



Profile

Name	Prof Preeti Rajput
Designation	Assistant Professor
Area of Interest	Risk Analysis of Floods and Droughts, Surface Water Hydrology and Watershed Management, Hydrologic Disaster Management, Impacts of Climate Change on Water Resources and Agriculture, Remote Sensing and GIS for Water Resources and Environmental Engineering
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Qualification

- Ph.D. (Civil Engineering) – UTD, CSVTU Bhilai, Newai, India (Pursuing)
- M.Tech (Irrigation & Water Resources Engineering) – NIT Raipur, Raipur, India – September-2014
- B.E (Civil Engineering) – BIT Durg, Durg, India – June-2011

Experience

- Assistant Professor – GEC Raipur- 15-07-2021 to Till date
- Assistant Professor – GEC Bilaspur, 06-10-2016 to 14-07-2021

Course Handled

- Engineering Hydrology & Water Resources Engineering
- Fluid Mechanics
- Hydraulic Engineering
- Transportation Engineering

Research and Consultancy

- Nil

Conference/workshop/FDP

Paper publication

1. GK Nigam, **P Rajput**, MP Tripathi (2022) Morphometric Assessment of Drainage Basin for Sub watershed Prioritization Based on Land Use Land Cover Using GIS, in: Advances in Hydrology and Climate Change, Apple Academic Press (AAP), CRC Press, a Taylor & Francis Group. <https://doi.org/10.1201/9781003282365-6>
2. **Rajput, P.**, Sinha, M.K., Nigam, G.K. (2022). Strategic Evaluation of Water Quality Monitoring Network Using GIS-AHP Model in a Large River System. In: Kumar, P., Nigam, G.K., Sinha, M.K., Singh, A. (eds) Water Resources Management and Sustainability. Advances in Geographical and Environmental Sciences. Springer, Singapore. https://doi.org/10.1007/978-981-16-6573-8_15
3. Sinha, M.K., **Rajput, P.**, Baier, K., Azzam, R. (2021). GIS-Based Assessment of Urban Groundwater Pollution Potential Using Water Quality Indices. In: Pande, C.B., Moharir, K.N. (eds) Groundwater Resources Development and Planning in the Semi-Arid Region. Springer, Cham. https://doi.org/10.1007/978-3-030-68124-1_15
4. **Rajput P.**, Manish Kumar Sinha, Surykant Dewangan; Assessment of Future Hydrological Response of an Urban Watershed. In Proceedings of International Conference on Recent Advances in Water Science and Technology (ICRAWST - 2021), December 02-03, 2021, ISBN 9789390853670, Pg. 33
5. **Rajput P.**; Manish Kumar Sinha; Geospatial evaluation of drought resilience in sub-basins of Mahanadi River in India. Water Supply 1 November 2020; 20 (7): 2826–2844. Doi: <https://doi.org/10.2166/ws.2020.178>
6. Sinha Manish Kumar, **Rajput P.** and Verma Mukesh Kumar (2018): Validation of Standardized Precipitation Index (SPI) for meteorological drought Risk in Central India, in: Disaster Advances, Volume No. 11(7), Pages 1-37, July (2018)
7. **Rajput P.**; Sinha M. K.; Verma M. K.; Ahmad I. (2014): Drought Hazard Assessment and Mapping in Upper Seonath Sub-Basin Using GIS, in: International Journal of Emerging Technology and Advanced Engineering, Vol. 4(10), pp 210-218, ISSN 2250-2459.
8. **Rajput P.**; Sinha M. K.; Baier K. (2019): Assessment of pollution potential of urban lakes using NSFQI and CCMEWQI Water Quality Indices, in: National Conference on Futuristic Trends in Civil Engineering for National Development, at Department of Civil Engineering, BIT Durg, India. BITCON 2019.
9. Dr. Gaurav Kant Nigam, Dr. Tripathi, **Rajput P.**; Dr. Jitendra Sinha (2018): Role of Remote Sensing and GIS Technique for Watersheds Prioritization Based on Morphometric and Land Use/Cover Analysis, in: Proceeding of HYDRO-2018 INTERNATIONAL, December 19-21, 2018.
10. Sinha M. K.; **Rajput P.**; Verma M. K.; Baier K.; Jha R.; Azzam R. (2017): Response of Urban Lakes Due to Informal Urban Settlements: A case study in Raipur city, in: Proceeding of WLMFLS –1st Asian conference on Water and Land Management for Food and Livelihood Security, January 20-22, 2017.
11. Sinha N.; **Rajput P.**; Sinha M. K.; Ahmad I. (2016): Land-use land-cover analysis and accuracy assessment using Landsat sensor data, in: Proceeding of ETEWP 2016 – Two days National Seminar on Emerging Technologies for Enhancing Water Productivity, November 17-18, 2016.
12. **Rajput, P.**, Verma V., Verma M. K. (2014): A Standardized Precipitation Index Based Draught Analysis in Upper Seonath Sub Basin Using GIS, in: HYDRO INTERNATIONAL, 19th International Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering, December 18-20, 2014, Published in: HYDRAULICS, WATER RESOURCES, COASTAL AND ENVIRONMENTAL ENGINEERING First Impression: 2014 ISBN: 978–93 – 84935–04–7(print).

13. Sinha M. K.; **Rajput P.**; Baghel T. (2017): Geographical Information System Based Identification of Groundwater Recharging Potential Zones – Application of multi-criteria decision-making technique, in: Lambert Academic Publishing, Saarbrücken, Germany, ISBN: 978-620-2-09290-6.
14. **Rajput, P.**, Verma M. K., Tripathi R. K. (2015): “Application of GIS in Drought Analysis - A case study of Upper Seonath Sub-basin”, in: LAP Lambert academic Publishing, Germany, December 2015, ISBN: 978-3-659-81286-6.

Lecture / Presentations Delivered

- 02/04/2022 **Presented** a paper in Roorkee Water Conclave on Water Security for sustainable development at Indian Institute of Technology Roorkee, Roorkee, India.
- 02/12/2021 **Presented** a paper in international conference on recent advances in water science and technology at Sri Shakthi Institute of Engineering & Technology, Chinniyampalayam, Coimbatore, India.
- 07/02/2020 **Presented** a paper in international conference on sustainable cities and communities at G D Goenka University, Gurugram, Haryana, India.
- 30/01/2020 **Presented** a paper in 2nd International Conference on recent trends in renewable energy and sustainable global development, Bhilai Institute of Technology Raipur, Raipur (C. G.) India.
- 08/04/2019 **Invited Lecture** on “Extreme Rainfall & Drought” at University Teaching Department, Chhattisgarh Swami Vivekananda Technical University, Bhilai (C.G.)
- 21/12/2018 **Presented** a paper in HYDRO 2018 INTERNATIONAL, International Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering at National Institute of Technology, Patna.
- 01/03/2017 **Presented** a paper on Earth and Atmospheric Sciences discipline in 15th Young Scientist Congress-2017, Chhattisgarh Council of Science and Technology (CCOST), India.
- 21/01/2017 **Invited Lecture** in 1st Asian conference on ‘Water and Land Management for Food and Livelihood Security’, IGKV Raipur and Soil conservation society New Delhi.
- 18/10/2016 **Presented** a paper in two days National Seminar on Emerging Technologies for Enhancing Water Productivity at Department of Soil and Water Engineering, IGKV Raipur.
- 20/12/2014 **Presented** a paper in HYDRO 2014 INTERNATIONAL, 19th International Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering at MNIT Bhopal.

Program attended

- 05/02/2022 **All India Council for Technical Education, 8 Module Certificate Course (1 Semester)**
National Initiative for Technical Teachers Training, India, Online Course.
- 24/08/2020 **Advance Technique for smart design & execution of water supply systems (1 week)**
Maulana Azad National Institute of Technology, Bhopal, India, Online Workshop.
- 13/01/2020 **Faculty Induction Program for Technical Education Department (3 Week)**
Chhattisgarh Administrative Academy, Nimora, Raipur, India.
- 15/11/2019 **STTP on- Hydrological & Hydraulics Modelling with MIKE Package & PCSWMM (1 Week)**
Chhattisgarh Swami Vivekananda Technical University, Bhilai, India.

- 23/10/2019 **Workshop on- Modelling Environmental & Geospatial Data on GIS Platform: ArcGIS (3 days)**
Chhattisgarh Swami Vivekananda Technical University, Bhilai, India.
- 17/10/2019 **FDP on- Global Navigation Satellite Systems and Applications (4 weeks)**
Indian Institute of Technology, Roorkee, India, NPTEL MOOC'S Course.
- 15/10/2019 **Hands on Training- Visual MODFLOW Flex & Hydro Geo Analyst (1 Week)**
Laga System Pvt. Ltd., Hyderabad, India
- 25/09/2019 **Workshop on- Advanced Surveying Techniques using DGPS (3 days)**
Indian Institute of Technology, Bhilai, India.
- 17/08/2019 **FDP on- Remote Sensing & digital image processing of satellite data (8 weeks)**
Indian Institute of Technology, Roorkee, India, NPTEL MOOC'S Course.
- 12/08/2019 **Workshop on- Industry-Institute-Interface for Entrepreneurship Development (7 days)**
National Institute of Technology, Rourkela, India.
- 31/05/2019 **FDP on- Student Induction (1 Week)**
Rungta College of Engineering & Technology, Raipur, Organized by AICTE India.
- 27/03/2019 **Workshop on- Virtual Laboratory (2 days)**
Indian Institute of Technology, Bhilai, India
- 27/07/2018 **Start-Up Conclave – Educate to Innovate 1.0 (3 days)**
Engineering Staff College of India, Hyderabad, India
- 28/05/2018 **Active Learning (1 Week)**
Indian Institute of Technology Gandhinagar- Summer Training Program, Under TEQIP-III, MHRD, Govt. of India.
- 01/05/2018 **Application of System Approach to Water Resources Engineering (1 Week)**
National Institute of Technology Calicut- Faculty Development Program, Under TEQIP-III, MHRD, Govt. of India.
- 16/09/2017 **River Basin Management (3 days)**
By Dr. Rajendra Singh (WATER-MAN India) at Tarun Bharat Sangh (Vidyapith), India.
- 26/01/2017 **Faculty Student Collaboration in TEQIP Institutes to Achieve Institutional Objectives (MHRD-TEQIP-KITE) (1 day)**
CDEEP & Department of Electrical Engineering, Indian Institute of Technology Bombay- Under TEQIP-III, MHRD, Govt. of India.
- 23/01/2017 **Innovation in Teaching and Research Techniques and Methodology in Selected Disciplines (2 week)**
Indian Institute of Technology Bombay-CE & QIP, Under TEQIP-II, MHRD, Govt. of India.
- 10/12/2016 **Total Quality Teaching (1 day)**
Government Engineering College Jagdalpur- Faculty Development Program, Under TEQIP-II, MHRD, Govt. of India.
- 09/07/2015 **River Engineering Solution and Their Implementation Strategies (2 days)**
Center for Water Resource Studies, NIT Patna, India.
- 18/11/2013 **Visual MODFLOW (Exclusive hands on Training with Project Assignment) (1 week)**
Department of Civil Engineering, National Institute of Technology Raipur, India.
- 14/05/2010 **Water Resources Department, Government of Chhattisgarh, India (40 days)**
Summer training: Field visit of the Dulna **diversion weir** on Mahanadi River during the construction practices of excavation in all types of strata, diaphragm wall, concreting in body wall of diversion weir and all other hydraulic components. This training also includes field investigation of the consequences on surrounding areas and river compartment in upstream and downstream portion of the river.
- 20/05/2009 **Water Resources Department, Government of Chhattisgarh, India (40 days)**

Summer training: This summer vocational training comprises construction site visit of the **Spillway dam** at Kelo River for understanding and analysing the behavioural changes in the River morphology. This training also includes the construction practices of excavation in all types of strata, concreting in wall of spillway, water loss testing, grout in body of dam, open duct reinforcement and concreting of RCC duct in main canal.

Professional Societies

- Member: International Association of Hydrological Science [**IAHS - 14758**]
- Member: International Society for Photogrammetry and Remote Sensing [**ISPRS-180101173718**]
- Member: International Water Resources Association [**IWRA - 5301**]
- Life Member: Indian Society for Hydraulics [**ISH - 1408**]
- Life Member: Indian Society of Remote Sensing [**ISRS-L4787**]

Additional Responsibilities

- Prof-in-Charge, Transportation Engineering Lab at GEC Raipur.
- Prof-in-Charge, Environmental Engineering Lab at GEC Raipur.
- Training & Placement Officer at GEC Raipur.
- Time Table in-charge of civil engineering department at GEC Raipur.
- Secretary, Internal Complaint Committee at GEC Raipur.