

MD MASUDUR RHAMAN
Department of Chemistry
Chittagong University of Engineering and Technology (CUET)
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EDUCATION

- 2016- 2019** **Masters of Philosophy (MPhil) in Chemistry**
Chittagong University of Engineering and Technology (CUET),
Chittagong-4349
Thesis: Removal of hexavalent chromium and dye from wastewater using amine crosslinked magnetic bioadsorbent based on jute stick powder.
Achievements
- CGPA: 3.75 in theory courses (Scale 1-4, 4 being the highest)
 - Graduate on Time (GOT)
 - Achieved University Research Fellowship
 - Achieved National Science and ICT Fellowship
- 2010 - 2012** **Masters of Science (MS) in Applied Chemistry and Chemical Engineering**
Islamic University, Khustia, Bangladesh
Thesis: Preparation and characterization of nano-heterjunction TiO₂/WO₃ composite by high irradiation and its photo-catalytical activity on organic pollutant in our environment.
Achievements
- CGPA: 3.72 (Scale 1-4, 4 being the highest)
 - Achieved 1st position among 40 students
 - Achieved National Science and ICT Fellowship
 - Achieved University Merit Scholarship
 - Achieved highest grade in analytical research and presentation
- 2006- 2010** **Bachelor of Science (Hons) in Applied Chemistry and Chemical Engineering**
Islamic University, Khustia, Bangladesh.
Project Title: Physico-chemical characterization of lipid extracted from American rui fish.
Achievements
- CGPA: 3.78 (Scale 1-4, 4 being the highest)
 - Achieved 1st position among 40 students
 - Achieved University Merit Scholarship

- Distinctions in Chemical thermodynamics, Polymer engineering, Process Engineering and Wastewater treatment
- Student representative for representing student response to changes in curriculum from 3rd and 4th year Bachelor students.

KEY SKILLS

Communication: Confident and clear communicator, adaptable to various contexts, strengthened through analytical laboratory instruments and research work experience, and university group presentations.

Administration: Procedural and organizational focus, with emphasis on records management, communication logging and filing, developed through processing contracts for government funding spends and general office administration.

Computer: Computer operation, internet and advanced web browsing, MS Word, MS PowerPoint, MS Excel.

Software Skills: Assignment and thesis Referencing Software (EndNote, Mendeley), Advanced level Chemical Drawing Software (ChemDraw)

Teaching: Experienced to teach the bachelor and diploma students effectively and keep them interested and attentive throughout the entire class.

EMPLOYMENT HISTORY

2017 - Current Assistant Professor

Department of Chemistry

Chittagong University of Engineering and Technology (CUET), Chittagong-4349, Bangladesh

Achievements & Responsibilities

- Course coordinator for Advanced Physical Chemistry & Nano-chemistry.
- Responsible for supervising the graduate student research projects.

2015 - 2017 Lecturer

Department of Chemistry

Chittagong University of Engineering and Technology (CUET), Chittagong-4349, Bangladesh

Achievements & Responsibilities

- Course coordinator for Corrosion Engineering & Material Science.
- Responsible for supervising the graduate student research projects.

2013 - 2015 Lecturer

Department of Textile Engineering

European University of Bangladesh, Shamoly, Dhaka.

Achievements & Responsibilities

- Responsible for the development and delivery of lectures and laboratory induction to the Diploma and 4th year Bachelor student research projects.
- Responsible for supervising the Diploma and 4th year Chemical Engineering Bachelor student research projects

2012 - 2013

Asst. Executive (Lab. Analyst)

Bureau Varitus Testing Service, DEPZ, Savar, Dhaka Industry: Testing Lab. (One of the leading Garments product testing laboratory in Bangladesh).

Achievements & Responsibilities

- Responsible to develop methods for analysis the commercial samples.
- Sample Preparation according to Standard Operating Procedure (SOP)
- Sample Extraction according to Standard Operating Procedure (SOP),
- Operating and handling of various analytical instruments (LC-MS, GC-MC, AAS, UV-VIS-NIR- Spectrophotometer.

2008 – 2011

Student Mentor (Voluntary)

Islamic University Mentor Program

Achievements & Responsibilities

- Coordinated industrial tours for 4th year Bachelor students
- Trained in communication, mentoring and advocacy
- Proactive in suggesting a timetable for mentor staffing of learning center

TRAINING AND PROFESSIONAL DEVELOPMENT

2015

Journal Publication Workshop

Chittagong University of Engineering and Technology (CUET), Chittagong-4349, Bangladesh

12 December 2014

2014

Instrument handling and operation (FSEM, UV-Vis spectroscopy, X-Ray Diffraction, XRD and FTIR)

Department of Glass and Ceramic Engineering

15-28 February 2014

PUBLICATIONS

Peer-reviewed articles

1. **Rhaman M. M.**, Ganguli S., Bera S., Rawal S. B. et. al. Visible-light responsive novel WO₃/TiO₂ and Au loaded WO₃/TiO₂ nanocomposite and wastewater remediation: Mechanistic inside and photocatalysis pathway. *Journal of Water Process Engineering* Volume **36**, August 2020, **101256**. <https://doi.org/10.1016/j.jwpe.2020.101256> (**Impact factor: 3.173**), **Q1, Science Citation Index Expanded Journal & SCOPUS Indexed in Journal**. <https://www.sciencedirect.com/science/article/abs/pii/S2214714420301355>

2. Chakraborty, Hossain, M.E. A.K., **Rhaman, M.M.** et al. Fabrication of Bi₂O₃/TiO₂ nanocomposites and their applications to the degradation of pollutants in air and water under visible-light. *J. of Env. Sci* 26(2), 458-465 (2014). [https://doi.org/10.1016/S1001-0742\(13\)60428-3](https://doi.org/10.1016/S1001-0742(13)60428-3). (**Impact factor:** 3.556), **Q1, Science Citation Index Journal.** <https://www.sciencedirect.com/science/article/pii/S1001074213604283?via%3Dihub>.
3. **Rhaman, M.M.**, Karim, M.R., Hyder, M.M.Z. et al. Removal of Chromium (VI) from Effluent by a Magnetic Bioadsorbent Based on Jute Stick Powder and its Adsorption Isotherm, Kinetics and Regeneration Study. *Water Air Soil Pollut* **231**, 164 (2020). <https://doi.org/10.1007/s11270-020-04544-8>. (**Impact factor:** 1.774), **Q2, SCOPUS Indexed in Journal.** <https://link.springer.com/article/10.1007/s11270-020-04544-8#citeas>
4. Chakraborty, A.K., Islam, M.R., Uddin, M.H., **Rhaman, M.M.** et al. Novel Visible-Light-Driven Photocatalyst Co₃O₄/FeWO₄ for Efficient Decomposition of Organic Pollutants. *J Clust Sci* **29**, 67–74 (2018). <https://doi.org/10.1007/s10876-017-1302-1>. (**Impact factor :** 2.154), **Q3, SCOPUS Index Journal.** <https://link.springer.com/article/10.1007%2Fs10876-017-1302-1>.
5. Chakraborty, A.K., **Rhaman, M.M.**, Hossain, M.E. et al. Preparation of WO₃/TiO₂/In₂O₃ composite structures and their enhanced photocatalytic activity under visible light irradiation. *Reac Kinet Mech Cat* **111**, 371–382 (2014). <https://doi.org/10.1007/s11144-013-0623-9>. (**Impact factor:** 1.428), **Q3, SCOPUS Indexed in Journal.** <https://link.springer.com/article/10.1007%2Fs11144-013-0623-9#citeas>.
6. Khatun, M. R., Islam M.M., Islam M. N., **Rhaman M. M.** Studies on Acoustic and Aggregation Properties of Sodium Dodecyl Sulfate in Amino Acid Solutions through Ultrasonic Velocity Technique. *Asian Journal of Chemistry* **31(5)**, 1113-1127(2019). <https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.14233%2Fajchem.2019.21844>. (**Impact factor:** 0.19), **Q4.**

Conference presentation

1st International Conference on Chemical Science & Technology, Department of Chemistry, KUET, Khulna, Bangladesh, (2018, February). **Conference Article-**

1. “Hexavalent chromium Cr (VI) removal from waste water by chitosan and its derivatives: a comparative study” 1. Rhaman, M. M. & Karim M. R; Abstract and Oral Presentation, 2018, OPC20, Page-97.

Research projects

1. **Title:** Development of eco-friendly low-cost adsorbent for waste water treatment using biosorbent.

Project Leader: Prof. Dr. Rezaul Karim

Project Member: Md. Masudur Rhaman
Dept. of Chemistry, CUET for Year 2017-18.

2. Title: Synthesis of nanoparticle deposited magnetic bioadsorbent and its application.

Project Leader: Prof. Dr. M. K. Mohammad Ziaul Hyder,

Project Member: Md. Masudur Rhaman
Dept. of Chemistry, CUET for Year 2019-20.

MEMBERSHIPS

- 2016- Current** Member, Alumni Association, Chittagong University of Engineering and Technology (CUET), Chittagong, Bangladesh.
- 2017- Current** Life time member, Bangladesh Chemical Society, Bangladesh.
- 2015- Current** Consulting member, CUET voluntary blood donations group, BADHON.
- 2015- Current** Chief Moderator, Greater Kustia Student Welfare Forum, CUET, Chittagong, Bangladesh
- 2009- Current** Member, Alumni Association, Islamic University, Kushtia-7003

REFEREES

Dr. Md. Rezaul Karim

Professor

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Chittagong University of Engineering and Technology (CUET)
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