

# Farah Jeba

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Work:  
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## Academic Qualification:

- ❖ 1<sup>st</sup> year PhD student, (joined UH in Spring 2023)
- ❖ Supervisor Professor Dr. Bernhard Rappenglueck
- ❖ **Master of Science (M.S.) in Inorganic and Analytical Chemistry (32 Credits)**, 2015 held in 2016  
**Specialization in Environmental Chemistry**  
Department of Chemistry, University of Dhaka  
CGPA: 3.98/4.00 (position held 1<sup>st</sup> out of 19)
- ❖ **Bachelor of Science (B.S.) Honors in Chemistry (140 Credits)**, 2014 held in 2015  
**Project on Environmental Chemistry**  
Department of Chemistry, University of Dhaka  
CGPA: 3.88/4.00 (Position held 1<sup>st</sup> out of 63)
- ❖ IELTS (academic) score: 7.5 (overall); result published on August 2022

## Research Interests:

- ❖ I am keenly interested to study on Environmental pollution monitoring and control, characterization of bioaerosols and their response, and chemical toxicology and their effect on human health.
- ❖ I am also interested in source identification by radioactive isotopes but not limited to these topics only.

## Research Experience:

- ❖ **B.S. Research Project:** Determination of water-soluble anions and trace metals in coal collected from different brick kilns in Bangladesh.
- ❖ **M.S. Thesis:** Polycyclic Aromatic Hydrocarbons (PAHs) in the Atmospheric Suspended Particulate Matters in Urban Dhaka and Rural Bhola, Bangladesh
- ❖ Co-supervision of eight students at their thesis at the graduate (MS) level and twelve students at their 4<sup>th</sup> year undergraduate level at the University of Dhaka in Bangladesh as a Lecturer

## List of Publications:

- ❖ Salam, A., Andersson, A., Jeba, F., Haque, M. I., Hossain Khan, M. D., & Gustafsson, Ö. (2021). Wintertime Air Quality in Megacity Dhaka, Bangladesh Strongly Affected by Influx of Black Carbon Aerosols from Regional Biomass Burning. *Environmental Science and Technology*. <https://doi.org/10.1021/acs.est.1c03623>
- ❖ Norazman, N. H., Khan, M. F., Ramanathan, S., Mustapa Kama Shah, S., Mohd Jani, S. J., Joy, K. S., Islam, K. N., Jeba, F., Salam, A., Yoshida, O., & Kawashima, H. (2021). Influence of Monsoonal Driving Factors on the Secondary Inorganic Aerosol over Ambient Air in Dhaka. *ACS Earth and Space Chemistry*. <https://doi.org/10.1021/acsearthspacechem.1c00200>
- ❖ Zaman, S. U., Yesmin, M., Pavel, M. R. S., Jeba, F., & Salam, A. (2021). Indoor air quality indicators and toxicity potential at the hospitals' environment in Dhaka, Bangladesh. *Environmental Science and Pollution Research*, 28(28), 37727–37740. <https://doi.org/10.1007/s11356-021-13162-8>

- ❖ Zaman, S. U., Pavel, M. R. S., Joy, K. S., Jeba, F., Islam, M. S., Paul, S., Bari, M. A., & Salam, A. (2021). Spatial and temporal variation of aerosol optical depths over six major cities in Bangladesh. *Atmospheric Research*, 262. <https://doi.org/10.1016/j.atmosres.2021.105803>
- ❖ Kumar, P., Hama, S., Nogueira, T., Abbass, R. A., Brand, V. S., Andrade, M. de F., Asfaw, A., Aziz, K. H., Cao, S. J., El-Gendy, A., Islam, S., Jeba, F., Khare, M., Mamuya, S. H., Martinez, J., Meng, M. R., Morawska, L., Muula, A. S., Shiva Nagendra, S. M., ... Salam, A. (2021). In-car particulate matter exposure across ten global cities. *Science of the Total Environment*, 750. <https://doi.org/10.1016/j.scitotenv.2020.141395>
- ❖ Jeba, F., Karim, T. T., Khan, M. F., Latif, M. T., Quddus, K. F., & Salam, A. (2021). Receptor modelling and risk factors of polycyclic aromatic hydrocarbons (PAHs) in the atmospheric particulate matter at an IGP outflow location (island of the Bay of Bengal—Bhola, Bangladesh). *Air Quality, Atmosphere and Health*, 14(9), 1417–1431. <https://doi.org/10.1007/s11869-021-01031-9>
- ❖ Pavel, M. R. S., Zaman, S. U., Jeba, F., Islam, M. S., & Salam, A. (2021). Long-Term (2003–2019) Air Quality, Climate Variables, and Human Health Consequences in Dhaka, Bangladesh. *Frontiers in Sustainable Cities*, 3. <https://doi.org/10.3389/frsc.2021.681759>
- ❖ Riad, M., Pavel, S., Salam, A., & Zaman, S. U. (n.d.). *Impact and Correlation of Air Quality and Climate Variables with Covid-19 Morbidity and Mortality in Dhaka, Bangladesh Seasonal influence on transboundary mercury transport over the Himalayas: Implications for society and potential health risk View project air pollution View project*. <https://doi.org/10.23880/act-16000197>
- ❖ Jeba, F., Riad, M., Pavel, S., & Zaman, S. U. (n.d.). *Health Risk Assessment of High-Level Particulate Matter Exposure in Different Environments in Mega City Dhaka, Bangladesh*. [www.baasbd.org](http://www.baasbd.org)
- ❖ Ahmed, M. S., Yesmin, M., Jeba, F., Hoque, M. S., Jamee, A. R., & Salam, A. (2020). Risk assessment and evaluation of heavy metals concentrations in blood samples of plastic industry workers in Dhaka, Bangladesh. *Toxicology Reports*, 7, 1373–1380. <https://doi.org/10.1016/j.toxrep.2020.10.003>
- ❖ McNeill, J., Snider, G., Weagle, C. L., Walsh, B., Bissonnette, P., Stone, E., Abboud, I., Akoshile, C., Anh, N. X., Balasubramanian, R., Brook, J. R., Coburn, C., Cohen, A., Dong, J., Gagnon, G., Garland, R. M., He, K., Holben, B. N., Kahn, R., ... Martin, R. v. (2020). Large global variations in measured airborne metal concentrations driven by anthropogenic sources. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-78789-y>
- ❖ Sadia, H. E., Jeba, F., Uddin, M. Z., & Salam, A. (2019). Sensitivity study of plant species due to traffic emitted air pollutants (NO<sub>2</sub> and PM<sub>2.5</sub>) during different seasons in Dhaka, Bangladesh. *SN Applied Sciences*, 1(11). <https://doi.org/10.1007/s42452-019-1421-4>
- ❖ Sadia, H., Jeba, F., Kamal, A., & Salam, A. (2019). Air pollution tolerance index of *Mangifera indica* plant species growing in the greater Dhaka region, Bangladesh. *Journal of Biodiversity Conservation and Bioresource Management*, 5(1), 1–12. <https://doi.org/10.3329/jbcbm.v5i1.42180>
- ❖ Khan, M. F., Maulud, K. N. A., Latif, M. T., Chung, J. X., Amil, N., Alias, A., Nadzir, M. S. M., Sahani, M., Mohammad, M., Jahaya, M. F., Hassan, H., Jeba, F., Tahir, N. M., & Abdullah, S. M. S. (2018). Physicochemical factors and their potential sources inferred from long-term rainfall measurements at an urban and a remote rural site in tropical areas. *Science of the Total Environment*, 613–614, 1401–1416. <https://doi.org/10.1016/j.scitotenv.2017.08.025>

#### Scientific Conference and workshops:

- ❖ MEC 11 (Mercury emission from coal-fired power plant) workshop, 2015, Chennai, India
- ❖ Workshop on Emissions from Brick Kilns, 20-21 January 2016, Dhaka University
- ❖ Bangladesh Chemical Congress 2018, University of Dhaka, Bangladesh (Oral presentation)
- ❖ ACAM 2019 (4<sup>th</sup> Atmospheric Composition and Asian Monsoon workshop) UKM, Bangi, Malaysia (poster presentation)

#### Awards:

- ❖ Awarded Dean's award (Gold Medal) 2014 for excellent result.
- ❖ Scholarship awarded by Government of Bangladesh for SSC and HSC result.
- ❖ Kabi sufia kamal hall trust fund scholarship 2016 awarded by Kabi sufia kamal hall, University of Dhaka.
- ❖ Professor Abdul Muktedir sarok scholarship 2013 awarded by the Department of Chemistry, University

of Dhaka etc.

- ❖ National Science and Technology (NST 2016-17) Ministry scholarship, Government of Bangladesh

Professional Experience:
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- ❖ Currently Working as a Graduate Teaching Assistant at the Department of Earth and Atmospheric Science at the University of Houston
- ❖ University of Dhaka, Dhaka-1000, Bangladesh  
**Lecturer (Full Time Faculty) (Currently on study leave)**, Department of Chemistry, October 2018 – Present
- ❖ **Courses Taught:** Environmental Chemistry, Chemistry of Aquatic and Biotic Environment, Fundamentals of Chemistry, Chemistry of the Elements, Inorganic Synthesis and Characterization Laboratory, and Inorganic and Analytical chemistry laboratory