

## LIST OF PUBLICATIONS

**Faculty: Dr Deblina Dutta**

**Department of Environmental Sciences**

### JOURNAL PUBLICATIONS

1. An insight on sampling, identification, quantification and characteristics of microplastics in solid wastes – P. Samanta, S. Dey, D. Kundu, **D. Dutta**, R. Jambulkar, R. Mishra, A.R. Ghosh, S. Kumar - *Trends in Environmental Analytical Chemistry* 36, e00181 (2022)

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2. Greenhouse-temperature induced manure driven low carbon footprint in aquaculture mesocosm- **D. Dutta**, D. Kundu, B.B. Jana, S. Lahiri, J.N. Bhakta - *Carbon Research* 1(1), 1-12 (2022)
3. A review on recovery processes of metals from E-waste: A green perspective - **D. Dutta**, R. Rautela, L.K.S. Gujjala, D. Kundu, P. Sharma, M. Tembhare, S. Kumar - *Science of the Total Environment* 859(2), 160391 (2022)
4. Valorization of wastewater: A paradigm shift towards circular bioeconomy and sustainability – D. Kundu, **D. Dutta**, P. Samanta, S. Dey, K.C. Sherpa, S. Kumar, B.K. Dubey - *Science of The Total Environment* 157709 (2022)
5. E-waste in Information and Communication Technology Sector: Existing scenario, management schemes and initiatives - S. Vishwakarma, V. Kumar, S. Arya, M. Tembhare, Rahul, **D. Dutta**, S. Kumar -*Environmental Technology & Innovation* (2022)
6. Growth dependent carbon sequestration proficiency of algal consortium grown in carbon dioxide enriched simulated greenhouse - **D. Dutta**, D. Kundu, B.B. Jana, S. Lahiri, J.N. Bhakta - *Journal of Bioresource Technology Reports* 18, 101090 (2022)
7. Health risk assessment for exposure to heavy metals in soils in and around E-waste dumping site - **D. Dutta**, S. Goel, S. Kumar - *Journal of Environmental Chemical Engineering* 10(2), 107269 (2022)
8. Role of microbes in bioaccumulation of heavy metals in municipal solid waste: Impacts on plant and human being - P. Sharma, **D. Dutta**, A. Udayan, A.K. Nadda, S.S. Lam, S. Kumar - *Journal of Environmental Pollution* 305, 119248 (2022)
9. Influence of COVID-19 on E-waste management - **D. Dutta**, S. Arya, S. Kumar, E. Lichtfouse - Editorial, *Environmental Chemistry Letters* 20, 971–974 (2022)

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10. Industrial wastewater purification through metal pollution reduction employing microbes and magnetic nanocomposites - P. Sharma, **D. Dutta**, A. Udayan, S. Kumar - *Journal of Environmental Chemical Engineering* 9(6), 106673 (2021)
  11. A state-of-the-art review on microbial desalination cells - L.K.S. Gujjala, **D. Dutta**, P. Sharma, D. Kundu, D.V.N. Vo, S. Kumar - *Chemosphere* 132386 (2021)
  12. Industrial Wastewater Treatment: Current Trends, Bottlenecks, and Best Practices - **D. Dutta**, S. Arya, S. Kumar - *Chemosphere* 285, 131245 (2021)
  13. Emission of ionizing radiation from Active and End-of-life Mobile Phones and Batteries - **D. Dutta**, S. Ghosal, S. Goel, D. Sengupta - *Journal of Hazardous, Toxic, and Radioactive Waste* 25(4), 05021006 (2021)
  14. Understanding the gap between formal and informal e-waste recycling facilities in India- **D. Dutta**, S. Goel - *Waste Management* 125, 163-171 (2021)
  15. Positive synergistic impacts of greenhouse temperature and manure driven total environment on breeding success of Tilapia during winter - B.B. Jana, D. Kundu, **D. Dutta**, S. Lahiri, S.K. Bag, J.N. Bhakta - *Indian Journal of Experimental Biology* 57, 96- 104 (2019)
  16. Close loop separation process for the recovery of Co, Cu, Mn, Fe and Li from spent lithium-ion batteries - **D. Dutta**, A. Kumari, R. Panda, S. Jha, D. Gupta, S. Goel, M.K. Jha - *Journal of Separation and Purification Technology* 200, 327-334 (2018)
  17. Sustainable recycling process for metals recovery from used printed circuit boards (PCBs) - **D. Dutta**, A. Kumari, R. Panda, S. Goel, M.K. Jha - *Sustainable Materials and Technologies* 17 (2018)
  18. Evaluation of growth, physiology, and yield of mung bean (*Vigna radiata*) by inoculating isolated nitrogen fixing bacteria from pharmaceutical wastewater - **D. Dutta**, D. Kundu, J.K. Datta - *Journal of Environmental Science and Pollution Research* 3(1), 149-152 (2017)
  19. Evidences of Manure Driven and C:N Regulated Enhanced Carbon Status and Microalgal Productivity in Managed Aquatic System under Simulated Green House Conditions -B.B. Jana, D. Kundu, **D. Dutta**, S. Lahiri, S.K. Bag, D. Sarkar, J.N. Bhakta - *Journal of Earth Science and Climate Change* 7, 336 (2016)
  20. Accumulation and contamination of lead in different trophic levels of food chain in sewage-fed East Kolkata Wetland, West Bengal, India – D. Kundu, S. Mondal, **D. Dutta**, S. Haque, A.R. Ghosh - *International Journal of Environmental and Technological Sciences* 2, 61-68 (2016)
  21. E-waste generation, management, utilization and recycling: A review – **D. Dutta**, S. Goel, J. Hait, M.K. Jha - *Journal of Metallurgy and Materials Science* 58 (3), 89-98 (2016)

## **BOOK CHAPTERS**

1. Products, processes, environmental impacts, and waste management of food industry focusing on ice cream – **D. Dutta**, V.R. Sankar Cheela, A.K. Jaglan, S. Rani, S. Adibhatla, B. Dubey - Environmental Impact of Agro-Food Industry and Food Consumption. Academic Press. pp. 147-168. ISBN: 978-0-12-821363-6 (2020)

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2. Algal Carbon Sequestration: A Green Technology for Bioremediation of Carbon dioxide Pollution – D. Kundu, S. Sarkar, S. Mondal, **D. Dutta**, T. Mondal, K. Mondal, J.N. Bhakta, B.B. Jana - (JN Bhakta, S Lahiri, BB Jana eds) In: Green technology for bioremediation of environmental pollution. Nova Science Publishers, Inc., New York. pp. 153-172. ISBN: 9781536145298 (2019)

3. Bioremediation in Different Domains of Environment – J.N. Bhakta, D. Kundu, **D. Dutta**, G.A. Płaza - (JN Bhakta, S Lahiri, BB Jana eds) In: Green technology for bioremediation of environmental pollution. Nova Science Publishers, Inc., New York. pp. 1-16. ISBN: 9781536145298 (2019)

4. Application of potential biological agents in green bioremediation technology: Case studies – D. Kundu, **D. Dutta**, S. Mondal, S. Haque, J.N. Bhakta, B.B. Jana - (JN Bhakta, ed). In: Handbook of Research on Inventive Bioremediation Techniques. IGI Global. Hershey: USA. Chapter 13. pp. 298-322. DOI: 10.4018/978-1-5225-2325-3.ch013 (2017)

5. Electronic Waste Generation and Management. Advances in Solid and Hazardous Waste Management – **D. Dutta**, S. Goel - Capital Publishing Company. Co published by Springer. 245-264 (2017)

6. Applications of remote sensing and GIS in solid waste management- A review- **D. Dutta**, S. Goel - Advances in Solid and Hazardous Waste Management. Capital Publishing Company. Co published by Springer. 129-149 (2017)

7. Fundamentals of microbiology- T. Mohanta, **D. Dutta**, S. Goel - Advances in Solid and Hazardous Waste Management. Capital Publishing Company. Co published by Springer. 297-317 (2017)

8. Environmental regulations in India- **D. Dutta**, T. Mohanta, S. Goel - Advances in Solid and Hazardous Waste Management. Capital Publishing Company. Co published by Springer. 321-355 (2017)

## **CONFERENCE PAPERS**

1. Recovery of Manganese from Scrap Batteries of Mobile Phones – **D. Dutta**, R. Panda, M.K. Jha, S. Goel - In: Kim H. et al. (Eds) Rare Metal Technology 2018. TMS 2018. The Minerals, Metals & Materials Series. Springer, Cham. [https://doi.org/10.1007/978-3-319-72350-1\\_16](https://doi.org/10.1007/978-3-319-72350-1_16) (2018)

