Name: Somdeep Ghosh

General Information

Department	**: Environmental Studies**
Designation	**: State-Aided College Teacher I**
Qualification	**: M.Sc.**
Specialization	**: Environmental Sciences**
Email	**: gsomdeep@gmail.com**

Selected Lectures and Presentations

N/A

Teaching Experience

15.06. 2018 – till date

Colleges/ Institutes Served

- Department of Environmental Science, University of Kalyani
- St. Paul's C. M. College

Research

- Worked as DST-SERB Project Fellow from 02.08.2013- 01.11.2016 in Department of Environmental Science, University of Calcutta.

Publication

1. BooksBook Chapters/Articles in Edited Volumes

a) **Ghosh, S.**, Bakshi, M., & Chaudhuri, P., (2016) Migration of Mangroves as an indicator of climate change in Hooghly Estuary .in Climate and Society-A Contemporary Perspective (Eds. A. Haldar and L.N. Satpati) published by Dept. of Geography, University of Calcutta, Kolkata, India. (ISBN : 978-81-923448-0-5) pp. 9-20

2. Articles in Journals/ e – journals

a) **Ghosh, S.,** Bakshi, M., Gupta, K., Mahanty, S., Bhattacharyya S., & Chaudhuri, P. (2020). A preliminary study on upstream migration of mangroves in response to changing

environment along River Hooghly, India. *Marine Pollution Bulletin*, https://doi.org/10.1016/j.marpolbul.2019.110840

b) Mahanty, S., Bakshi, M., **Ghosh, S.,** Gaine, T., Chatterjee, S., Bhattacharyya, S., ... & Chaudhuri, P. (2019). Mycosynthesis of iron oxide nanoparticles using manglicolous fungi isolated from Indian sundarbans and its application for the treatment of chromium containing solution: Synthesis, adsorption isotherm, kinetics and thermodynamics study. *Environmental Nanotechnology, Monitoring & Management*, *12*, 100276.

c) Sarkar, S., Mukherjee, A., Parvin, R., Das, S., Roy, U., **Ghosh, S**., ... & Gachhui, R. (2019). Removal of Pb (II), As (III), and Cr (VI) by nitrogen-starved Papiliotrema laurentii strain RY1. *Journal of Basic Microbiology*. https://doi.org/10.1002/jobm.201900222

d) Mahanty, S., Bakshi, M., Ghosh, S., Chatterjee, S., Bhattacharyya, S., Das, P., ... & Chaudhuri, P. (2019). Green Synthesis of Iron Oxide Nanoparticles Mediated by Filamentous Fungi Isolated from Sundarban Mangrove Ecosystem, India. *BioNanoScience*, *9*(3), 637-651.

e) **Ghosh S.**, Bakshi M., Mitra S., Mahanty S., Ram S S., Banerjee S., Chakraborty A., Sudarshan M., Bhattacharyya S., & Chaudhuri P. (2018). An assessment of elemental geochemistry in acid sulphate soils of reclaimed islands of Indian Sundarban. *Marine Pollution Bulletin*, DOI: 10.1016/j.marpolbul.2018.11.057

f) Bakshi, M., **Ghosh, S.**, Chakraborty, D., Hazra, S., & Chaudhuri, P. (2018). Assessment of potentially toxic metal (PTM) pollution in mangrove habitats using biochemical markers: A case study on Avicennia officinalis L. in and around Sundarban, India. *Marine Pollution Bulletin*, *133*, 157-172.

g) Bakshi, M., **Ghosh, S.**, Ram, S. S., Sudarshan, M., Chakraborty, A., Biswas, J. K., ... & Chaudhuri, P. (2018). Sediment quality, elemental bioaccumulation and antimicrobial properties of mangroves of Indian Sundarban. *Environmental geochemistry and health*, 1-22.

h) **Ghosh, S.**, Bakshi, M., Kumar, A., Ramanathan, A. L., Biswas, J. K., Bhattacharyya, S., ... & Rinklebe, J. (2018). Assessing the potential ecological risk of Co, Cr, Cu, Fe and Zn in the sediments of Hooghly–Matla estuarine system, India. *Environmental geochemistry and health*, 1-18.

i) Bakshi, M., Ram, S S., **Ghosh, S.**, Chakraborty, A., Sudarshan, M., & Chaudhuri, P. (2017). Micro spatial variation of elemental distribution in estuarine sediment and their accumulation in mangroves of Indian Sundarban. *Environmental Monitoring and Assessment*, 189, 221. DOI: 10.1007/s10661-017-5891-9.

j) **Ghosh, S.**, Ram, S S., Bakshi, M., Chakraborty, A., Sudarshan, M., & Chaudhuri, P. (2016). Vertical and horizontal variation of elemental contamination in sediments of Hooghly estuary, India. *Marine Pollution Bulletin*, 109, 539–549.

k) Bakshi, M., **Ghosh, S.**, & Chaudhuri, P. (2015). Green Synthesis, Characterization and Antimicrobial Potential of Sliver Nanoparticles Using Three Mangrove Plants from Indian Sundarban. *BioNanoScienc*e, DOI 10.1007/s12668-015-0175-8.

l) **Ghosh, S.**, Bakshi, M., Bhattacharya, S., Nath, B., & Chaudhuri, P. (2015). A Review of Threats and Vulnerabilities to Mangrove Habitats: With Special Emphasis on East Coast of India. *Journal of Earth Science Climatic Change*, 2015. 6: 270. doi:10.4172/2157-7617.1000270

m) Dey, T. K., Banerjee, P., Bakshi, M., Kar, A., & **Ghosh, S**. (2014). Groundwater arsenic contamination in West Bengal: current scenario, effects and probable ways of mitigation. *International Letters of Natural Sciences*, *8*(1).

n) Nandy, V., Bakshi, M., **Ghosh, S.**, Sharma, H., Basu, B. R., & Chaudhuri, P. (2014). Potentiality assessment of fish scale biodegradation using mangrove fungi isolated from Indian Sundarban. *International Letters of Natural Sciences*, *9*.

3. Seminar/ Conference Proceedings

N/A

Invited Lectures/ Paper Presentations

a) **Ghosh, S.,** Das, R., Bakshi, M., Mahanty, S., …….. & Chaudhuri, P. (2019, December). Potentially toxic element and micro plastic contamination in the Hooghly estuarine region : implications to better water quality management. In the International Symposium AdCoRe IP-2019 during 17-19th December 2019 at Chennai, India.

b) Bakshi, M., **Ghosh, S.,** & Chaudhuri, P. (2019, December). Ecotoxicological response of potential toxic metal (PTM) pollution in estuarine mangrove habitat of Indian Sundarban. In the International Symposium AdCoRe IP-2019 during 17-19th December 2019 at Chennai, India.

c) Mahanty, S., **Ghosh, S.**, Bakshi, M., Gaine, T., Tudu, P., Bhattacharyya, S., Das, P., & Chaudhuri, P. (2019, December). Mycofabrication of Iron Oxide Nanoparticles using Mangicolous Fungi from Indian Sundarbans and its application for the treatment of polluted marine water. In the International Symposium AdCoRe IP-2019 during 17-19th December 2019 at Chennai, India.

d) An invited lecture on the Annual Science Day at the Kolkata Centre of the UGC-DAE Consortium for Scientific Research, on Feb 28, 2019.

e) Mahanty, S., Bakshi, M., **Ghosh, S.**, Bhattacharyya, S., & Chaudhuri, P. (2017, December). Mycosynthesis and characterisation of iron nano particle by *Trichoderma* sp. isolated from Indian Sunderban. In *International Conference on Nanotechnology: Ideas, Innovations & Initiatives- 2017* at IIT Roorkee, India.

f) **Ghosh, S.**, Bakshi, M., Mahanty, S., & Chaudhuri, P. (2017, October). Toxic metals accumulation and ecological risk in intertidal mangrove ecosystem in upstream of Hooghly estuary, India. In *3rd International Conference on Environmental Science and Technology*, 19th - 23rd October, 2017, Budapest, Hungary, at Budapest, Hungary.

g) Bakshi, M., **Ghosh, S.**, Bhattacharya, J., & Chaudhuri, P. (2017, October). Assessment of antimicrobial and antioxidative properties of mangroves from Indian Sundarban. In *3rd International Conference on Environmental Science and Technology*, 19th - 23rd October, 2017, Budapest, Hungary, at Budapest, Hungary.

h) **Ghosh, S.,** Ram, S S., Bakshi, M., Mahanty, S., Sudarshan, M., & Chaudhuri, P. (2017, March). Geospatial distribution of elements in sediments of Hooghly estuary, India. In *National Seminar on Emerging Trends In Environmental Research,* 22nd March, 2017 at University of Calcutta, Kolkata.

i) Chaudhuri, P., **Ghosh, S.**, & Ramanathan, A. L. (2016, November). Ecological Risk Assessment of Trace Metal in the Sediments of Hooghly-Matla Estuarine System. In *Proceedings of the 18th International Conference on Heavy Metals in the Environment*.

j) Mitra, S., **Ghosh, S.**, Sudarshan, M., Chakraborty, A., Bhattacharyya, S., & Chaudhuri, P. (2016). Elemental characteristics of Acid Sulphate Soils in some Islands of Indian Sundarbans. In *West Bengal State Science & Technology Congress 2016* at Presidency University, Kolkata.

k) **Ghosh, S.**, Ram, S S., Bakshi, M., Sudarshan, M., & Chaudhuri, P. (2015). Status of trace elements in surface sediments of lower saline stretch of Hooghly estuary, India. In *Indian Science Congress 2015*, Mumbai.

l) **Ghosh, S.**, Sharma, H., Kumar, A., Ramanathan, A.L., & Chaudhuri, P. (2015). Trace elemental contaminations and Ecological risk assessment in the reclaimed area of Indian Sundarban and mangrove habitats of Hooghly Estuary, India. In *National Seminar on "Past and Present Geochemical Processes - Impacts on Climate Change*" at Jawaharlal Nehru University (JNU), New Delhi.

m) **Ghosh, S.**, Bakshi, M., Sharma, H., & Chaudhuri, P. (2014). Application of SEM – EDX as a tool for sediment quality monitoring: A case study in estuarine mangrove habitat. In *National Seminar On Development of Modern Technology: A Catalyst for Advancement of Science (DMTCAS-2014*), Birbhum, India.

n) Chaudhuri, P., **Ghosh, S.**, & Bakshi, M. (2014). Migration of Mangroves as an indicator of climate change in Hooghly Estuary. In *National symposium on Climate, Society and Sustainability*. University of Calcutta, Kolkata, India.

Awards/ Fellowships/ Grants

International Travel grant from University of Calcutta (UGC/503/UPE Fellow Travel dated 07.07.2017).
International Travel Grant from Council of Scientific & Industrial Research (CSIR), Govt. of India (TG/ 9486/17- HRD dated 05.09.2017).

Honorary Posts/Positions/Responsibilities Held

N/A

Any other relevant information

N/A