

Curriculum Vitae

Name: **Dr. Md. Mufazzal Hossain**
Date of Birth: 01 June 1971
Official Address: Professor, Department of Chemistry, University of Dhaka, Dhaka-1000
Bangladesh. Email: mufazzal@du.ac.bd
Phone: +880-1817675017 (mobile)
Google Scholar: <https://scholar.google.com/citations?user=LHOMuxoAAAAJ&hl=en>
Homepage: https://www.du.ac.bd/body/faculty_details/CHM/107

Nationality: Bangladeshi by Birth

Academic and Research Background

Name of Degree/Fellowship	Institution/University	Year of passing/ Duration	Result
JASSO Follow up Research Fellow	Utsunomiya Univ. Japan	28 May 2012- 25 Aug 2012	Completed
Visiting Professor	Utsunomiya University, Japan	14 Dec. – 28 Dec. 2010	Visited
Post Doc. Fellow	Venture Business Laboratory Fellowship, Utsunomiya University, Japan	02 Jul. 04- 08 Feb 2007	Successfully Completed
Ph. D.	Department of Material Science & Engineering Utsunomiya University, Japan	March 23 2001	Awarded
M. Sc.	Department of Chemistry University of Dhaka	1992 (held in 1996)	First Class First (with record Marks)
B. Sc. (Hons.)	Department of Chemistry University of Dhaka	1991 (held in 1994)	First Class First (with record Marks)
H. S. C.	Ananda Mohan College Mymensingh	1988	First Division
S. S. C.	Kazi Nazrul Islam High School Mymensingh	1986	First Division

Other Research Experience

October 1997-March 1998 :Research Student, Utsunomiya University, Japan.
01 Jul 1996-28 March 1997 :Research Fellow, Semiconductor Technology Research Center,
University of Dhaka.

Professional Experience

Position	Institute	Duration
Professor	Department of Chemistry, University of Dhaka	23 June 2013- to present
Associate Professor	Department of Chemistry, University of Dhaka	27 December 2009- 22 June 2013
Assistant Professor	Department of Chemistry, University of Dhaka	01 November 2003- 26 December 2009
Assistant Professor	Dept. of Chemistry, Bangladesh University of Engineering & Technology (BUET)	26 April 2001- 01 November 2003
Lecturer	Dept. of Chemistry, Bangladesh University of Engineering & Technology (BUET)	30 March 1997- 29 September 1997

Other Experiences

(a) Administrative Experience

19 Jan 2010- 08 Oct. 2017 : House Tutor, Salimullah Muslim Hall, Dhaka University.

09 Oct. 2007-18 Jan 2010 : Assistant House Tutor, Salimullah Muslim Hall, Dhaka University

(b) Organizational Experience

16-19 March 2016: Co-convenor, Scientific Committee, 16th Asian Chemical Congress 2016.

30 Jan- 01 Feb 2009: Member, Scientific Committee, Bangladesh Chemical Congress 2008.

(c) Panel reviewer of

- (1) Langmuir (Am. Chem. Soc.)
- (2) J. Colloid Interface Sci. (Elsevier)
- (3) Colloid Surfaces A (Elsevier)
- (4) Spectrochimica Acta A (Elsevier)
- (5) J. Applied Polymer Sci. (John Wiley & Sons)
- (6) Green Chemistry letters and Reviews
- (7) Surface and Interface Analysis (John Wiley & Sons)
- (8) Bangladesh Journal of Scientific and Industrial Research
- (9) Dhaka University J. Sci.
- (10) Journal of Bangladesh Chemical Society

Language Proficiency: Bengali (mother tongue), English, Japanese.

Countries Visited: Japan, South Korea, India, Nepal, Butan

Honors/Awards

1. **Visiting Researcher (JASSO Follow-up Fellow)**, 28 May 2012 to 25 August 2012, Utsunomiya University, Japan.
2. **Visiting Professor**, 14 December 2010 to 28 December 2010, Utsunomiya University, Japan.
3. **Post Doctoral Fellow (Venture Business Laboratory Fellowship)** 02 July 2004 to 24 November 2006, Utsunomiya University, Japan.
4. **“YOUNG SCHOLARSHIP 2000”** for excellent research works in 2000 in Utsunomiya University.
5. **“YOUNG SCHOLARSHIP 1999”** for excellent research works in 1999 in Utsunomiya University.
6. **Japanese Government Scholarship (MONBUKAGAKUSHO)** October 1997-March 2001.
7. **University Scholarship** with full tuition waives due to academic excellence in 1992 in Chemistry, University of Dhaka.
8. **Dr. Kudrat-e-Khuda foundation scholarship** for being first class first in B.Sc. (Hons.) in Chemistry (1991), University of Dhaka

Affiliated Membership

1. Life Member, Registrar Graduate, Dhaka University, No. 19267. 2017034486
2. Life Member of Bangladesh Chemical Society- No. LM-724
3. Ex-Member of Japan Chemical Society (1998-2001)- No. 1983074100
4. Ex-Member of Japan Chemical Society (2005)- No. 2050237100
5. Life member of JUAAB (Japanese Universities Alumni Association of Bangladesh)
6. Life member of NITUB-No. LM-36

Dissertations

1. Studies on Formation and Structures of Ordered Condensed Phases in Gibbs Monolayers, Ph. D. Thesis, Utsunomiya University, 2001.
2. TiO₂ Mediated Photodegradation of Methylene Blue and Procion Red, M. Sc. Thesis, University of Dhaka, 1992 (held in 1996).

Books

1. Chemical Kinetics and Photochemistry. **M. M. Hossain**, M. A. Rahim (written in Bengali for students of B.Sc.(Hons) in Chemistry) First Edition, Panjeri Pub. Ltd. Dhaka, Bangladesh, October, **2009**.

Chapter of Books

2. Removal of Textile Dyes using Copper-Cobalt Mixed Oxide Matrix. Y. J. Ferdosi, A. N. Chowdhury, **M.M. Hossain**, Chemeca 2010: Engineering at the Edge; 26-29 (Publishers: Engineers Australia) **2010**, 2047-2056.
3. Two-Dimensional Phase Behavior and Condensed Phase Formation in Gibbs Monolayers at the Air-Water Interface. M. N. Islam, **M. M. Hossain**, T. Kato, *Bottom-Up Nanofabrication; Supramolecules, Self-Assemblies, and Organized Films: Ed. K. Ariga & H. S. Nalwa* (American Scientific Publishers), **2009**, 5, 275-298.
4. Surface Phase Behavior of Some Non-ionic Surfactants at the Air-Water Interface, M. N. Islam, **M. M. Hossain**, T. Kato, *Recent Res. Devel. Physical Chem.* (Transworld Research Network) **2004**, 7, 261-278.

Published Papers (International Journal)

5. Photocatalytic Degradation of Methylene Blue under Visible Light Using Carbon-Doped Titanium Dioxide as Photocatalyst. I. Jerrin, M. A. Rahman, A. H. Khan, **M. M. Hossain**, *Desalination and Water Treatment*, 320, **2024**, 100711.
(<https://doi.org/10.1016/j.dwt.2024.100711>).
6. XPS valence band observable light-responsive system for photocatalytic Acid Red14 dye decomposition using a ZnO-Cu₂O heterojunction. N Akter, T Ahmed, I Huque, M K Hossain, G Ray, **M M Hossain**, M.S. Islam, M. A. A. Shaikh, U. S. Akter, *Heliyon*, **2024**, (<https://doi.org/10.1016/j.heliyon.2024.e30802>)
7. Source Identification and Health Risk Assessment of Particle Phase Organic Compounds in Urban and Rural Areas of Bangladesh. M. N. Islam, S. U. Zaman, **M. M. Hossain**, A Salam, *E3S Web of Conferences*, **2024**, 485, 060005.
(<https://doi.org/10.1051/e3sconf/202448506005>.)
8. Removal of Methylene Blue from Aqueous Solution by Coconut Coir Dust as a Low-Cost Adsorbent. A. A. Ashik, M. A. Rahman, D. Halder, **M. M. Hossain**, *Applied Water Res.* **2023**, 13:81(<https://doi.org/10.1007/s13201-023-01887-5>).
9. Studies on Synthesis, Characterization, and Photocatalytic Activity of TiO₂ and Cr doped TiO₂ for the Degradation of p-chlorophenol, M. K. Hossain, **M. M. Hossain**, S. Akhtar, *ACS Omega*, **2023**
<https://pubs.acs.org/action/showCitFormats?doi=10.1021/acsomega.2c05107&ref=pdf>.
10. Synthesis of a Clay Based Photocatalyst for the removal of Yosin Yellow in Aqueous Solution. D. Haldar, M. N. Islam, **M. M. Hossain**, M. A. Rahman, R Samadder, M M Rahman, *Int. J. Material and Mathematical Sciences*, **2022**, 4, 83-93.
11. Photodegradation and Reaction Kinetics for Eosin Yellow Using ZnO Nanoparticles as Catalysts. M. K. Hossain, **M. M. Hossain**, S. Akhtar, *Reaction Kinetics, Mechanism and*

- Catalysis*, **2022** (27 June 2022 published online) <https://doi.org/10.1007/s11144-022-02244-4>.
12. Removal of Remazol Red RR from Aqueous Solution by Glass Supported Films of ZnO Nanoparticles. M. A. Hossain, M. N. Kayes, **M. M. Hossain**, *ICRRD Qual. Ind. Res. J.* **2021**, 2(3), 109-119.
 13. Interactions of L-arginine with Langmuir Monolayers of Common Phospholipids at the Air-Water Interface. **M. M. Hossain**, K. Iimura. *Chem. Phys, Lipids* **2021**, 235, No. 105054.
 14. Fe(III)-aqua complex mediated photodegradation of Methylene Blue dye. A. Nawar, M. A. Rahman, **M. M. Hossain**, *Int. J. Environ. Sci. Dev.* **2021**, 12(4), pp 112-117.
 15. Enhanced Photocatalytic Activity of an Acid-modified TiO₂ Surface for Degradation of the Azo Dye Remazol Red. U. Afrin, M. R. Mian, B. K. Breedlove, **M. M. Hossain**. *Chemistry Select.* **2017**, 2, 10371-10374.
 16. Decolorization of Remazol Black B in Aqueous Suspension of TiO₂. M. J. Miah, M. T. Aziz, M. N. Kayes, M. Obaidullah, **M. M. Hossain**. *British J. Env. Sci.* **2017**, 5, 51-70.
 17. Effect of Transition Metal Ions on Photodegradation of Remazol Black B (RBB) in the Aqueous Suspension of ZnO under Solar Light Irradiation. M. Obaidullah, M. N. Kayes, M. J. Miah, N. Suzuki, **M. M. Hossain**. *J. Adv. Chem. Sci.* **2017**, 3, 445-448.
 18. Effect of Inorganic Anions on Photodegradation of Remazol Black B (RBB) in the Aqueous Suspension of ZnO under Solar Light Irradiation. M. Obaidullah, M. N. Kayes, M. J. Miah, N. Suzuki, **M. M. Hossain**. *J. Environ. Sci. Pollution Res.* **2016**, 2, 145-148.
 19. Photodegradation Efficiency of Prepared and Commercial ZnO to Remove Textile Dye from Aqueous Solution. M. J. Miah, M. N. Kayes, M. Obaidullah, **M. M. Hossain**, *J Adv. Chem. Sci.* **2016**, 2, 337-340.
 20. Immobilization of ZnO Suspension on Glass Substrate to Remove Filtration During the Removal of Remazol Red R from Aqueous Solution. M N Kayes, M. J. Miah, M. Obaidullah, M. A. Hossain, **M. M. Hossain**. *J. Advances Chem.* **2016**, 12, 4127-4133.
 21. Effect of Some Metal Ions on the Photocatalytic Oxidation of Remazol Black B in Aqueous Solution under UV Irradiation. M. A. A. Nahid, **M. M. Hossain**, M Rahman, *J. Adv. Oxidation Technol.* **2015**, 18, 23-30.
 22. Removal of Bractive T Blue by Photodegradation and Adsorption Using ZnO. M. A. A. Nahid, **M. M. Hossain**, M Rahman, *Smart Sci.* **2014**, 2, 70-74.
 23. A Facile Approach to Fabrication of Novel CeO₂-TiO₂ Core-Shell Nanocomposite Leads to Excellent UV-Shielding Ability and Lower Catalytic Activity. N. M. Bahadur, F. Kurayama, T. Furusawa, M. Sato, I. A. Siddiquey, **M. M. Hossain**, N. Suzuki, *J. Nanopart. Res.* **2013**, 15, 1390.
 24. Copper-Cobalt Mixed Oxide Matrix: A Better Adsorbent for the Treatment of Textile Dye. M. J. Ferdousi, A. N. Chowdhury, **M. M. Hossain**, *Asian J. Water Environ. Pollution.* **2013**, 10(2), 1-9.

25. Temperature Dependent Dendritic Domain Shapes in Langmuir Monolayers of Tetradecanoyl N-ethanolamide at the Air-water Interface. **M. M. Hossain**, K. Iimura, M. Yoshida, T. Kato, *J. Colloid Interface Sci.* **2011**, 353, 220-224.
26. Comparison of Phase Behavior between Water Soluble and Insoluble Surfactants at the Air-Water Interface. **M. M. Hossain**, K. Iimura, T. Kato. *Appl. Surf. Sci.* **2010**, 257, 1129-1133.
27. Effect of Head Groups on the Phase Transitions in Gibbs Adsorption Layers at the Air-Water Interface. **M. M. Hossain**, K. Iimura, M. Yoshida, T. Sakai, T. Kato, *J. Colloid Interface Sci.* **2010**, 348, 146-151.
28. Cobalt-Nickel Mixed Oxide Surface : A Promising Adsorbent for the Removal of PR Dye From Water. A. N. Chowdhury, M. A. Rahim, M. J. Ferdousi, M. S. Azam, **M. M. Hossain**, *Appl. Surf. Sci.* **2010**, 256, 3718-3724.
29. Temperature and Compression Rate Independent Domain Shape in Langmuir Monolayers of Di-n-dodecyl Hydrogen phosphate at the Air-Water Interface. **M. M. Hossain**, K. Iimura, T. Kato, *J. Colloid Interface Sci.* **2008**, 319, 295-301.
30. How Many Phases and Phase Transition do Exist in Gibbs Monolayers at the Air-Water Interface. **M. M. Hossain**, K. Iimura, T. Kato, *J. Colloid Interface Sci.* **2007**, 306, 391-397.
31. Interactions of L-Arginine with Langmuir Monolayers of Di-n-dodecyl Hydrogen Phosphate at the Air-Water Interface. **M. M. Hossain**, K. Iimura, T. Kato, *J. Colloid Interface Sci.* **2006**, 304, 200-207.
32. Surface Phase Behavior of Di-n-tetradecyl Hydrogen Phosphate in Langmuir Monolayers at the Air-Water Interface. **M. M. Hossain**, K. Iimura, T. Kato, *J. Colloid Interface Sci.* **2006**, 302, 272-277.
33. Effect of Temperature on the Surface Phase Behavior of n-Hexadecyl Dihydrogen Phosphate in Adsorption Layers at the Air-Water Interface. **M. M. Hossain**, K. Iimura, T. Kato, *J. Colloid and Interface Sci.* **2006**, 298, 348-355.
34. Effect of an Amino Acid on the Surface Phase Behavior of n-Hexadecyl Phosphate in Gibbs Adsorption Layers. **M. M. Hossain**, T. Suzuki, T. Kato. *Colloids and Surfaces A* **2006**, 284/285, 119-124.
35. Phase Diagram of n-Tetradecyl Phosphate in Gibbs Monolayers. **M. M. Hossain**, T. Suzuki, T. Kato. *Colloids and Surfaces A* **2006**, 284/285, 234-238.
36. Kinetic Appearance of First-Order Gas-Liquid Expanded and Liquid Expanded-Liquid Condensed Phase Transitions Below the Triple Point. **M. M. Hossain**, T. Suzuki, K. Iimura, T. Kato, *Langmuir* **2006**, 22, 1074-1078.
37. Interaction of an Organic Cation with Gibbs Monolayers of n-Hexadecyl Phosphate. **M. M. Hossain**, T. Suzuki, T. Kato. *J. Colloid Interface Sci.* **2005**, 292, 186-194.
38. Phases and Phase Transitions in Gibbs Monolayers of an Alkyl Phosphate Surfactant, **M. M. Hossain**, T. Suzuki, T. Kato, *J. Colloid Interface Sci.*, **2005**, 288, 342-349.

39. Removal of Dyes from Water by Conducting Polymeric Adsorbent. A.-N. Chowdhury, S. R. Jesmeen, **M. M. Hossain**, *Polym. Adv. Technol.* 2004, 15, 633-638.
40. Condensed Structure Formation in Mixed Monolayers of Anionic Surfactants and 2-Hydroxyethyl Laurate at the Air-Water interface. **M. M. Hossain**, M. N. Islam, T. Okano, T. Kato, *Colloid and Surfaces A* **2002**, 205, 249-260.
41. Phase Behavior of n-Hexadecyl Phosphate in Gibbs Adsorption Layers. **M. M. Hossain**, T. Suzuki, T. Kato, *Colloid and Surfaces A* **2002**, 198-200, 53-57.
42. $\text{CH}_3(\text{CH}_2)_n\text{COOH}/\text{Cd}^{2+}$ System on the Aqueous Cadmium Acetate Solution Investigated in situ by Polarization Modulation Infrared Spectroscopy. Y. Ren, **M. M. Hossain**, K. Iimura, T. Kato, *J. Phys. Chem. B* **2001**, 105, 7723-7729.
43. Phase Transition in Gibbs Monolayers of Mixed Surfactants. **M. M. Hossain**, T. Okano, T. Kato, *Stud. Surf. Sci. Catal.* **2001**, 132, 169-172.
44. Unusual Transition in a Two-Dimensional Condensed Phase to a Mosaic Texture. **M. M. Hossain**, T. Suzuki, T. Kato, *Langmuir* **2000**, 16, 9109-9112.
45. Line tension Induced Instability of Condensed Domains Formed in Adsorbed Monolayers at the Air-Water Interface. **M. M. Hossain**, T. Kato, *Langmuir* **2000**, 16, 10175-10183.
46. Orthorhombic Structure of Cadmium Behenate Monolayers on the Water Surface of a Langmuir Trough Detected by Polarization Modulation Infrared Spectroscopy. Y. Ren, **M. M. Hossain**, K. Iimura, T. Kato, *Chem. Phys. Lett.* **2000**, 325, 503-507.
47. Higher Order Structure Formation in Adsorbed Monolayers at Aqueous Solution Surfaces Studied by Brewster Angle Microscopy. **M. M. Hossain**, M. Yoshida, T. Kato, *Langmuir* **2000**, 16, 3345-3348.
48. Phase Transition in Adsorbed Monolayers of 2-Hydroxyethyl Laurate at the Air-Water Interface. **M. M. Hossain**, M. Yoshida, K. Iimura, N. Suzuki, T. Kato, *Colloid and Surfaces A* **2000**, 171, 105-113.

Published Papers (National Journal)

49. Heterogeneous Catalysis on Prepared ZnO Nanocatalysts: Effect of Calcination Temperature. M A Hossain, M. N. Kayes, M. M. Hossain, *Journal of Engineering Sci.*, **2024** (in press).
50. Preparation and Characterization of Carbon Doped ZnO and Its Effectiveness as Photocatalyst under Visible Light. M. Zaman, N. Akter, M. A. Rahman, **M. M. Hossain**. *Dhaka Univ. J. Sci.* **2023**, 71, 127-133.
51. ZnO-Cu₂O Composites for Photocatalytical Removal of Methylene Blue from Aqueous Solution under Visible Light. N. Akter, M. Zaman, M. A. Rahman, **M. M. Hossain**. *Dhaka Univ. J. Sci.* **2023**, 71, 42-48.

52. Cu(II) Doped TiO₂ for Photodegradation of Remazol Black B in Aqueous Solution. M. A. Momen, M. A. Rahman, H. A. Begum, **M. M. Hossain**, *Dhaka Univ. J. Sci.* **2022**, 70, 64-69.
53. ZnO-TiO₂ Composite Mediated Photocatalytic Degradation of Orange G. from Aqueous Solution. F. Hossain, M. A. Rahman, **M. M. Hossain**, *Dhaka Univ. J. Sci.* **2022**, 69, 218-224.
54. Kinetics, Equilibrium and Thermodynamics Studies for Adsorption of Aqueous Basic Blue 41 by Peanut Shell. M.S. Alam, **M. M. Hossain**, H.A. Begum, *J. Bangladesh Chem. Soc.* **2021**, 33(3). 87-92.
55. A Comparative Study of Photodegradation of Orange G by Fe(III)-Aqua Complex and Fenton Reagent. F. Hossain, M. M. Hasan, M. A. Rahman, D. Halder, **M. M. Hossain**, *J. Bangladesh Chem. Soc.* **2020**, 32, 75-79.
56. Optical, Magnetic and Adsorptive Properties of Copper(II) oxide Prepared from Thermal Decomposition of Copper(II) carbonate. M. A. Rahman, T. S. A. Islam, **M. M. Hossain**, *Dhaka Univ. J. Sci.* **2020**, 68, 7-12.
57. Theoretical Investigation of Non-linear Optical (NLO) properties and UV-visible Spectra of N-(3,5-dichlorobenzylidene)aniline and N-(3,5-dichlorobenzylidene)4-nitroaniline. M. S. Islam, N. Mousume, **M. M. Hossain**, M. A. Aziz, M. S. Islam. *Dhaka Univ. J. Sci.* **2018**, 66, 139-143.
58. A Comparative Study for Adsorptive Removal of Remazol Red R and Remazol Black B from Aqueous Solution by ZnO. A. Z. M. M. I. Mazumder, C. R. Bikash, M. A. Rahman, **M. M. Hossain**. *Dhaka Univ. J. Sci.* **2018**, 66, 121-127.
59. Preparation, Characterization and Catalytic Activity of Copper(II) Oxide Nanoparticles. M. A. Rahman, A. Z. M. M. I. Mazumder, **M. M. Hossain**, T. S. A. Islam. *Dhaka Univ. J. Sci.* **2018**, 66, 9-13.
60. Comparative Study for Photodegradation of Remazol Red R by Different TiO₂ Samples. N. N. Rashed, A.Z.M. M. I. Mazumder, **M. M. Hossain**. *Dhaka Univ. J. Sci.* 2017, 65, 49-54.
61. Estimation of Formation Constant of Cr(III)-EDTA Complex and Kinetic Study of the Complexation Reaction. A. Hossain, **M. M. Hossain**. M. Q. Ehsan. *J. Bangladesh Chem. Soc.* **2015**, 27, 139-150.
62. Preparation of Clay-ZnO Composite Photocatalysts and Study Their Effectiveness in Removing Brilliant Orange from Aqueous Solution. **M. M. Hossain**, M. A. Rahman. *J. Bangladesh Chem. Soc.* **2015**, 27, 58-68.
63. ZnO Mediated Photodegradation of Aqueous Solutions of Crystal Violet and Ponceau S by Visible Light. **M. M. Hossain**, M. A. Hossain, M. N. Kayes, D. Halder. *Journal of Engineering Science* **2014**, 05, 69-74.
64. Adsorption of Remazol Red RR onto Chitosan from Aqueous Solution. M. P. Kabir, M. M. Islam, S. M. Masun, **M. M. Hossain**, *Bangladesh J. Sci. Ind. Res.* **2014**, 49, 111-118 .

65. Preparation of ZnO with Characteristic Surface Properties for Application as an Adsorbent. **M. M. Hossain**, M. J. Mia, M. N. Kayes, M. A. Hossain, M. N. Bahadur. *J. Bangladesh Chem. Soc.* **2013**, 26, 112-125
66. Photodegradation of Orange Green by Fe(III)–Aqua Complex. **M. M. Hossain**, M. R. I. Rasel, M. S. Islam, *Dhaka Univ. J. Sci.* **2012**, 60(1), 43-46.
67. Adsorption of Methylene Blue and Crystal Violet on Natural and Modified Clays. A. J. Mahmood, **M. M. Hossain**, M. A. Rahman, M. E. Quayum, *J. Bangladesh Chem. Soc.* **2011**, 24(1), 46-55.
68. Removal of Brilliant Orange from Aqueous Solution by Prepared and Commercial ZnO. **M. M. Hossain**, T. S. A. Islam, M. A. Rahman, *The Dhaka Univ. J. Sci.* **2011**, 59(1), 81-85.
69. Head-group dependent domain morphologies in Langmuir monolayers. **M. M. Hossain**, T. Kato. *Bangladesh J. Sci. Ind. Res.*, **2011**, 46(1), 47-52.
70. Photocatalytic Degradation of Brilliant Orange in Presence of TiO₂ Suspension. M. S. Islam, **M. M. Hossain**, T. S. A. Islam, *J. Bangladesh Chem. Soc.* **2009**, 22(2), 88-97.
71. Effect of pH, Ions and Ionic Strength on TiO₂-mediated Photodegradation of Brilliant Orange. M. S. Islam, **M. M. Hossain**, T. S. A. Islam, *The Dhaka Univ. J. Sci.* **2010**, 58(2), 187-190.
72. Removal of 2,5-Dichlorophenol from Aquatic Environment using TiO₂ as a Photocatalyst. T. S. A. Islam, H. A. Begum, **M. M. Hossain**, M. J. Islam, *The Dhaka Univ. J. Sci.* **2010**, 58(1), 119-122.
73. Temperature Effect on Surface Phase and Micellization of 2-Hydroxyethyl Laurate in Water. **M. M. Hossain**, K. Iimura, T. Kato, *The Dhaka Univ. J. Sci.* **2004**, 52, 385-390.
74. ZnO Mediated Degradation of Brilliant Orange by Visible Light. A. J. Mahmood, M. S. Islam, **M. M. Hossain**, *J. Bangladesh Chem. Soc.* **2003**, 16, 36-46.
75. Removal of Bractive T Blue from Aqueous Solution by ZnO. A. J. Mahmood, M. S. Islam, **M. M. Hossain**, *The Dhaka Univ. J. Sci.* **2003**, 52, 13-21.
76. Studies on TiO₂ Mediated Photodegradation of Procion Red. A. J. Mahmood, M. M. Rahman, **M. M. Hossain**, *J. Bangladesh Chem. Soc.* **1996**, 9, 229-237.
77. Head-group dependent domain morphologies in Langmuir monolayers at the air-water interface. **M. M. Hossain**, K. Iimura, T. Kato. Proceedings of *Bangladesh Chemical Congress 2008*, 167-173 (OP-B5) 30 January – 01 February, **2009**, Dhaka, Bangladesh.
78. Photodegradation of Brilliant Orange in TiO₂ Suspension. T. S. A. Islam, **M. M. Hossain**, H. A. Begum, M. S. Islam. Proceedings of *Bangladesh Chemical Congress 2008*, 225-235 (OP-B19) 30 January – 01 February, **2009**, Dhaka, Bangladesh.

Seminar and Conference Presentations

1. Photocatalytical Removal of Dyes from Aqueous Solution. **M. M. Hossain**. Keynote Lecture (KN-E5), PP 259, BCSIR Congress 2022, 01-03 December 2022.
2. Preparation and Characterization of ZnO-Cu₂O Composites and Their Effectiveness in Removing Methylene Blue from Aqueous Solution under Visible Light. N. Akter, U. S. Akhtar, **M. M. Hossain**, OP-B14, pp. 132, BCSIR Congress 2022, 01-03 December 2022.
3. 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. M. A. Rahman, T S A Islam, **M M Hossain**. International Conference on Nanomaterials for Environmental Applications (NEA 2019) Miramar-Goa, 6-7 March 2019.
4. Preparation of Mn₅O₈ Nanoparticles by a Facile Gel Formation Route and the Study of Its Effectiveness in Oxidative Removal of Methylene Blue from an Aqueous Solution, T. Bhowmick **M. M. Hossain**. PP 22, 5th Conference of Bangladesh Crystallographic Association, 25-26 January 2019, Dhaka, Bangladesh.
5. Preparation and Characterization of ZnO-TiO₂ Composites and Their Application in Photodegradation of Textiles Dyes Orange G and Methylene Blue from Aqueous Solution, F. Hossain, M. A. Rahman, **M. M. Hossain**. PP 23, 5th Conference of Bangladesh Crystallographic Association, 25-26 January 2019, Dhaka, Bangladesh.
6. Optical, Magnetic and Catalytic Properties of Prepared Copper(II) oxide. M. A. Rahman, T S A Islam, **M M Hossain**. PP 25, 5th Conference of Bangladesh Crystallographic Association, 25-26 January 2019, Dhaka, Bangladesh.
7. Photodegradation of Remazol Black B by Aqueous Suspension of Titanium Dioxide, M. A. Momen, A. Z. M. M. I. Mazumder, **M. M. Hossain**. PP 34, 5th Conference of Bangladesh Crystallographic Association, 25-26 January 2019, Dhaka, Bangladesh.
8. Interaction of L-arginine with Gibbs Monolayers and Langmuir Monolayers of Amphiphiles at the Air-Water Interface, M. M. Hossain, K. I. Iimura, Invited Lecture, Abstract of International Conference on Functional Nanomaterials and Nanotechnology (ICFNN 2017), p 75-76, October 10-13, 2017, Kathmandu, Nepal.
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