Dr. Shikha Chourasiya

Assistant Professor
Department of Civil Engineering

Personal Information
Full Name: Dr. Shikha Chourasiya
Email: shikha.chourasiya@cuj.ac.in
Mobile: +91 8603279060
Address: Department of Civil Engineering, Central University of Jharkhand
ORCID ID: 0000-0001-7037-6378
Google Scholar Link: https://scholar.google.com/citations?hl=en&user=t9CnlFIAAAAJ
Journal Papers: 05
Conference Papers: 08
Sponsored Projects: 0
Book and Book Chapters: 03
Doctoral Students: 01 (Ongoing)

Brief Profile: Dr. Shikha Chourasiya has a keen interest in solving societal problems related to the field of Water Resources Engineering through research and consultancies. She is a two times gold medalist for her excellence in academics and research during her B.Tech and Ph.D. Having her research interest in experimental hydraulics, she has a good experience in setting-up of physical models in laboratory and conducting laboratory scale experiments. Her current area of research includes (but not limited to) Sediment Transportation, Open Channel Hydraulics, Data-driven Modeling in Water Resources Engineering, Climate Change Impact on Hydraulic Structures, Instrumentation and Control in Hydraulics, etc.

Educational Qualifications

- **Ph.D.,** Hydraulics and Water Resources Engineering (Civil Engineering), Indian Institute of Technology Kanpur, Kanpur (U.P.), 2018.
- **M.Tech.,** Hydro Power Engineering (Civil Engineering), Maulana Azad National Institute of Technology, Bhopal (M.P.), 2010.
- **B.Tech.**, Agricultural Engineering, College of Agricultural Engineering, Jawaharlal Nehru Krishi Vishwavidyalaya, Jabalpur (M.P.), 2008.

Courses Taught

Ph.D.: Open Channel Hydraulics, Advanced Fluid Mechanics.
PG: Sediment Transportation, Open Channel Hydraulics, Open Channel Hydraulics Lab., Earth and Rock fill Dams, Preparation of Water Resources Projects, Stress Management by Yoga, Mini-Project, Groundwater Hydrology, Design and Maintenance of Low-Volume Roads, Advanced Fluid Mechanics.
UG-PG Integrated: Modeling in Water Resources, EIA in Water Resources.

Professional Experience

1. Assistant Professor, Department of Civil Engineering, Central University of Jharkhand, 20 th Feb, 2020 – Present.
2. Senior Research Fellow (in a SERB Funded project), Indian Institute of Technology Kanpur, Kanpur (U.P.), 01 th Nov, 2018 – 11 th Jan, 2019.
3. Assistant Professor, Department of Civil Engineering, Sir Padampat Singhania University, Udaipur, Rajasthan, 07 th July, 2010 – 24 th Dec, 2010.

Additional Roles/ Responsibilities

1. Warden, Girls Hostel, Brambe Campus, CUJ, 17 th Nov, 2023 – Present.
2. Administrative Warden (Incharge), Girls Hostel, Brambe Campus, CUJ, 10 th July, 2023 – 17 th Nov, 2023.
3. Warden, Girls Hostel, Brambe Campus, CUJ, 09 th Oct, 2020 – 10 th July, 2023.

Journal Articles

1. Chourasiya, S., Mohapatra, P. K. and Tripathi, S. 2017. Non-Intrusive Underwater Measurement of Mobile Bottom Surface, Advances in Water Resources (ELSEVIER), 104:76–88, http://dx.doi.org/10.1016/j.advwatres.2017.03.009.
2. Vidyarthi, V. K., Jain, A. and Chourasiya, S. 2020. Modeling Rainfall- Runoff Process using Artificial Neural Network with Emphasis on Parameter Sensitivity, Modeling Earth Systems and Environment, https://doi.org/10.1007/s40808-020-00833-7.
3. Vidyarthi, V. K., Mukherjee, P. and Chourasiya, S. 2023. Modeling and Forecasting of Relative Humidity in Indian Region, International Journal of Hydrology Science and Technology.
4. Kumar A., Verma, R. K., Sriharsha, S., Chourasiya, S. and Singh, A. 2023. Delineation of Groundwater Potential Zone for Sustainable Water Resources Management using Remote Sensing-GIS and Analytic Hierarchy Approach in the State of Jharkhand, India, Ground Water for Sustainable Development, https://doi.org/10.1016/j.gsd.2023.100908.
5. Ayaz, Md., Chourasiya, S. and Danish, M. 2023. Performance Analysis of Different ANN Modelling Techniques in Discharge Prediction of Circular Side Orifice, Modeling Earth Systems and Environment, https://doi.org/10.1007/s40808-023-01766-7.

Book Chapters

1. Vidyarthi, V. K. and Chourasiya, S. 2020. Particle Swarm Optimization for Training Artificial Neural Network-Based Rainfall–Runoff Model, Case Study: Jardine River Basin.", In: Sharma D., Balas V., Son L., Sharma R., Cengiz K. (eds) Micro-Electronics and Telecommunication Engineering. Lecture Notes in Networks and Systems, vol. 106. (SCOPUS) Springer, Singapore. https://doi.org/10.1007/978-981-15-2329-8_65.
2. Chourasiya, S., Talukdar, B., Vidyarthi, V. K., Vajpayee, A., Eslamian, S. and Medhi, H. 2022. Modeling Reference Evapotranspiration with Limited Climatic Data for Indian Region using Artificial Neural Networks, Water Scarcity Global Perspectives, Issues and Challenges, Book ID: 18393, Chapter ID: 75770, Nova Science Publishers, Inc., 415, Oser Avenue, Suite N, Hauppauge, NY 11788 USA.
3. Medhi, H., Soni, P., Vidyarthi, V. K. and Chourasiya, S. 2023. Understanding the Relationship between Normalized Difference Vegetation Index and Meteorological Attribute using Clustering Algorithm, Smart Sensors, Actuators and Decision Support Systems for Precision Agriculture, (Scopus), Apple Academic Press, CRC Press, Taylor and Francis Group, USA.

Conferences

1. Prasad, V., Khare, R. and Chourasiya, S. 2010. Transient Flow Computations in Hydro Power Canal, 37 th National and 4 th International Conference on Fluid Mechanics and Fluid Power (FMFP), IIT Madras, Chennai, India.
2. Prasad, V., Khare, R. and Chourasiya, S. 2011. Effect of Slope and Roughness on Unsteady Flow in Hydro Power Canals", National Conference on Hydraulics and Water Resources (HYDRO), SVNIT Surat, Gujarat, India.
3. Chourasiya, S., Mohapatra, P. K. and Tripathi, S. 2014. Experimental Investigation of Levee breaching due to Overtopping", 19 th International Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering (HYDRO), MANIT Bhopal, MP, India.
4. Chourasiya, S., Mohapatra, P. K. and Tripathi, S. 2015. Experimental Investigation of Overtopping Breaching of Non-Cohesive Earthen Dam, 20 th International Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering (HYDRO), IIT Roorkee, UK, India.
5. Chourasiya, S., Mohapatra, P. K. and Tripathi, S. 2015. A Laboratory Study of Earthen Dam breaching due to Overtopping, Asia Oceania Geosciences Society (AOGS) - 12 th Annual Meeting together with 7th Asia Pacific Association of Hydrology and Water Resources (APHW), Singapore.
6. Vidyarthi, V. K. and Chourasiya, S. 2019. Particle Swarm Optimization for Training Artificial Neural Network based Rainfall-Runoff Model, Case Study: Jardine River Basin, SPRINGER, ICMETE, SRM IST Modinagar.
7. Hansda, V., K. and Chourasiya, S. 2022, Rainfall Prediction from Antecedent Rainfall using a Model Tree, 27 th International Conference on Hydraulics,Water Resources, Environmental and Coastal Engineering (HYDRO 2022 INTERNATIONAL), Punjab Engineering College, Chandigarh, India.
8. Prem Chand, Shikha Chourasiya and Nitesh Patidar (2023), "Groundwater Flow Modelling using Model Muse: A case Study of Patna district of Bihar, 28th International Conference on Hydraulics, Water Resources, River and Coastal Engineering (HYDRO 2023 INTERNATIONAL), 21-23 December 2023, NIT Warangal, India

Awards/Honors/Achievements

1. Recipient of Vishwa Vidyalaya Gold Medal for excellent academic performance in four years of B.Tech program, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur.

2. Qualified GATE-2007 with all India Rank 137.
3. Qualified JRF-2007 with all India Rank 118.
4. Recipient of Trilok Chandra Goel Memorial Gold Medal for the best project or published paper by any graduating student which has contributed to economic growth with a sustainable future by helping conserve energy and /or water resources, Indian Institute of Technology Kanpur.
5. Recipient of Best Paper Award (along with a co-author) for the paper titled 'Rainfall Prediction from Antecedent Rainfall using a Model Tree Technique' in the 27 th International Conference on Hydraulics, Water Resources, Environmental and Coastal Engineering (HYDRO-2022), organized by Department of Civil Engineering, Punjab Engineering College, Chandigarh, held on 22-24 December, 2022.

Invited/Guest Lectures

1. Delivered Guest Lecture on 'Hydraulics and Water Resources Engineering in Current Scenario with Emphasis on Levee Breaching', organized by Department of Civil Engineering, SRM Institute of Science and Technology, Ghaziabad, 22 nd January, 2020.

Others

1. Member of the Editorial Board of the Journal of Water Engineering and Management (JWEAM).
2. Member of the Editorial Board of the Journal of Region – Water Conservancy, Frontier Scientific Publishing, Pvt. Ltd.