UHV&PE)
- ❖ BCE 754 Startup and Entrepreneurial Activity Assessment (SEAA) Lab
- ❖ BCE753/851 Project Coordinator
- ❖ KOE 085 Quality Management

REFERENCES

1. Dr. C.S Singh (Senior Scientific Officer)
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Mob. No. +91 9713110209
3. Prof. A.R Quaff
Department of Civil Engineering, NIT Patna
Arquaff@nitp.ac.in
Mob. No: +91 9572586093

Technical Skills Sets

- ❖ Software (Origin Pro, Google Earth Pro, Grapher, Diagrammes, Past4.03)
- ❖ Remote Sensing & GIS (ArcGIS 10.8, QGIS, ERDAS IMAGINE 15)
- ❖ Micro-soft Office 2019
- ❖ AUTOCAD

STRENGTHS

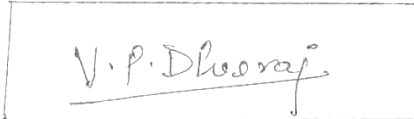
- ❖ Research Oriented & writing the research paper.
 - ❖ Data analysis and visualization.
 - ❖ Strong academic background.
 - ❖ Self-motivated and disciplined.
 - ❖ Work effectively and efficiently.
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PERSONEL INFORMATION

Father's name : Late Munni Lal Sonker
Mother's name : Late Smt. Dhanno Devi
Address : Village: Kasba Khas Ghosi,
Post: Mirza Jamalpur, Tahsil: Ghosi
District- Mau, Uttar Pradesh, India

DECLARATION

I hereby certify that the information provided is accurate and true to the best of my knowledge and understand & agree to abide by the rules, regulations, and norms established by esteemed institute.

A rectangular box containing a handwritten signature in cursive script that reads "V.P. Dheeraj".

Dr. Vijayendra Pratap Dheeraj