

Research Info

Scientist Details:

Dr. Jewel Das

Senior Scientific Officer

BCSIR Chattogram Laboratories

Chattogram 4220.

Education

2018 - 2022	PhD in Microbiology [Fellowship: Science Foundation Ireland (SFI) Fellowship] University of Galway, Ireland
2016 - 2018	MSc in Environmental Science and Technology [Fellowship: Netherland Fellowship Program (NFP)] IHE Delft Institute for Water Education, The Netherlands
2003 - 2004	MS in Chemistry University of Chittagong, Bangladesh
1999 - 2003	BSc (Honours) in Chemistry University of Chittagong, Bangladesh

Scientific publications

1. Molla, M.H., Chowdhury, M.A.T., Muhibullah, M., Ali, K.M.B., Bhuiyan, M.H.R., Morshed A.J.M., **Das, J.**, Islam, S., 2023. Suitability of drinking water quality in Chittagong Metropolitan City, Bangladesh: research on urban water bodies (UWBs) using multivariate analytic techniques. *H₂Open Journal*. 6, 140-156. <https://doi.org/10.2166/h2oj.2023.015>
2. **Das, J.**, Lens, P.N.L., 2022. Resilience of hollow fibre membrane bioreactors for treating H₂S under steady state and transient conditions. *Chemosphere*. 307, 136142. <https://doi.org/10.1016/j.chemosphere.2022.136142>
3. **Das, J.**, Nolan, S., Lens, P.N.L., 2022. Simultaneous removal of H₂S and NH₃ from raw biogas in hollow fibre membrane bioreactors. *Environmental Technology & Innovation*. 28, 102777. <https://doi.org/10.1016/j.eti.2022.102777>
4. **Das, J.**, Ravishankar, H., Lens, P.N.L., 2022. Biological biogas purification: recent developments, challenges and future prospects. *Journal of Environmental Management*. 304, 114198. <https://doi.org/10.1016/j.jenvman.2021.114198>
5. **Das, J.**, Ravishankar, H., Lens, P.N.L., 2022. Biological removal of gas-phase H₂S in hollow fibre membrane bioreactors. *Journal of Chemical Technology & Biotechnology*. 97, 1149-1161. <https://doi.org/10.1002/jctb.6999>
6. Molla, M.H., Chowdhury, M.A.T., Bhuiyan, M., Rahman, H., Das, S., Morshed, A.J.M., **Das, J.**, Islam, S., 2022. Seasonal variation of drinking water quality in urban water bodies (UWBs) of Chittagong Metropolitan City, Bangladesh: implications of higher water quality index (WQI) for the urban environment. *Water Supply*. 22, 4934-4950. <https://doi.org/10.2166/ws.2022.151>
7. Huno, S.K.M. **Das, J.**, van Hullebusch, E.D., Annachatre, A.P., Rene, E.R., 2022. Nitrate removal from groundwater using chemically modified coconut husk based granular activated carbon: Characterization of the adsorbent, kinetics and mechanism.

Systems Microbiology and Biomanufacturing. 1-14. <https://doi.org/10.1007/s43393-022-00108-5>

8. **Das, J.**, Rene, E.R., Dupont, C., Dufourny, A., Blin, J., van Hullebusch, E.D., 2019. Performance of a compost and biochar packed biofilter for gas-phase hydrogen sulfide removal. *Bioresource Technology*. 273, 581-591. <https://doi.org/10.1016/j.biortech.2018.11.052>
9. Das, J., Rene, E.R., Krishnan, J., 2018. Photocatalytic degradation of volatile pollutants. *Journal of Environmental Chemistry and Toxicology*. 2, 57-59.
10. Wambugu C., Marvins A. D., **Das J.**, Rene E.R., 2017. Conventional bioprocesses for the removal of gas-phase contaminants. *Research and Review Insights*. 1:1-2.
11. Chakraborty D., **Das J.**, Das P.K., Bhattacharjee S.C., Das S., 2017. Evaluation of the parameters affecting the extraction of sesame oil from sesame (*Sesamum Indicum* L.) seed using soxhlet apparatus. *International Food Research Journal*. 24: 691-695
12. **Das J.**, Chakraborty D., Das S., Bhattacharjee S.C., Das P.K., 2016. Physicochemical Parameters and Heavy Metal Content in Soybean Oil from Bangladesh. *Pakistan Journal of Nutrition*. 15: 565-571.
13. Jahan, F., Uddin, M.H., **Das, J.**, 2016. Analytical characterization and microbial studies of muscle lipid of Indian threadfin (*Polynemus indicus*) of the Bay of Bengal. *International Journal of Fisheries and Aquatic Studies*. 4: 393-398.
14. Dey S., **Das J.**, Manchur M.A., 2015. Studies on heavy metal pollution of Karnaphuli river, Chittagong, Bangladesh. *IOSR Journal of Environmental Science, Toxicology and Food Technology*. 9: 79-83.
15. **Das, J.**, Das, S., Bakar, M.A., Biswas, A., Uddin, M., 2013. Evaluation of essential and toxic metals in bakery foods consumed in Chittagong (Bangladesh). *Analytical Chemistry an Indian Journal*. 13, 118-125.

Book chapter:

1. Abubackar, H.N., **Das, J.**, Veiga, M.C., Kennes, C., Rene, E.R., van Hullebusch, E.D., 2019. Gas-Phase Bioreactors, in: Moo-Young, M. (Eds.), *Comprehensive Biotechnology*. Elsevier, United Kingdom, pp. 446-463. <https://doi.org/10.1016/B978-0-444-64046-8.00142-7>

Presentation in conference & symposium

BCSIR, Bangladesh-CSIR, India Joint Symposium organized by Bangladesh Council of Scientific and Industrial Research ([BCSIR](#)), Bangladesh (30.05.2023-31.05.2023)

[BCSIR Congress-2022](#) organized by Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh (01.12.2022-03.12.2022)

[7th International conference on research frontiers in chalcogen cycle science & technology](#) (Online) organized by University of Galway, Ireland (10.12.2020-11.12.2020)

[Biofilms9](#) conference (Online) organized by Karlsruhe Institute of Technology, Germany (29.09.2020-01.10.2020)

[MaREI Biofuels Symposium](#) (Web-based) organized by MaREI, Ireland (29.04.2020)

[8th International Conference on Biotechniques for Air Pollution Control & Bioenergy](#) organized by University of Galway, Ireland (28.08.2019-30.08.2019)

16th Asian Chemical Congress, Dhaka, Bangladesh organized by [Bangladesh Chemical Society](#) (16.03.2016-19.03.2016)