

Brief Curriculum Vitae

Prachi Pratyasha Jena

Assistant Professor
Department of Soil and water Conservation Engineering
College of Agricultural Engineering and Technology
Odisha University of Agriculture and Technology
Bhubaneswar
751003
Odisha, India
Email ID: ppjena.swce@ouat.ac.in
Mobile No: 9556270655



Academic Achievement

- Ph D in Land and water resources engineering **2021**
Indian Institute of Technology, Kharagpur, West Bengal, India
Dissertation: Flood hazard assessment for changing flood regime in Mahanadi river basin
- M.Tech in Soil and water Conservation Engineering **2010**
Indian Institute of Technology, Kharagpur, West Bengal, India
Dissertation: Application of Rainfall Runoff Library in rainfall runoff modelling
- B. Tech in Agricultural Engineering **2008**
Odisha University of Agriculture and Technology, Bhubaneswar, Odisha, India

Specialised Training

- Completed 10-days Faculty development training at ICAR-NAARM, Hyderabad, India 23 July-3 Aug 2023
- Completed 21-days winter school on “Artificial Intelligence in Agriculture” Organised by organized by ICAR-Indian Agricultural Statistics Research Institute, New Delhi Feb 2022
- Completed 21-days winter school on “Advanced technology in watershed hydrology to mitigate climate change impact on soil and water resources” organised by ICAR-IISWC Regional centre, Tamilnadu during 1-21 Nov 2016
- Completed International summer and winter school on “Geospatial Technologies in hydrological modeling” at IIT Kharagpur, India during 16-27 June 2014
- Completed International summer and winter school on “Hydrology and Climate Change” at IIT Kharagpur, India during 1-11 July 2014

Work Experience

1. **Assistant Professor, Soil and Water Conservation Engineering;** College of Agricultural Engineering and Technology, Odisha University of Agriculture and Technology, Bhubaneswar, Odisha, India 16.6.2021-till date
Responsible for Teaching & research and extension on Watershed management and Planning, Advanced hydrology, Design of farm irrigation system

2. **Assistant Professor, Soil and Water Conservation Engineering**, College of Agriculture, Chiplima, Sambalpur, 30.03.2015 – 15.06.2021

Odisha University of Agriculture and Technology

Responsible for Teaching & research and extension on Soil and water conservation engineering, Renewable energy and green technology, Farm Machinery power, Protected cultivation & secondary agriculture

3. **Senior Research Fellow**; Project entitled “ Flood Inundation Zoning in Mahanadi Basin for different return period” (FIZ) at IIT Kharagpur 12.08.2011 to 31.12.2014

I have worked in different software like Microsoft office, GIS software, and Flood model(MIKEFLOOD) during the project. I have acquired very good research experience during my work and field visit

4. **Design Engineer (Micro irrigation) in Jain Irrigation System Limited** at Vijayawada, Andhra Pradesh from 5.7.2010 to 15.07.2011.

Responsible for designing drip and sprinkler system for fields, landscape designing and lift irrigation system concepts

Area of Interest:

- Climate smart approaches in Agriculture
- Watershed modeling integrated with RS, GIS and Machine learning

Software application Skills: ArcGIS, ERDAS- IMAGINE, MIKEFLOOD, Basics of Python. MATLAB

Publications in peer reviewed journals:

Patel, A., **Jena, P.P.**, Khatun, A. *et al.* Improved Cartosat-1 Based DEM for Flood Inundation Modeling in the Delta Region of Mahanadi River Basin, India. *J Indian Soc Remote Sens* **50**, 1227–1241 (2022). <https://doi.org/10.1007/s12524-022-01525-8>

Bisht, D. S., Mohite, A. R., **Jena, P. P.**, Khatun, A., Chatterjee, C., Raghuwanshi, N. S., Singh, R., & Sahoo, B. (2020). Impact of climate change on streamflow regime of a large Indian river basin using a novel monthly hybrid bias correction technique and a conceptual modeling framework. *Journal of Hydrology*, 590, 125448. <https://doi.org/10.1016/j.jhydrol.2020.125448>

Jena, P. P., Panigrahi, B., & Chatterjee, C. (2016). Assessment of Cartosat-1 DEM for Modeling Floods in Data Scarce Regions. *Water Resources Management*. <https://doi.org/10.1007/s11269-016-1226-9>

Kumar, A., Singh, R., **Jena, P. P.**, Chatterjee, C., & Mishra, A. (2015). Identification of the best multi-model combination for simulating river discharge. *Journal of Hydrology*. <https://doi.org/10.1016/j.jhydrol.2015.03.060>

Jena, P. P., Chatterjee, C., Pradhan, G., & Mishra, A. (2014). Are recent frequent high floods in Mahanadi basin in eastern India due to increase in extreme rainfalls? *Journal of Hydrology*. <https://doi.org/10.1016/j.jhydrol.2014.06.021>

Manuals

Jena PP, Sahoo AP and Paul JC, (2023) Practical Manual on Watershed Planning and Management, Dept. of Soil & Water Conservation Engineering, College of Agricultural Engineering and Technology, Bhubaneswar, Odisha, India

Paul JC, Sahoo AP and **Jena PP**, (2023) Concepts in Minor Irrigation and Command area Development, Dept. of Soil & Water Conservation Engineering, College of Agricultural Engineering and Technology, Bhubaneswar, Odisha India

Academic Excellencies:

- Qualified NET-2014 (National Eligibility Test) in ‘Land and Water Management Engineering’ conducted by ICAR-ASRB.
- Qualified in GATE’2008 Examination in Agricultural Engineering with all India rank 45th.
- Received MHRD Fellowship during M. Tech and PhD.
- Received ICAR merit cum means scholarship during B. Tech.

Membership of Professional Societies:

- Member in “Soil Conservation Society of India”
- Member in “Indian Society of Agricultural Engineering”
- Associate member in “The Institution of Engineers (India)”
- Life member in Odisha Bigyan Academy
