

## LIST OF PUBLICATIONS

**Faculty: Dr Siddhant Dash**

**Department of Civil Engineering**

### JOURNAL PUBLICATIONS & BOOK CHAPTERS

Application of Multivariate Statistics as a Tool for Development of Water Quality Index (WQI) For Water Quality Assessment of Deepor Beel, Assam, India. - **Dash, S.**, Borah, S. S & Kalamdhad, A. S. - In: Kalamdhad et al. (eds) Environmental Degradation: Monitoring, Assessment and Treatment Technologies, Springer-Nature, Switzerland Jointly published with Capital Publishing Company, New Delhi, India. (2022)

---

Monitoring Heavy Metals Concentrations in a Natural Wetland and Aquatic Plant Eichhornia crassipes for Assessment of Its Biomonitoring Potential. - **Dash, S.** & Kalamdhad, A. S. - In: Laishram B., Tawalare A. (eds) Recent Advancements in Civil Engineering. Lecture Notes in Civil Engineering, vol 172. Springer, Singapore. (2022)

Steady and Unsteady Hydrodynamic Simulation of Pili River as a Potential Flood Warning System using HEC-RAS. - **Dash, S.**, Vijay, R. & Gupta, R. - In: Laishram B., Tawalare A. (eds) Recent Advancements in Civil Engineering. Lecture Notes in Civil Engineering, vol 172. Springer, Singapore. (2022)

Urban Flood Modelling: Concern to Solution. - Gupta, R., Vijay R., & **Dash, S.** - In: A. P. Mull (eds) View Point-September 2021, published with Consulting Engineers Association of India (CEAI), India. pp. 18-23. (2021)

Seasonal and Spatial Variation of DO and BOD for Assessment of the Water Quality of Brahmaputra River. - **Dash, S.**, Borah, S., Singh, K. R. & Kalamdhad, A. S. - In: Kalamdhad A. (eds) Recent Developments in Waste Management, Lecture Notes in Civil Engineering, vol 57 (pp. 473-483), Springer, Singapore. (2020)

Sewage surveillance for SARS-CoV-2: molecular detection, quantification and normalization factors. - Mazumder, P., **Dash, S.**, Honda, R., Sonne, C. & Kumar, M. - Current Opinion in Environmental Science and Health, 28, 100363. (2022)

Science mapping approach to critical reviewing of published literature on water quality indexing. - **Dash, S.** & Kalamdhad, A. S. - Ecological Indicators, 128, 107862 (2021)

Discussion on the existing methodology of entropy-weights in water quality indexing and proposal for a modification of the expected conflicts. - **Dash, S.** & Kalamdhad, A. S. - Environmental Science and Pollution Research, 28(38), 53983– 54001. (2021)

Understanding the dynamics of heavy metals in a freshwater ecosystem through their toxicity and bioavailability assay. - **Dash, S.** & Kalamdhad, A. S. - Environment, Development and Sustainability, 23(11), 16381–16409. (2021)

Hydrochemical dynamics of water quality for irrigation use and introducing a new water quality index incorporating multivariate statistics. - **Dash, S.** & Kalamdhad, A. S. - Environmental Earth Sciences, 80(73). (2021)

Heavy metal pollution and potential ecological risk assessment for surficial sediments of Deepor Beel, India. - **Dash, S.,** Borah, S. S. & Kalamdhad, A. S. - Ecological Indicators, 122, 107265. (2021)

Application of Environmetrics tools for geochemistry, water quality assessment and apportionment of pollution sources in Deepor Beel, Assam, India. - **Dash, S.,** Borah, S. S. & Kalamdhad, A. S. - Water Practice and Technology, 15(4), 973 – 992. (2020)

Application of positive matrix factorization receptor model and elemental analysis for the assessment of sediment contamination and their source apportionment of Deepor Beel, Assam, India. - **Dash, S.,** Borah, S. S. & Kalamdhad, A. S. – Ecological Indicators, 114, 106291(2020)

Study of the limnology of wetlands through a one-dimensional model for assessing the eutrophication levels induced by various pollution sources. - **Dash, S.,** Borah, S. S. & Kalamdhad, A. S. - Ecological Modelling, 416, 108907. (2020)

A modified indexing approach for assessment of heavy metal contamination in Deepor Beel, India. - **Dash, S.,** Borah, S. S. & Kalamdhad, A. – Ecological Indicators, 106, 105444. (2019)

Monitoring and assessment of Deepor Beel water quality using multivariate statistical tools. - **Dash, S.,** Borah, S. S. & Kalamdhad, A. - Water Practice and Technology, 13(4), 893 – 908. (2018)

A Modeling Approach for Water Quality Assessment of Pili River using HEC RAS. - **Dash, S.,** Vijay, R. & Gupta, R. Journal of Indian Water Works Association, 49(1), 24 – 30. (2017)

## **BOOKS**

Environmental Degradation: Monitoring, Assessment and Treatment Technologies. - Haq, I., Kalamdhad, A.S., & **Dash, S.** - Springer Nature, Switzerland, jointly published with Capital Publishing Company, New Delhi, India. (2022) ISBN: 978-3-030-94147-5; 978-3-030-94148-2 (eBook)