Journal Publications

7. Pandey, A. K., & Mohapatra, P. K. (2024). 3D Numerical Simulations of the Bed Evolutions at an Open Channel Junction For the Flood Conditions. *Journal of Irrigation and Drainage Engineering* [**Accepted**]. https://doi.org/10.1061/JIDEDH/IRENG-1032

6. Pandey, A. K., & Mohapatra, P. K. (2023). Flow Dynamics and Pollutant Transport at an Artificial Right-Angled Open-Channel Junction with a Deformed Bed. *Journal of Hydraulic Engineering*, *149*(4), 04023006. https://doi.org/10.1061/JHEND8.HYENG-13424.

5. Pandey, A. K., & Mohapatra, P. K. (2022). Three-dimensional numerical simulation of the flood-wave propagation at a combining open-channel junction. *Journal of Irrigation and Drainage Engineering*, *148*(11), 04022038. https://doi.org/10.1061/(ASCE)IR.1943-4774.0001713.

4. Pandey, A. K., & Mohapatra, P. K. (2022). Discussion of "Mahmodinia, S., & Javan, M.(2021). Vortical structures, entrainment and mixing process in the lateral discharge of the gravity current. Environmental Fluid Mechanics, 21 (5), 1035–1067". *Environmental Fluid Mechanics*, *22*(4), 1025-1033. https://doi.org/10.1007/s10652-022-09859-0.

3. Pandey, A. K., & Mohapatra, P. K. (2022). Large eddy simulation of sediment transport in high flow intensity by discrete particle method By B. Zhang; B., Wu; S., Li and Y., Shi, Journal of Hydraulic Research. 59 (4), 2020, 605-620, https://doi.org/10.1080/00221686.2020. 1818306. *Journal of Hydraulics Research*, *60(1)*, 182-183. https://doi.org/10.1080/00221686.2021.1968965

2. Pandey, A. K., & Mohapatra, P. K. (2021). Reduction of the Flow Separation Zone at Combining Open-Channel Junction by Applying Alternate Suction and Blowing. *Journal of Irrigation and Drainage Engineering*, *147(10)*, 06021011. https://doi.org/10.1061/(ASCE)IR.1943-4774.0001611

1. Pandey, A. K., Mohapatra, P. K., Jain, V., & Bhatia, U. (2020). Studying subcritical opposing channel flows. *Journal of Applied Water Engineering and Research*, *8(4)*, 262- 276. https://doi.org/10.1080/23249676.2020.1787247

Conference Proceeedings

3. Pandey, A. K., & Mohapatra, P. K. (2022). Performances of Different Turbulence Models in Predicting Important Characteristics of Steady Flow in Combined Open Channel Junction. 39th IAHR World Congress-From Snow To Sea, 3848-3857, Granada, Spain. https://doi.10.3850/IAHR-39WC2521711920221565

2. Pandey, A. K., Mohapatra, P. K., & Jain, V. (2020). Equivalent Manning's Roughness in Combining Open Channel Junction Flows. World Environmental and Water Resources Congress 2020: Hydraulics, Waterways, and Water Distribution Systems Analysis, 99-107. https://doi.org/10.1061/9780784482971.010

1. Pandey, A. K., and Mohapatra, P. K. (2019). 3D simulation of flow in a right angled channel junction with a pit. In World Environmental and Water Resources Congress 2019: Hydraulics,

Waterways, and Water Distribution Systems Analysis, 144-158. https://doi.org/10.1061/9780784482353.014

Book Chapters

Pandey, A.K., Mohapatra, P.K. & Jain, V. (2021). Studying the channel confluence hydraulics using eddy viscosity models and Reynolds stress model. In Recent Advances in Computational Mechanics and Simulations (pp. 295-305). Springer, Singapore. https://doi.org/10.1007/978-981-15-8315-5_26