MD. ATAUR RAHMAN



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ACADEMIC QUALIFICATION

Master of Science (M.S.) in Physical Chemistry

Department of Chemistry, University of Dhaka

• GPA: **3.98** out of 4.00 (First Position)

Bachelor of Science (B.S.) Honours in Chemistry

Department of Chemistry, University of Dhaka
CGPA: 3.79 out of 4.00 (First Position)

Higher Secondary Certificate (HSC) Examination

Govt. Science College

• GPA: **5.00** out of 5.00

Secondary School Certificate (SSC) Examination

Jajira Mohar Ali High School • GPA: **4.88** out of 5.00

AWARD/SCHOLARSHIP/FELLOWSHIP

- Dean's Award (Gold Medal) 2013, Faculty of Science, University of Dhaka
- Undergraduate Board Scholarship, 2012
- University Postgraduate Scholarship, 2013
- National Science and Technology Fellowship (2014-2015 Fiscal)
- Dhaka University Alumni Association Scholarship
- Abdul Aziz Patwary Memorial Undergraduate Scholarship
- Prof. Abdul Muktadir Memorial Scholarship
- Qudrat-e-Khuda Foundation Scholarship
- Dr. Abdul Satter Khan Memorial Trust Fund Scholarship
- Prof. Dr. A S M Nurul Haque Bhuiyan Trust Fund Scholarship
- Ronenro Chandro Dasgupto Memorial Trust Fund Scholarship
- Dr. Abdul Jabber Miah Memorial Scholarship
- Dhaka Education Board Scholarship, 2006
- Talent pool Scholarship, 2003 (Junior Level)

PROFESSIONAL EXPERIENCE

University of Dhaka*

Assistant Professor, Department of Chemistry

University of Dhaka *Lecturer (Full Time Faculty), Department of Chemistry*

Jagannath University Lecturer (Full Time Faculty), Department of Chemistry

Courses Taught: Chemical Spectroscopy I, Thermodynamics and Electrochemistry II, Calculus I, Calculus II, Fundamentals of Chemistry, Physical Chemistry Laboratory I, Physical Chemistry Laboratory II, Physical Chemistry Laboratory IV & Physical Chemistry Laboratory IV & Physical Chemistry Laboratory (Graduate Level)

PUBLICATIONS

1. Al Ashik, A.; Rahman, M. A.; Halder, D.; Hossain, M. M. Removal of methylene blue from aqueous solution by coconut coir dust as a low-cost adsorbent. *Appl Water Sci.* 2023, *13* (3), 81.

2013 (held in 2014) Dhaka, Bangladesh Jun., 2015

2012 (held in 2013) Dhaka, Bangladesh Sept., 2013

2008 Dhaka, Bangladesh

aka, Bangladesh Sept., 2008

2006

Shariatpur, Bangladesh Jun., 2006

Dhaka-1000, Bangladesh Jun. 21, 2021–Present

Dhaka-1000, Bangladesh Oct.4, 2018 – Jun. 20, 2021

Dhaka-1100, Bangladesh Aug.16, 2015 – Oct.3, 2018

- 2. Rahman, M. A.; Hossain, M. Z.; Ahmed, N. Adsorption Isotherms of 2,4-Dichlorophenolonto Lignocellulosic Materials, Used Black Tea Leaves. *Int. J. Adv. Engr.* 2022, *5* (2), 1-8.
- 3. Momen, M. A.; Rahman, M. A.; Begum, H. A.; Hossain, M. M. Cu(II) Doped TiO₂ for Photodegradation of Remazol Black B in Aqueous Solution. *Dhaka Univ. J. Sci.* 2022, 70 (1), 64-69.
- 4. Hossain, F.; **Rahman, M. A.**; Hossain, M. M. ZnO-TiO₂ Composite Mediated Photocatalytic Degradation of Orange G from Aqueous Solution. *Dhaka Univ. J. Sci.* **2022**, *69* (3), 218-224.
- 5. Halder, D.; Islam, M. N.; Hossain, M. M.; **Rahman, M. A.**; Samadder, R.; Rahman, M. M. Synthesis a clay based photocatalyst for the removal of eosin yellow in aqueous solution. *Int. J. Mat. Math. Sci.*, **2022**, *4* (4), 83-93.
- 6. Ahmed, N.; **Rahman, M. A.** Adsorptive Removal of 2,4-Dichlorophenol from Aqueous Solution by Using Used Black Tea Leaves. *J. Mex. Chem. Soc.* **2021**, *65* (2), 225-236.
- 7. Nawar, A.; Rahman, M. A.; Hossain, M. M. Fe(III)-aqua Complex Mediated Photodegradation of Methylene Blue Dye. *Int. J. Environ. Sci. Dev.* **2021**, *12* (4), 112-117.
- 8. Halim, M. E.; Farooque, K. N.; Hasan, M. M.; **Rahman, M. A.**; Islam, M. R.; Akhtar, U. S. Physico-chemical properties of rice husk ash and fly ash composite cement. *J. Bangladesh Chem. Soc.* **2021**, *33* (2), 122–127.
- 9. Hossain, F.; Hasan, M. M.; **Rahman, M. A.**; Halder, D; Hossain, M. M. A Comparative Study of Photodegradation of a Textile Dye Orange G by Fe(III)-Aqua Complex and Fenton Process. *J. Bangladesh Chem. Soc.* **2020**, *32* (1 & 2), 75–79.
- 10. Rahman, M. A.; Islam, T. S. A.; Hossain, M. M. Optical, Magnetic and Adsorptive Properties of Prepared Copper (II) Oxide. *Dhaka Univ. J. Sci.* 2020, 68 (1), 7–12.*
- Rahman, M. A.; Mazumder, A. Z. M. M. I.; Hossain, M. M.; Islam, T. S. A. Preparation, Characterization and Catalytic Activity of Copper (II) Oxide Nanoparticles. *Dhaka Univ. J. Sci.* 2018, 66 (1), 9–13.*
- 12. Mazumder, A. Z. M. M. I.; Bikash, C. R.; **Rahman, M. A.**; Hossain, M. M. A Comparative Study for Adsorptive Removal of Remazol Red R and Remazol Black B from Aqueous Solution by ZnO. *Dhaka Univ. J. Sci.* **2018**, *66* (2), 121–127.*
- 13. **Rahman, M. A.**; Islam, T. S. A. Synthesis and Characterization of Copper Oxide Composite and Study of Composite Mediated Photo-Oxidative Degradation of Methylene Blue under Visible Light. *Int. Lett. Chem. Phys. Astron.* **2016**, *63*, 29–35.*
- 14. Hossain, M. F.; Awal, A.; Akanda, M. R.; **Rahman, M. A.**; Rahman, A. K. M. L.; Rouf, M. A. Market Vegetable Waste Combined with Cow-Dung a Potential and Economically Viable Source of Bio-Gas. *Jagannath Univ. J. Sci.* **2016**, *5* (I), 42–54.

PRESENTATIONS IN SCIENTIFIC CONFERENCES & SYMPOSIUMS

- 1. **Md. Ataur Rahman**, Tajmeri. S. A. Islam, "Synthesis and Characterization of Copper Oxide Composite and Study of Composite Mediated Photo-Oxidative Degradation of Methylene Blue under Visible Light", *16th Asian Chemical Congress*, 16-19 March 2016, Dhaka, Bangladesh (Oral presentation, PH-OP-09)
- Md. Ataur Rahman, A. Z. M. Mainul Islam Mazumder, Md. Mufazzal Hossain and Tajmeri S A Islam, "Optical, Magnetic Properties and Catalytic Activity of Prepared Copper(II) oxide Nanoparticles", *International Conference on Chemical Science & Technology (ICCST-Chem* 2018), 24-25 February 2018, Khulna University of Science & Technology, Khulna, Bangladesh (Oral presentation, OP/A6)
- 3. Nafees Ahmed, **Md. Ataur Rahman**, "Optimization of Physicochemical Conditions for the Adsorption of 2,4-Dichlorophenol onto Used Black Tea Leaves (UBTLs)", *International Conference on Chemical Science & Technology (ICCST-Chem 2018)*, 24-25 February 2018, Khulna University of Science & Technology, Khulna, Bangladesh (Oral presentation, OP/B11)
- 4. **Md. Ataur Rahman**, Tajmeri S A Islam, Md. Mufazzal Hossain, "Optical, Magnetic and Catalytic Properties of Prepared Copper(II) oxide", 5th Conference of Bangladesh Crystallographic Association, 25-26 January 2019, University of Dhaka, Dhaka, Bangladesh (Poster presentation, PP-25)
- 5. Farhana Hossain, **Md. Ataur Rahman**, Md. Mufazzal Hossain, "Preparation and Characterization of ZnO-TiO₂ Composites and Their Application in Photodegradation of Textiles Dyes Orange G

and Methylene Blue from Aqueous Solution", 5th Conference of Bangladesh Crystallographic Association, 25-26 January 2019, University of Dhaka, Dhaka-1000, Bangladesh (Poster presentation, PP-23)

- 6. **Md. Ataur Rahman**, Tajmeri S A Islam, Md. Mufazzal Hossain, "pH Dependent Photocatalytic Activity of Prepared CuO/Cu₂O Composite for the Photo-oxidative Degradation of Methylene blue from its Aqueous Solution Under Visible Light Irradiation", *International Conference on Nano-materials for Environmental Applications (NEA 2019)*, 6-7 March 2019, Miramar, Goa, India (Poster presentation, PC 017)
- Mahbuba Zaman, Md. Ataur Rahman, Md. Mufazzal Hossain, "Photocatalytic Degradation of Aqueous Solution of Orange G Using TiO₂", International Conference on Recent Advances in Chemistry, 7-8 February 2020, Jagannath University, Dhaka-1100, Bangladesh (Poster presentation, PP-D-06)
- 8. Nasrin Akter, **Md. Ataur Rahman**, Md. Mufazzal Hossain, "ZnO Mediated Photodegradation of Aqueous Solution of Orange", International Conference on Recent Advances in Chemistry, 7-8 February 2020, Jagannath University, Dhaka-1100, Bangladesh (Poster presentation, PP-D-05)
- 9. Md. Abdul Momen, **Md. Ataur Rahman**, Md. Mufazzal Hossain, "Preparation, Characterization and Application of Cu(II) Doped TiO₂ in Photodegradation of Aqueous Remazol Black B", International Conference on Recent Advances in Chemistry, 7-8 February 2020, Jagannath University, Dhaka-1100, Bangladesh (Poster presentation, PP-D-02)

WORKSHOP

- "Plagiarism: Ethical Aspects & Remedy in Higher Education", *Centre of Excellence in Teaching and Learning (CoETL), University of Dhaka, Dhaka-1000, Bangladesh, 26 October 2019.*
- "Workshop on SciFinder", Cyber Center, University of Dhaka, Dhaka-1000, Bangladesh, 3 July 2019.
- "Workshop on X-ray Powder Diffraction and Data Analysis", *Centre for Advanced Research in Sciences (CARS), University of Dhaka, Dhaka-1000, Bangladesh*, 27 January 2019.
- "National Integrity Strategy, Service Delivery and Good Governance", National Academy of Planning and Development, Ministry of Planning, Government of the People's Republic of Bangladesh, 21 August 2014.

RESEARCH INTEREST

Photochemistry, Material Chemistry, Surface Chemistry, Spectroscopy & Nonlinear Spectroscopy

COMPUTER SKILLS

- Programming Language: MATLAB
- Graphical Programming Environment: LabVIEW
- Molecule Editor: Chemdraw
- Scientific Graphing: SigmaPlot, KyPlot, Origin

TECHNICAL SKILLS

- UV-visible Spectrophotometer
- FTIR Spectrophotometer
- Magnetic Susceptibility Balance
- Scanning Electron Microscopy
- Energy Dispersive X-Ray Spectrometer
- X-Ray diffractometer
- Raman Spectroscopy

(Md. Ataur Rahman)