

# Dr. Pratibha Warwade

Assistant Professor

Department of Civil Engineering

## Personal Information:

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**ORCID ID:**

**Web of Science ID:**

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

**Scopus ID:**

**Journal Papers:** 19

**Book and Book Chapters:** 9

**Doctoral Students:** 1 (Submitted)

**Brief Profile:** Dr. Pratibha Warwade is an Assistant Professor in the Department of Civil Engineering (former Centre for Water Engineering and Management and then Department of Water Engineering and Management (DWEM)) at Central University of Jharkhand (CUJ), Ranchi, India. She has a teaching experience of 12 years in the CUJ. Dr Pratibha has published various research papers/book chapters with renowned publishers. She has organized conferences, workshops and various academic activities in the department. Dr. Warwade has received her PhD degree from Indian Institute of Technology (IIT) Roorkee, she has qualified ASRB-NET and awardees of UGC, MHRD and DAAD fellowships, she has visited Germany during her doctoral research. She has also contributed to the University administration in various aspects. Her research area is climate change and water resources, watershed management, RS and GIS application in watershed management and water footprint etc.

## Educational Qualifications:

- **Doctor of Philosophy (PhD)**, Indian Institute of Technology (IIT) Roorkee **(2016)**
- **Master of Technology (Soil and Water Engineering)** (2009)
- **B Tech** (2007)

## Courses Taught:

**PhD:** Hydraulics of Open Channel flow, Research Methodology and IPR

**Five years Integrated M Tech:** Fluid Mechanics, Advanced Irrigation & Drainage Engineering, Project Management Technique, Structural Analysis I, Research methodology and IPR, Technical Report Writing, Open Channel & Fluvial Hydraulics, River Engineering, Hydraulics of Open Channel Flow, and Advanced Land Drainage etc.

**Two years M Tech.:** Advanced Irrigation & Drainage Engineering, Hydraulics of Open Channel Flow, Project Management Technique, Research Methodology and IPR.



## Professional Experience

1. Assistant Professor, Department of Civil Engineering (former Department of Water Engineering and Management, Central University of Jharkhand, since 16 -08-2012 to Present.

## Additional Roles/ Responsibility:

1. Administrative warden, Girls Hostel CUJ
2. Warden, Girls Hostel CUJ
3. Member SC/ST cell standing committee CUJ
4. Member Anti ragging committee, CUJ
5. Member fact finding Committee, CUJ
6. Member, Board of studies, DCE
7. Member, Departmental Committee (DRC)
8. Member Research advisory Committee (RAC)
9. Member, Departmental Admission Committee
10. Departmental Alumni Cell representative

## Articles Published:

1. Warwade, P., Hardaha, M.K., Chandniha, S.K. and Kumar, D., 2013. Land use land cover change detection of Patani micro-watershed of Madhya Pradesh using remote sensing data. *Academicjournals*, 8(40), pp.1983-1990.
2. Warwade, Pratibha, Hardaha, M.K., Kumar, Dheeraj. and Chandniha, S.K., 2014. Estimation of soil erosion and crop suitability for a watershed through remote sensing and GIS approach. *Indian Journal of Agricultural Sciences*, 84(1), pp.18-23.
3. Pratibha Warwade, DipikaKumariandNayanSharma,"Trends in reference evapotranspiration of Dikhow catchment, North East India".In *International Journal of Tropical Agriculture* (Referred Journal with ISSN:0254-8755) Vol 33 (2),pp 1571-1578, (2015).
4. Warwade, P., Sharma, N., Ahrens, B. and Pandey, A., 2015. Characterization and analysis of the trend of climate variable (temperatures) for the north eastern region of India. *Int. J. Recent Sci. Res.*, 6(4), pp.3618-3624.
5. Warwade, P., Tiwari, S., Ranjan, S., Chandniha, S.K. and Adamowski, J., 2018. Spatio-temporal variation of rainfall over Bihar State, India. *Journal of water and land development*.
6. Kumar; R., Taneja P., Chakraborty, A., Nigam, P., and Warwade, P., 2018. Evaluation of STPs in Jamshedpur city: design of a 45mld STP and reuse option in Jamshedpur city. *Int J of Adv Res Ideas Innov Tech*, 4, pp.177-186.

7. Nandargi, S.S., Kumar, A. and Warwade, P., 2019. Analysis of rainfall and rainstorms over the Gujarat state, India. *Journal of Research in Engineering and Applied Sciences*, 4 (1), pp 43-56.
8. Kumar, G., Warwade, P., Mukund, G., Dhaked, N. and Suman, S., 2020. Morphometric Analysis and Prioritization of Sub-Watersheds in Watershed of Nashik, Maharashtra of Godavari River Basin using Remote Sensing and GIS as a Tool. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 9, pp.1553-1559.
9. Jha, A.K., Warwade, P., Singh, A., 2020. Effect of Vegetation Cover on Pre-Monsoonal Rainfall Trend over Ranchi Region, Jharkhand, India. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* 9 (5).
10. Jha, A. K., Singh, A., and Warwade, P. 2020. Effect of tropical dry and wet forest on convective precipitation—A case study of Ranchi Region, Jharkhand, India. *Ecology Environment & Conservation*. 26 (4), pp. 1670-1677.
11. Suman, S., Warwade, and Kumari, P., Rainfall Variability over Southern Bihar, India. *Journal of Water Engineering and Management* 2020, 1(1), pp. 60-67. ISSN 2582 6298.
12. Jha, S.K. and Pratibha Warwade, S.K.M., 2020. Study of decadal rainfall variation of Ramgarh district using TRMM data. *Journal of Water Engineering and Management*, 1(1), pp.63-68.
13. Jha, A.K., Singh, A. and Warwade, P., 2021. Impact of Pre-Monsoonal Rainfall Trend on Vegetation for Ranchi Plateau, Jharkhand, India. *Indian Journal of Ecology*, 48(6), pp.1621-1626.
14. Jha, S.K., Warwade, P. and Mahto, S.K., 2021. Impact assessment of mining activities on surface and sub-surface water condition of Ramgarh, Jharkhand, India using geospatial techniques. *Journal of Mining and Environment*, 12(3), pp.651-665.
15. Kumari, A., Kumar, D. and Warwade, P., 2021. Application of multi-criteria decision making (MCDM) and electrical resistivity tomography (ERT) techniques for identification of groundwater recharge zone (s) in granitic hard rock aquifer. *Journal of Earth System Science*, 130(2), p.81.
16. Kumar, G., Kumar, D. and Warwade, P., 2022. GIS and geophysics: an integrative and inter-evaluating approach towards groundwater assessment. *Geocarto International*, 37(27), pp.15656-15682.
17. Chandniha, S.K., Sinha, J., Khalko, D., Tripathi, M.P. and Wadware, P., 2022. Optimal land and water management-A case study of Krishi Vigyan Kendra Bilaspur, Chhattisgarh. *Journal of Soil and Water Conservation*, 21(1), pp.86-92.
18. Sahu, K. K., Chandniha, S.K., Nema, M.K., Das, G. K., Lekshmi V. H., and Wadware, P., 2023. Level long-term rainfall variability using trend analysis in a state of central India. *Journal of Water and Climate Change* (under press).

19. Ujjwal S., Warwade P. and Chandniha, S.K., 2023. Drought monitoring and assessment using Remote Sensing and GIS application: a case study of Jharkhand, India *Journal of Jilin University (Engineering and Technology Edition)* 42(12), pp. 270-291.

## Edited Book:

1. Ajai Singh, Vinod Kumar Tripathi, Prabeer Kumar Parhi, Birendra Bharti, Pratibha Warwade and Pancham Kumar. "Water and Sustainable Development", Published by New Delhi Publishers (2016). ISBN 9385503227.

## Book and Book Chapters:

1. Pratibha Warwade, Nayan Sharma, Ashish Pandey and Bodo Ahrens (2016)," Analysis of climate variability in a part of Brahmaputra river basin in India" In River System Analysis and Management. Pp 113-142, Springer, Singapore (ISBN: 978-981-10-1471-0). DOI <https://doi.org/10.1007/978-981-10-1472-7>
2. Sanny Kumar, Pratibha Warwade and Ajai Singh (2016). Calibration and validation of SWAT model for simulation of surface runoff. In Water and Sustainable Development 2016, Newdelhi Publisher (ISBN: 978-93-85503-22-1), New Delhi. pp 345-357.
3. Vinod kumar Tripathi and PratibhaWarwade (2018). "Influence of Semi-arid Climate on Characterization of Domestic Wastewater". In Environmental Pollution, pp 281-292, Springer, Singapore. ISBN 978-981-10-5792-2
4. Pratibha Warwade, (2019)"Enso Association With Rainfall" In Wastewater Reuse and Watershed Management: Engineering Implications for Agriculture, Industry, and the Environment, pp 173-189. Apple Academic Press, ISBN ebook: 9780429433986.
5. Pratibha Warwade, GarimaJhariya SurendraChandniha (2019).Downscaling of Precipitation using Large Scale Variables, In Wastewater Reuse and Watershed Management: Engineering Implications for Agriculture, Industry, and the Environment, pp 439-459. Apple Academic Press, CRC TISBN ebook: 9780429433986.
6. Garima Jhariya, Rajeev Ranjan, Pratibha Warwade, K. L. Mishra, V. K. Jain (2019). Determination of Design Parameters for the Border Irrigation Method, In Wastewater Reuse and Watershed Management: Engineering Implications for Agriculture, Industry, and the Environment, pp. Apple Academic Press, CRC TISBN ebook: 9780429433986.
7. Ravi Raj, Aman Kumar, Yempali Priyanka, and Pratibha Warwade (2022). Prioritization of Charwa Watershed Based on Morphometric Analysis Using Remote Sensing and Geospatial Techniques in "Advances in Hydrology and Climate Change: Historical Trends and New Approaches in Water Resources Management". Surendra Kumar Chandniha, Anil Kumar Lohani,

Gopal Krishan, & Ajay Krishna Prabhakar (Eds.). Apple Academic Press, Inc. Co-published with CRC Press (Taylor & Francis). ISSN 9781003282365.

8. Saurabh Suman, Pratibha Warwade, and Priti Kumar (2022). Long-Term Trend Analysis of Rainfall Series (1901–2010) over Southern Bihar, India in *Advances in Hydrology and Climate Change: Historical Trends and New Approaches in Water Resources Management*. Surendra Kumar Chandniha, Anil Kumar Lohani, Gopal Krishan, & Ajay Krishna Prabhakar (Eds.). Apple Academic Press, Inc. Co-published with CRC Press (Taylor & Francis). ISSN 9781003282365.
9. Pushpalata Kumari Sinha, Pratibha Warwade, A.B. Pachore, Renji Remesan (2023). SRM-based quantification of snowmelt runoff in the Beas River Basin of the Himalayan region with the aid of MODIS/TERRA snow cover data products In *Modeling and Mitigation Measures for Managing Extreme Hydrometeorological Events Under a Warming Climate* Edited by K.S. Kasiviswanathan, B. Soundharajan, Sandhya Patidar, Jianxun He, Chandra Shekhar Prasad Ojha. Elsevier pp 27-297.

## **Conferences:**

1. Ashish Pandey Pratibha Warwade Nayan Sharma presented in National Conference on Science of Climate Change and Earth's Sustainability: Issues and Challenges 'A Scientist-People Partnership', University of Lucknow, 12-14 September 2011, Lucknow titled "Temporal variability in annual precipitation and temperature series at Nagaland, India."
2. Pratibha Warwade, Nayan Sharma and Devendra Warwade presented in International conference on Climate Change Forest Resource and Environment (ICCFRE), University of Kerala, Thiruvananthapuram, 9 -11 Dec. 2011 titled "Historical trend analysis in temperature time series at Dikhow catchment, India"
3. Pratibha Warwade, Nayan Sharma, Ashish Pandey presented in IGCP 582 Annual Meeting and Conference, Tropical Rivers: Hydro-Physical Processes, Impacts, Hazards and Management, 5-7 January titled "Trend and change-point detection for annual and seasonal discharge series of the Brahmaputra river at the Pandu hydrological station, North East, India"
4. Pratibha Warwade, Dipika Kumari and Nayan Sharma presented in International Conference on agricultural and Horticultural sciences, 6- 7 June 2015, Newdelhi, titled "Trend in Reference Evapotranspiration on Dikhow catchment, North East India"
5. Pratibha Warwade and Vinod Kumar Tripathi presented in international conference on water, environment, energy and society, 15-18 March 2016, Bhopal, titled "Influence of semi-arid climate on characterization of domestic wastewater".

6. Aindrila Ghosh and Pratibha Warwade presented in 25th International congress and 74th IEC organized by International Commission on Irrigation and Drainage (ICID), 02-04 November, 2023, Vishakhapatnam, titled 'Water Footprint and its variation depending upon the forest cover and the human intervention over Jharkhand'.
7. Aindrila Ghosh, Pratibha Warwade and Ajai Singh presented in 28th International Conference on Hydraulics, Water Resources, River and Coastal Engineering, 21-23 December, 2023, NIT Warangal, titled 'Assessment of water footprint of maize in urban districts of Jharkhand in India'.
8. Aindrila Ghosh, Pratibha Warwade and Ajai Singh presented in 3rd Roorkee Water Conclave, 03-06 March, 2024, IIT Roorkee, titled 'Water Footprint assessment over the Central and North Eastern plateau region of Jharkhand near the Ganga river basin'.

## **Program Organised:**

1. Organized, International Conference on "Water and Waste-Water Management and Modelling" as an Organizing secretary at Central University of Jharkhand during 16-17 Jan 2018.
2. Conducted a online Five days FDP on "Modeling of Water Resources Systems" as co-coordinator at Central University of Jharkhand, Ranchi under AICTE Training And Learning (ATAL) Academy during 1<sup>st</sup> Nov to 5<sup>th</sup> Nov 2021.

## **Awards and Honours:**

1. Qualified National Eligibility Test (NET) Conducted by Agricultural Scientist Recruitment Board, Indian Council of Agricultural Research (ICAR), Pusa, New Delhi in 2012.
2. Recipient of Ministry of Human Resources Development (MHRD) Fellowship during Doctoral Research.
3. Awarded German Academic Exchange Service (DAAD) Fellowship for Six months to pursue Doctoral Research.
4. Recipient of University Grant Commission (UGC) Fellowship during M. Tech. program.

## **Professional Affiliations**

1. Indian Water Resources Society
2. Meteorological Society

## **Any Other Information:**

1. Member of the Editorial Board of the Journal of Water Engineering and Management (JWEAM).