Summary

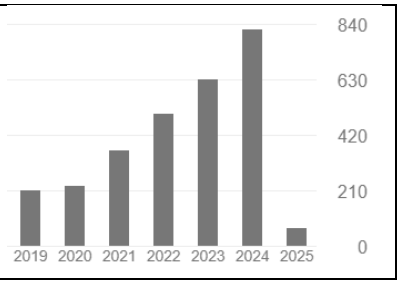
Dr. Shafi Mohammad Tareq completed **B.Sc. (Hons)** and **M.Sc.** in Chemistry from Jahangirnagar University and obtained an **M.S.** in Environmental Science and was awarded a **D.Sc.** from Nagoya University, Japan. He completed a Postgraduate Certificate in Higher Education (**PGCHE**) at the University of Nottingham and became a fellow of the Higher Education Academy, U.K. He worked as a postdoctoral fellow of the Japanese Society for the Promotion of Science (**JSPS**) and a **Commonwealth** academic fellow, UK. Dr. Tareq also worked as an **associate professor at the School of Bioscience, the University of Nottingham**. He also worked as the chairman and founding faculty of the Department of Environmental Sciences at Jahangirnagar University. Dr. Tareq was a visiting researcher at the University of Shiga Prefecture and Hokkaido University, Japan. He is skilled in environmental monitoring and assessment, focusing on emerging pollution-related health risks, hydrobiogeochemistry, and the fate and transport of dissolved organic matter and emerging chemicals, including microplastics and antibiotics in freshwater and the food chain. Dr. Tareq established the **Hydrobiogeochemistry and Pollution Control Laboratory** at Jahangirnagar University. Dr Tareq published more than 160 papers in refereed journals with a total citation of 4680 (h-index 36, i10-index 75) and received both the very prestigious Bangladesh Academy of Science and the World Academy of Science **(BAS-TWAS) Young Scientist Gold Medal Award, 2013 and BAS Gold Medal (senior group) 2024**. Dr Tareq enlisted as a **Fellow (FRSC)** and Chartered Environmentalist **(CEnv)** in the Royal Chemical Society, U.K. He is also a **fellow of the Bangladesh Academy of Science**. He worked as an editor/editorial board member and guest editor of several national/international journals, including Frontier Earth Science, Sustainability, Frontiers in Water, and Editorial Board Member of Hygiene and Environmental Health Advances, Elsevier and Discover Environment, Discover Applied Science of Nature, Springer. His contribution to lignin molecular biogeochemistry was published in a book titled "Lignin Molecular Biogeochemistry: Principles and Practices".

Research highlights

- Health risks of emerging pollutants (Microplastics and Fluorescent Whitening Agents; FWA, antibiotic residues, toxic substances) in the water and food chain
- Transport and fate of emerging pollutants and dissolved organic matter (DOM) in the deltaic ecosystem
- Anthropogenic and climate change impact on water quality and greenhouse gas emissions from Asian rivers
- Self-organizing complex geochemical process of arsenic mobilization in the deltaic sedimentary environment.
- Isotope and biomarker signature in lacustrine sedimentary organic matter

https://scholar.google.com/citations?user=A7Kd5J8AAAAJ&hl=en

	All	Since 2019
Citations	4680	3295
h-index	36	32
*i*10-index	75	65



Curriculum Vitae

Personal Information

Name	: **Dr. Shafi Mohammad Tareq**	Phone	:88-02-224491045-51,ext.1864
Date of Birth	: 31 December 1974	Fax	:88-02-224491052
Nationality	: Bangladeshi	Mobil	:88-01720299364
Affiliation	: Department of Environmental Sciences, Jahangirnagar University, Dhaka 1342, Bangladesh	Email	smtareq@juniv.edu
		www	: juniv.edu

Teaching and Research Interest

- Water, health and sustainable development
- Emerging pollution and health risk
- Occupational Health and Environmental Safety
- Environmental monitoring and assessment (EIA, SEA)
- HydroBioGeochemistry, GHG emission and climate change

Education

Postgraduate Certificate in Higher Education (**PGCHE**)	Graduate School of Education, The University of Nottingham (06/2014 - 06/2016)
Doctor of Science (**DSc**)	Graduate School of Environmental Studies, Nagoya University, Japan. (10/2003-09/2006)
Master of Environmental Studies (**MS**)	Department of Earth and Environmental Sciences, Nagoya University, Japan. (10/2001-09/2003)
Master of Science (**MSc**)	Department of Chemistry, Jahangirnagar University, Bangladesh. (07/1994-06/1995)
Bachelor of Science with Honours (**BSc**)	Department of Chemistry, Jahangirnagar University, Bangladesh. (07/1991-06/1994)

Employment

Professor (Grade 1)	**Department of Environmental Sciences, Jahangirnagar University, Bangladesh. (03/2012- till date)**
Associate Professor (lien from JU)	School of Bioscience, The University of Nottingham (03/2014 – 03/2017)
Commonwealth Academic Fellow	School of Geography, Earth and Environmental Sciences, the University of Birmingham, UK. (01/2015 – 04/2015)
Visiting researcher	School of Environmental Science, the University of Shiga Prefecture, Japan. (08/2012-10/2012)
Chairman (Head)	Department of Environmental Sciences, Jahangirnagar University, Bangladesh. (09/2010 - 08/2013)
Adjunct Faculty	School of Environmental Science, the University of Shiga Prefecture, Japan. (05/2009-08/2010)
JSPS postdoctoral fellow	Nagoya University and the University of Shiga Prefecture, Japan. (09/2008-08/2010)
Associate Professor	Department of Environmental Sciences, Jahangirnagar University, Bangladesh. (01/2008-08/2008)
Assistant Professor	Department of Environmental Sciences, Jahangirnagar University, Bangladesh. (01/2003-12/2007)
Lecturer	Department of Environmental Sciences, Jahangirnagar University, Bangladesh. (10/1999-12/2002)

Selected Publications (detail in appendix/Google Scholar/Orcid 0000-0002-6417-3846)

1. Haque, M. M., Begum, M.S., Nayna, O.K., Tareq, S.M., Park, J-H. 2022. Seasonal Shifts in Diel Variations of pCO_2 and O_2 in the Lower Ganges River. Limnology and Oceanography Letters 7, 191-201. **(IF 7.8)**
2. Parvin, F., Jannat, S., Tareq, S.M. 2021. Abundance, characteristics and variation of microplastics in different freshwater fish species from Bangladesh, Science of The Total Environment, 784, 147137. **(IF 8.20)**
3. Shammi, M., Behal, A. and Tareq, S.M. 2021. The Escalating Biomedical Waste Management to Control the Environmental Transmission of COVID-19 Pandemic: A Perspective from Two South Asian Countries. Environmental Science & Technology. 55(7), 4087–4093. **(IF 10.90)**
4. Tareq, S. M., Safiullah, S., Anawar, H. M., Rahman, M. M., and Ishizuka, T. 2003. Arsenic pollution in groundwater: a self-organizing complex geochemical process in the deltaic sedimentary environment, Bangladesh, Science of the Total Environment, 313 (1-3), 213-226. **(IF 8.20)**
5. Anawar, H. M., Akai, J., Khan, M. G. M., Safiullah, S. and Tareq, S. M. 2002. Arsenic poisoning in groundwater: Health risk and geochemical sources in Bangladesh. Environmental International, 27(7), 597-604. **(IF 10.30)**

Award/ Fellowship/ Biography listed

- Bangladesh Academy of Science **(BAS) gold medal (2024**, senior group) for outstanding contribution to national science and technology
- Bangladesh Academy of Science and the World Academy of Science **(BAS-TWAS) young scientist gold medal (2013)** for outstanding contribution to national science and technology
- Commonwealth Academic Fellowship **(CSC), UK**, 2013
- Best oral presentation **award at the 4th Asia-Oceania** Conference on Green and Sustainable Chemistry 2013, Taiwan
- Japan Student Services Organization **(JASSO) visiting researcher** fellowship, 2011-2012
- Best researcher award from Nutandara Foundation, Bangladesh, 2011.
- Japan Society for the Promotion of Science (**JSPS**) postdoctoral fellowship, 2008-2009.
- Biography listed in the **International Biography Center (IBC), Cambridge, England** (Edition, 2007).
- Biography listed in the **Who's Who in the World** (23ard Edition, 2006; Published from USA).
- Hori Information Science Promotion Foundation Award, Aichi, Japan (April 2005)
- International Hydrological Programme (IHP) Ph. D. fellowship under the recommendation of **IHP-UNESCO**. 2003-2006.
- Japanese Ministry of Education, Culture, Sports, Science and Technology **(Monbukagakusho**) scholarship, 2001-2003.

Research highlights

- Health risks of toxic metals and emerging pollutants (microplastics and Fluorescence Whitening Agents; FWA, antibiotic residues) in the water and food chain
- Anthropogenic and climate change impact on water quality and greenhouse gas emission from the Asian rivers

- Transport and fate of emerging pollutants and dissolved organic matter (DOM) in the deltaic ecosystem
- Self-organizing complex geochemical process of arsenic mobilization in the deltaic sedimentary environment.
- Isotope and biomarker signature in lacustrine sedimentary organic matter

Organizing national/international meetings/conferences/training

- Local organizer, The Second International Workshop on Human Impacts on Carbon Fluxes in Asian River Systems, 9-11 February 2018, Dhaka, Bangladesh.
- Organising member, professional training on waste recycling and health and safety management, Jahangirnagar University.
- Organizing member, and professional training on food safety and climate change, the University of Nottingham
- Resource person, faculty training, National University, Bangladesh.
- Co-organizer, Higher Education in Environmental Leadership Training Program, Danang, Vietnam, 8-13 August 2011.

Professional Position/ Services

- Editorial board member, Hygiene and Environmental Health Advances, Elsevier.
- Editorial board member, Discover Applied Science of Nature Springer.
- Editorial board member, Discover Environment of Nature Springer
- Editorial board member, Discover Water of Nature Springer
- Guest Editor, Sustainability.
- Guest Associate Editor, Frontiers in Water, water and human health section.
- Guest Editor, Frontier of Earth Science, Hydrosphere section
- Review Editor, Frontiers in Marine Science, Biogeochemistry section
- Editor, Bangladesh Journal of Environmental Research (June 2022- till date)
- Editorial board member, Journal of Desalination and Water Purification (2016- till date)
- Editorial board member, Journal of Earth and Environment (2016- till date)
- Associate Editor, Jahangirnagar University Journal of Science (2018- till date)
- Editor, Jahangirnagar University Environmental Bulletin (2011-2013)
- Editorial board member, Jahangirnagar University Journal of Science (2011-2013)
- Editor, Bangladesh Journal of Environmental Research (2010-2013)
- Editorial board member, Bangladesh Journal of Environmental Research (2006-2008)
- Provost, Bir Protick Taramon Bibi Hall (12/2022- 10/2024)
- Provost, Mir Mossaraf Hossain Hall (06/2017- 06/2019)
- Provost, A F M Kamaluddin Hall (05/2013- 5/2014)
- Elected senator, Jahangirnagar University (2024- till date)

Reviewer, National and International Journal (*e.g., Limnology, Land Contamination and Reclamation, Science of the Total Environment, Chemosphere, Water, Air and Soil Pollution, Physics and Chemistry of the Earth, Organic Geochemistry, Sustainability, Env Sci and Pollution Res., Deep sea Research, Frontier of Earth Science, Scientific reports, **Nature***

Major Professional Training/Workshop Attended

- Workshop on Environmental Protection and Green Technology (EPGT) organized by National Tsing Hua University, Taiwan, 1-8 November, 2013.

- Higher Education in Environmental Leadership Training Program organized by the University of Shiga prefectures, Japan and Danang University, Vietnam, Danang, Vietnam, 8-13 August 2011.
- 14th International Hydrological (IHP) training program on the ***hydrology of Asia*** organized by Humid Tropical Center (HTC) and UNESCO, Kuala Lumpur, Malaysia, 11- 15 October 2004.
- 12th International Hydrological (IHP) training program on ***precipitation and water resources*** organized by Nagoya University, Kyoto University and UNESCO, 23 February-8 March 2003
- Workshop on global ***information exchange mechanism on arsenic, Environmental Health Program***, International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), December 1999.
- International workshop on ***environmental biogeochemistry*** organized by the School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India, Hamburg University, Germany, and SCOPE, 13-18 December, 1998.

Member of Professional/Social Organizations

- Fellow, Higher Education Academy, UK (Ref. No. 105963)
- Fellow, the Royal Society of Chemistry, UK, FRSC(Ref. no. 613190)
- Fellow, Bangladesh Academy of Science
- Chartered Environmentalist (CEnv), UK
- Bangladesh Chemical Society (Life Member, LM-694)
- International Association of Hydrological Sciences (IAHS, 7489)
- Japanese Universities Alumni Association in Bangladesh (JUAAB, Life Member)
- Alumni Association of Chemistry Department, Jahangirnagar University (LM-316)
- Bangladesh Environmental Sciences Society (BESS)
- Bangladesh National Cadet Core
- Bangladesh Asiatic Society (General member)
- Bangladesh JSPS Alumni
- CSC Alumni, UK

Appendix1

Full list of publications *of Dr. Shafi Mohammad Tareq*

Original peer-reviewed papers

1. Ahona, N., Anik, A. H., Tareq. S. M. 2025. A Systematic Review of Water, Sanitation and Hygiene of Bangladesh: Prospects and Challenges to Achieve Sustainable Development." Water and Environment Journal 1–17. https://doi.org/10.1111/wej.70009
2. Anika, F., Rahman, M. A., Anik, A. H., **Tareq, S. M.** 2025. Dairy under the microscope: A study on microplastic pollution in commercially available milk in Bangladesh, Journal of Food Composition and Analysis,147, 108037. https://doi.org/10.1016/j.jfca.2025.108037
3. Hassan, M. A., Shammi, M., **Tareq, S. M.** 2025. Assessing Year-round Microplastic Loading in the Lower Brahmaputra River: A Threat to Aquatic Environment, Journal of Hazardous Materials Advances, 100592, https://doi.org/10.1016/j.hazadv.2025.100592
4. Hassan, M. A., Islam, R., Shammi, M., **Tareq, S. M.** 2025. Microplastics Contamination in Carbonated Beverages: An Emerging Threat to Human Health in Bangladesh. Journal of Food Composition and Analysis, 107312. https://doi.org/10.1016/j.jfca.2025.107312
5. Choudhury, T. R., Jahan, F., Alam, M.Nur E., Lutfa,L. N., Chowdhury, T. I., Rahman, M. S., **Tareq, S. M.** 2025. An evaluation of potential sources of toxic metals in the poultry industry in Bangladesh: Dietary exposure and toxicological implications, Journal of Food Protection, 100565, https://doi.org/10.1016/j.jfp.2025.100565
6. Anik, A.H., Aurnab, I.T., Sultan, M.B., Basir, M.S., Murshed, M.F., Jarin, J., Sorkar, R., Alam, M., **Tareq, S.M.** 2025. A State-of-the-Art Review of the Environmental Mixtures, Exposure, and Health Risks of PFAS: A Special Focus on Developing Countries. Water Air Soil Pollut 236, 594. https://doi.org/10.1007/s11270-025-08253-y
7. Anik, A. H., Basir, M. S., Sultan, M. B., Alam, M., Rahman, M. M., **Tareq, S. M.** 2025. Unveiling the emerging concern of per- and polyfluoroalkyl substances (PFAS) and their potential impacts on estuarine ecosystems. Marine Pollution Bulletin. 212, 117554. https://doi.org/10.1016/j.marpolbul.2025.117554
8. Shammi, M., **Tareq, S. M.** 2025. "Correspondence on "Eutrophication and Dissolved Organic Matter Exacerbate the Diel Discrepancy of CO_2 Emissions in China's Largest Urban Lake". Environmental Science & Technology. https://doi.org/10.1021/acs.est.4c14427
9. Niloy, N. M.,Parvin, F., **Tareq, S. M.** 2025. A prompt technique to identify fluoroquinolone antibiotics (FQs) residue in the environment, MethodsX,14, 103287. https://doi.org/10.1016/j.mex.2025.103287
10. Niloy, N. M., Shammi, M., Tareq, S. M. 2025. Fluorescence characteristics of dissolved organic matter (DOM) in bottled drinking water of different countries: A potential risk to public health. Water Environment Research 97(4), e70064. https://doi.org/10.1002/wer.70064

11. Miah, O., Anik, A. H., Sorker, R., Parvin, F., Shammi, M., **Tareq, S. M.** 2025. Impacts of rapid urbanization on long-term water quality of the peripheral River of Dhaka, Bangladesh. Water Environment Research. 97(1), e11042. https://doi.org/10.1002/wer.70000
12. Khan, M. S., Kabir, M. A., **Tareq, S. M.** 2025. Relationship between autism spectrum disorder and maternal exposure to passive smoking and environmental factors: A case-control study in Bangladesh. Health Science Reports. 8(2), e70430, https://doi.org/10.1002/hsr2.70430
13. Mohinuzzaman, M., Mowa, J., Kabir, M. M., Chowdhury, M. Z. C., Nesha, M., Mostofa, K. M. G., Niloy, N. M., Shammi, M., **Tareq, S. M.** 2025. Water Quality and Fluorescent Dissolved Organic Matter Dynamics of Dhaleshwari River. Frontiers in Water, 7, 1507254. doi: 0.3389/frwa.2025.1507254
14. Hassan, M. A., M Shammi, M., **Tareq, S. M.** 2024. Seasonal and diurnal changes of pCO_2 in the lower Brahmaputra River, Bangladesh. Scientific Reports. 14, 28911. https://doi.org/10.1038/s41598-024-71872-8
15. Niloy, N. M., Parvin, F., **Tareq, S. M.** 2024. Spectral characterization, degradation behavior, quenching, and semi-quantification of fluoroquinolone antibiotics in the antibiotic-humic mixture using fluorescence spectroscopy, Science of The Total Environment, 935, 173346, https://doi.org/10.1016/j.scitotenv.2024.173346
16. Zaman, F., Rahman, M. A., Haque, M. M., Akbor, M. A. **Tareq, S. M.** 2024. Pervasiveness and classification of microplastics in Landfill Leachate: Impacts, Risks, and Treatment Efficiency. Journal of Hazardous Materials Advances, 100502. https://doi.org/10.1016/j.hazadv.2024.100502
17. Haque, M. M., Kabir, A. T., Latifi, E. M., Mahmud, D. M. S., Hossain, M. R., Himu, H. A., Fatema, U. K., **Tareq, S. M.** 2024. Microfiber prevalence and removal efficiency of textile effluent treatment plants in Bangladesh, Journal of Hazardous Materials Advances, 14, 100436, https://doi.org/10.1016/j.hazadv.2024.100436
18. Anik, A. H., Toha, M., **Tareq, S. M.**2024. Occupational Chemical Safety and Management: A Case Study to Identify Best Practices for Sustainable Advancement of Bangladesh. Hygiene and Environmental Health Advances, 100110. https://doi.org/10.1016/j.heha.2024.100110
19. Sakib, M. A. A., Miah, O., Niloy, N. M., Haque, M. M., Shammi, M., **Tareq, S.M.** 2024. Tracing fluorescent dissolved organic matter (fDOM) characteristics and water quality parameters: Insights from an urban industrial river to a marine zone. Water Environment Research 96 (9), e11125. https://doi.org/10.1002/wer.11125
20. Hassan, M. A., Shetu, M. H. Miah, O., Parvin, F., Shammi, M., **Tareq, S. M.** 2024. The seasonal variation and ecological risk of microplastics in the Lower Ganges River, Bangladesh. Water Environment Research 96(8), e11103. https://doi.org/10.1002/wer.11103
21. Barma, R., Reza, F., Kabir, Z., Shammi, M., **Tareq, S. M.** 2024. Implementation of Environmental management plans in the transport sector Development Projects: A case study of two mega projects in Bangladesh. Case Studies on Transport Policy. 18, 101298, https://doi.org/10.1016/j.cstp.2024.101298
22. Hassan, M.A., M Shammi, M., **Tareq, S. M.** 2024. The deciphering of microplastics-derived fluorescent dissolved organic matter in urban lakes, canals, and rivers using parallel factor analysis modeling and mimic experiment, Water Environment Research 96 (5), e11041, https://doi.org/10.1002/wer.11041

23. Rahman, M. A., Haque, M. M., **Tareq, S. M.** 2024. Abundance and characteristics of microplastics in the landfill leachate of Dhaka, Bangladesh: A potential risk to aquatic ecosystems. Physics and Chemistry of the Earth, Parts A/B/C. https://doi.org/10.1016/j.pce.2024.103573
24. Nath, J., Parvin, F. & **Tareq, S.M.** 2024. Bioaccumulation of microplastics in the edible tissues of fish collected from urban lakes of Bangladesh: a potential exposure to public health. Environ Sci Pollut Res, 31, 2067–2078. https://doi.org/10.1007/s11356-023-31219-8
25. Rahman, M.A., Haque, M. M. N. **Tareq, S. M.** 2024. Appraising the wet process water footprint in the ready-made garments sector of Bangladesh. Bangladesh Journal of Environmental Research, 15, 1-9.
26. Sikder, S., Toha, M., Sultan, M.B., Anik, A. H., Alam, M., Parvin, F., **Tareq, S. M.** 2024. A comprehensive review on the fate and impact of antibiotic residues in the environment and public health: A special focus on the developing countries. Water Environment Research, 96(2), e10987. https://doi.org/10.1002/wer.10987
27. Mukta, N. A., Ahmed, S., Chowdhury, A. M. S., **Tareq, S. M.,** Sajib, A. A., Bashar, M. S., Haque, P., 2024. Effect of core–sheath bi-polymeric scaffolds fabricated from acid-soluble collagen and poly(lactic acid) derivatives on wound healing. 141,28, https://doi.org/10.1002/app.55636
28. Khan, M. S., Kabir, M. A., **Tareq, S. M.** 2024. Socio-economic status and autism spectrum disorder: A case-control study in Bangladesh, Preventive Medicine Reports, 102614, https://doi.org/10.1016/j.pmedr.2024.102614
29. Talkukder, S., **Tareq, S. M.,** Khalequzzaman, K. M., 2024. Impact of Agro-chemical on framers perceptions: a study of Sirajganj district, Bangladesh. Int. J. Expt. Agric., 14(2), 13-21.
30. Alam, M. J., Shammi, M., **Tareq, S. M.** 2023. Distribution of Microplastics in Shoreline Water and Sediments of the Ganges River Basin to Meghna Estuary in Bangladesh. Ecotoxicology and Environmental Safety. 266, 115537. https://doi.org/10.1016/j.ecoenv.2023.115537
31. Khan, R., Basir, M. S., Akhi, S. Z. Anik, A. H., Hossain, S., Islam, H. M. T., Islam, A.R. M. T., Idris, A. M., Khan, M. H. R., Aldawood, S., **Tareq, S. M.** 2023. Radiation exposure and health concerns associated with the environmental geochemistry of relatively higher radioactivity in a freshwater basin, Marine Pollution Bulletin, 196, 115588, https://doi.org/10.1016/j.marpolbul.2023.115588
32. Niloy, N. M., Habib, S. M. A., Islam, M. I., Haque, M. M., Shammi, M., **Tareq, S. M.** 2023. Distribution, characteristics and fate of fluorescent dissolved organic matter (FDOM) in the Bay of Bengal, Marine Pollution Bulletin,195, 115467, https://doi.org/10.1016/j.marpolbul.2023.115467
33. Miah, O., Roy, A., Sakib, A. A., Niloy, N. M., Haque, M. M., Shammi, M., **Tareq, S. M.** 2023. Diurnal and Seasonal Variations of pCO_2 and Fluorescent Dissolved Organic Matter (FDOM) in Different Polluted Lakes, Environmental Science and Pollution Research. 30, 92720–92735, https://doi.org/10.1007/s11356-023-28878-y
34. Muhib, M.I., Ali, M.M., **Tareq, S.M.,** MM Rahman, M.M. 2023. Nitrate Pollution in the Groundwater of Bangladesh: An Emerging Threat, Sustainability, 15, 8188. https://doi.org/10.3390/su15108188
35. Anik, A.H., Sultan, M.B., Alam, M., Parvin, F., Ali, M.M., **Tareq, S. M.** 2023. The impact of climate change on water resources and associated health risks in Bangladesh: A review, Water Security, 18, 100133. https://doi.org/10.1016/j.wasec.2023.100133

36. Shetu, M.H., Parvin, F., **Tareq, S. M.** 2023. Identifying the presence of microplastics in frogs from the largest delta of the world. Environmental Advances, 11, 100355. https://doi.org/10.1016/j.envadv.2023.100355
37. Rahman, M. M., Bhuiyan, M.S. I., **Tareq, S.M.** 2023. Effects of Salinity on Cadmium Availability in Soil and Fruits of Tomato (Lycopersicon Esculentum Miller). Bangladesh Journal of Botany, 52(2), 315-321
38. Abedin, A.B.M. S., Reza, F., Shammi, M., **Tareq, S. M.** 2023. Long-term land use and land cover change (LULC) in Jahangirnagar University: challenges of achieving sustainable green university campus. Bangladesh J of Env. Res. 14, 1-8.
39. **Tareq, S.M.,** Lu, X.X., Shammi, M., Maruo, M. 2022. Editorial: Hydrobiogeochemistry of major Asian rivers. Front. Earth Sci. 10:1065133. https://doi.org/10.3389/feart.2022.1065133
40. Shammi, M., Halder, P.K., **Tareq, S. M.,** Rahman, M.M., Kabir, Z. 2022. From environmental impact assessment to strategic environmental assessment in Bangladesh: Evolution, perspective, governance and challenge. Environmental Impact Assessment Review, 97, 106890. https://doi.org/10.1016/j.eiar.2022.106890
41. Anik, A. H., Khan, R., Hossain, S., Siddique, M. A. B., Tamim, U., Islam, A.R. M.T., Idris, A. M., **Tareq, S. M.** 2022.Reconciling the geogenic and non-crustal origins of elements in an Indo-Bangla transboundary river, Atrai: Pollution status, sediment quality, and preliminary risk assessment, Environmental Research, 214(4), 114134. https://doi.org/10.1016/j.envres.2022.114134
42. Haque, M. M., Begum, M.S., Nayna, O.K., **Tareq, S.M.,** Park, J-H. 2022. Seasonal Shifts in Diel Variations of pCO_2 and O_2 in the Lower Ganges River. Limnology and Oceanography Letters.7, 191-201. https://doi.org/10.1002/lol2.10246
43. Haque, M. M., Nupur, F. Y., Parvin, F., **Tareq, S. M.** 2022. Occurrence and characteristics of microplastic in different types of industrial wastewater and sludge: A potential threat of emerging pollutants to the freshwater of Bangladesh, Journal of Hazardous Materials Advances, 8, 100166. https://doi.org/10.1016/j.hazadv.2022.100166
44. Parvin, F., Hassan, M. A., **Tareq, S. M.** 2022. Risk assessment of microplastic pollution in urban lakes and peripheral Rivers of Dhaka, Bangladesh, J of Hazard Mat Adv, 8, 100187. https://doi.org/10.1016/j.hazadv.2022.100187
45. Niloy, N.M., Shammi, M., Haque, M.M., **Tareq, S.M.** 2022. Biogeochemistry of the dissolved organic matter (DOM) in the estuarine rivers of Bangladesh–Sundarbans under different anthropogenic influences. Heliyon, 8, e10228. https://doi.org/10.1016/j.heliyon.2022.e10228
46. Niloy, M.N., Haque, M., **Tareq, S.M.,** 2022. Temporal changes in hydrochemistry and DOM characteristics of the Brahmaputra River: implication to the seasonality of water quality. Environmental Science and Pollution Research 29 (23), 35165-35178. https://doi.org/10.1007/s11356-022-18618-z
47. Niloy, N.M., Sharmin, F., Shajed, S. N., **Tareq, S.M.** 2022. Identification and characterization of sources and fate of emerging pollutants (EPs) in surface water of Bangladesh using three-dimensional excitation-emission (3DEEM) spectroscopy, Journal of the Bangladesh Chemical Society, 8, 126-136.
48. Shammi, M., Rahman, m. M., Ali, M. l., Khan, A.S. M., Siddique, M. A. B., Ashadudzaman, M., Bodrud-Doza, M., Alam, G. M. M., **Tareq, S. M.** 2022. Application of short and rapid strategic environmental assessment (SEA) for biomedical waste management in Bangladesh. Case Studies in Chemical and

Environmental Engineering 5, 100177. https://doi.org/10.1016/j.cscee.2021.100177
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Book/research topic/ Special Issues of journals

1. Research Topic: Emerging Pollutants: Occurrence, Monitoring and Health Risk. (**Tareq S.M.** Shammi, M. Ed) Discover Applied Science. 2024
2. Research Topic: Emerging Water Contaminants in Developing Countries: Detection, Monitoring, and Impact of Xenobiotics. (**Tareq, S.M.,** Disner, G.R., Ed.), Frontiers in Water. 2024.
3. Special Issue "Impact of Water Pollution on Human Health and Environmental Sustainability" (Rahman, M.M., Malafaia, G., **Tareq S.M.** Shammi, M. Ed.), Sustainability. 2023.
4. Research Topic: World Water Day: Importance of WASH, Equal Access Opportunities, and WASH Resilience - A Sanitation Perspective. Frontiers in Water. 2022
5. Research Topic: Hydrobiogeochemistry of Major Asian Rivers, (**Tareq, S.M.,** Lu, X. Shammi, M., Maruo, M. Ed.) Frontiers in Environmental Science, 2021.
6. Research Topic: Human impacts on carbon fluxes in Asian river systems (Park, J-H., **Tareq, S. M.,** Begum, M.S. Ed.), JU. 2018.
7. Book: Lignin Molecular Biogeochemistry: Practices and Principles, (**Tareq, S.M.** and Ohta) NOVA Pub, NewYorks. 2018.

Important published data set.

1. Begum, M. S., Bogard, M. J., Butman, D. E., Chea, E., Kumar, S., Lu, X., Nayna O.K., Ran, L., Richey, J.E., Tareq, S. M., Xuan, D.T., Yu, R., Park, J-H. 2021. Spatiotemporal variation in pCO_2, CH_4, N_2O, DOM, and ancillary water quality measured in the Ganges, Mekong, and Yellow River during 2016 to 2019. PANGAEA. https://doi.org/10.1594/PANGAEA.926582

2. Haque, M. M., Begum, M.S., Nayna, O.K., Tareq, S.M., Park, J-H. 2021. Seasonal shifts in diel pCO2 variations investigated by high-frequency sensor measurements in the lower Ganges River in 2018-2019. PANGAEA. https://doi.org/10.1594/PANGAEA.931791

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1. Parvin, F., Jannat, S., **Tareq, S. M.** (2021) Abundance, characteristics and variation of microplastics in different commercial freshwater fish species from Bangladesh, 5th World Forum for Women in Science without Borders, Kurdistan region, Iraq.
2. **Tareq, S.M.,** Haque, M.M., Niloy, N.M., Rahman, M.S. (2019). Investigating water quality of the Ganges and Brahmaputra River using three-dimensional excitation-emission matrix (3DEEM) fluorescence spectroscopy. The third International Workshop on Human Impacts on Carbon Fluxes in Asian River Systems, Inner Mongolia University (HNA Grand Hotel Portman Hohhot), Hohhot, China.
3. Haque, M.M., Niloy, N.M., Rikta, S.Y., Tareq, S.M. (2019). Human Impact on Carbon Fluxes in the Ganges River (Oral), 6th International Conference on Natural

Science and Technology (ICNST'19) at Asian University for Women (AUW), March 2019, Chittagong, Bangladesh.

4. **Tareq, S.M.** Rikta, S. Y., M. S. Rahman. 2018. Characteristics and dynamics of dissolved organic matter in the Ganges and Brahmaputra river, Bangladesh. In the Second international workshop on Human impacts on carbon fluxes in the Asian river system 9-11 Feb. Dhaka.
5. **Tareq, S.M.** Rikta, S. Y., M. S. Rahman. 2016. Application of Fluorescence Spectroscopy and Size Exclusion Chromatography for the Simultaneous Characterization of Dissolved Organic Matter and Biological Pollution in Groundwater. Society of environmental toxicology and Chemistry for Asia/Pacific conferences, Singapure, 16-19 September.
6. **Tareq, S.M.** 2015. Arsenic Pollution in Groundwater of Bangladesh: Health Risk and Geochemical Mobilization, University colloquium, the University of Birmingham, UK, March.
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8. **Tareq, S.M.**, 2013. Source and characteristic fluorescence humic substances in arsenic polluted groundwater of Bangladesh. 4th Asia-Oceania Conference on Green and Sustainable Chemistry, Taipei, Taiwan, 4-6 November.
9. **Tareq, S.M.**, 2013. Characteristics and role of groundwater dissolved organic matter on arsenic mobilization and poisoning in Bangladesh. 19th Conference of the Islamic World Academy of Sciences, Dhaka, 5-8 May.
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11. **Tareq, S.M.**, Maruo M., Nagahuchi, O., Ohta, K. 2009. Molecular changes in dissolved organic matter during photodegradation, *14th international symposium on River and Lake Environments. Ueda*, Japan, 28-31 August.
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1. বাংলাদেশ প্রেক্ষাপটে পরিবেশ দূষণ ও জনস্বাস্থ্য ঝুঁকি, (14, October, 2024) The daily Bonik Barta. https://www.bonikbarta.com/editorial/mEOfWgwJ1VhDwLcv
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3. **Microplastics in freshwater fish of Bangladesh**
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   https://www.voabangla.com/a/6007686.html
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6. **Toxic metals in poultry**
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12. **Documentary on microplastics in freshwater fish of Bangladesh in DEUTSCHE WELLE (DW)**
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