

Rashedul Islam

Scientific Officer, Hydrogen Energy Laboratory

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www.researchgate.net/profile/Rashedul-Islam-46

Research interests

- Purification of Hydrogen for fuel cell uses
- Nutrient dynamics under saline and non-saline conditions at the soil water interface
- Extraction of biodegradable natural polymers and synthesis of their derivatives

Education

- Masters of Science (MSc) in Chemistry (Inorganic Chemistry major) || 2019
Department of Chemistry, Jahangirnagar University, Bangladesh
Supervisor: Dr. Md. Abdus Sabur, thesis title: "Effects of salinity on the coupled cycling of iron and phosphorous in coastal saline soil"
Result (based on cumulative average grade point): 3.85 (out of 4.00) Position: 3th in order
- Bachelor of Science (BSc) in Chemistry || 2018
Department of Chemistry, Jahangirnagar University, Bangladesh
Result (based on cumulative average grade point): 3.66 (out of 4.00) Position: 7th in order

Work experiences

- Scientific Officer, Hydrogen Energy Laboratory (September 2023 to Present)
Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh
- Research Chemist, Synthesis Laboratory (November 2021 to August 2023)
Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh
- Research Associate (January 2020 to October 2021)
Geochemistry Research Group
Department of Chemistry, Jahangirnagar University, Bangladesh
- MSc thesis || (January 2018 to December 2019)
Department of Chemistry, Jahangirnagar University, Bangladesh
Supervisor: Dr. Md Abdus Sabur
Thesis Title: Effects of salinity on the coupled cycling of iron and phosphorous in coastal saline soil.

- Industrial training || September 2017 (1 month)
Bangladesh Council of Scientific and Industrial Research (BCSIR) Dhaka-1205
Expertise gained: water analysis, preparation of chitosan, preparation of composite materials, preparation of biodegradable film

Referred publications

- Islam, M.M., **Islam, R.**, Mahmudul Hassan, S.M., Karim, M.R., Rahman, M.M., Rahman, S., Nur Hossain, M., Islam, D., Aftab Ali Shaikh, M., Georghiou, P.E., 2023. Carboxymethyl chitin and chitosan derivatives: Synthesis, characterization and antibacterial activity. Carbohydr. Polym. Technol. Appl. 5, 100283. <https://doi.org/10.1016/j.carpta.2023.100283>
- Islam, M., Shahin Ahmed, K., Karim, R., Nath, B.D., Prosad Moulick, S., **Islam, R.**, Mahmudul Hassan, S.M., Hossain, H., Moniruzzaman, M., Jahan, M.S. and Ali Shaikh, A., 2022. Alcohol-based Hand Sanitizers amid COVID-19: Chemical Formulation, Analysis, Safety. ChemistrySelect, 7(45), p.e202203290. <https://doi.org/10.1002/slct.202203290>

Non-referred publication

- Marium Sultana, **Rashedul Islam**, and Md Abdus Sabur, The role of phosphorus in agricultural production and its future crisis, About Arsenic Pollution, Jahangirnagar University Chemical Review, 25, 37-50 (Article in Bangla).

Conference presentation

- “Effects of salinity on the mobility of phosphate and iron at the soil water interface” **Rashedul Islam**, Debashis Kumar Barman, Mahbub Kabir, and Md Abdus Sabur* An oral presentation at the GOLDSCHMIDT_ 2023 Place: Lyon, France.
- “Synthesis, Characterization, and antimicrobial study of water-soluble chitosan derivatives” **Rashedul Islam**, Md. Rezaul Karim and Md. Monarul Islam, An oral presentation at the BCSIR Congress - 2022, BCSIR, Dhaka (December 2022).
- “Iron cycling in coastal agricultural soil: effects of salinity and redox conditions” **Rashedul Islam**, Debashis Kumar Barman, Gautam Kumar Dash, Mahbub Kabir, An oral presentation at the International Conference on Environmental Protection for Sustainable Development (ICEPSD-2022), CIRDA, Dhaka (September 2022)
- “Determination of aqueous Phosphate in the presence of various silicate concentrations” Debashis Kumar Barman, **Rashedul Islam**, and Md Abdus Sabur, A poster at the International Conference on Science and Technology for Celebrating the Birth Centenary of Bangabandhu (ICSTB-2021), BCSIR, Dhaka (March 2021)

Other skills

- Operational experience with these UV-VIS, FTIR, Fluorescence, and GC-FID sophisticated instruments
- Having work experience with OriginLab, Microsoft Office, Zoom, Google Meet, Team, and Google Classroom software

Research grants

- Goldschmidt 2023 Conference grants on abstract fees and registration
- NST Fellowship based on MSc thesis. Title: Effects of salinity on the coupled cycling of iron and phosphorous in coastal saline soil || 2022 (under Ministry of Science and Technology, Bangladesh) (completed)

Scholarships and awards

- University Grant Commission Scholarship for the Result of BSc (Honors) Examination, Jahangirnagar University || 2018
- Merit Scholarship, Jahangirnagar University || 2015-20017
- Entrance Scholarship, Jahangirnagar University || 2015

Profession membership

- Student member, European Association of Geochemistry (2023-2024)
- Member, Scientist Association of BCSIR, Bangladesh (2021 to present)

References

Dr. Md. Abdus Sabur

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<https://www.juniv.edu/teachers/sabur>

Dr. Mahbub Kabir

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