Dr. Md. Mominul Islam

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Biography

Dr Md Mominul Islam is an Assistant Professor of the Department of Chemistry, Dhaka University (DU). He completed his B.Sc. and M.Sc. degrees from the same department in 1997 and 1999, respectively. In 2001, he went to Tokyo Institute of Technology, Japan for PhD degree. After finishing his PhD work in 2004, he continued research work for more than 4 years with different postdoctoral fellowships. His field of specialization is electrochemistry.

Dr Islam published 33 peer-reviewed papers. One Japanese patent is in his credit. His first edited book "*Trends in Polyaniline Research*" and two book chapters have been published by Nova Science Publishers, USA. He is one of the authors of Chemistry Textbook (Class IX-X) distributed by National Curriculum and Textbook Board, Bangladesh (NCTB). About 50 abstracts on his research work have been published in the proceedings of different national and international conferences. He attended various workshops including the workshop on computational chemistry co-hosted by Gaussian.

Dr Islam presently involves with six research projects supported by different organizations including TWAS, World Bank-Bangladesh Govt., UGC, ministry of science and technology, and Bose Centre at DU. He is also working an assistant house-tutor of Fazlul Huq Muslim Hall, DU and as the executive of management committee, Institute of Chemists and Chemical Technologists, Bangladesh (ICCTB), Bangladesh Chemical Society (BCS). He worked as a member of development of curriculum of chemistry textbook (class XI-XII), NCTB in 2012 and joint-secretary of the Organizing Committee, Bangladesh Chemical Congress (BCC2012) organized by BCS. Dr Islam received several prestigious awards/fellowships including Dean's Award 2012 (DU), Katho science foundation award, monobusho scholarship, young research grants (AvH), VBL fellowship etc. He is the life member of BCS, Bangladesh Crystallographic Association (BCA), Bangladesh Association for the Advancement of Science (BAAS) and DU Alumni Association, and DU Registered Graduate. He visited Japan, Germany, Malaysia, China and India.

Educational Qualifications

Name of the Degree	Year of Exam	Institute
Bachelor of Science (Honours)	1997 (Exam of 1995)	Department of Chemistry, University of Dhaka, Bangladesh
Master of Science (Thesis group)	1999 (Exam of 1996)	Department of Chemistry, University of Dhaka, Bangladesh
Doctor of Engineering (Electrochemistry)	2004	Department of Electronic Chemistry, Tokyo Institute of Technology, Japan

Professional Experiences

Position	Organization	Duration
Assistant Professor	Department of Chemistry, University of Dhaka, Dhaka, Bangladesh	Jun., 2011- present
Assistant Professor	Department of Chemistry, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh	Nov., 2010- Jun., 2011
Assistant Professor (in chemistry)	Department of Arts and Sciences, Ahsanullah University of Science and Technology, Dhaka, Bangladesh	Sept., 2009 – Oct., 2010
Postdoctoral Research Fellow	Department of Electronic Chemistry, Tokyo Institute of Technology, Tokyo, Japan	Oct., 2004 - Mar., 2009
Scientific Officer	Institute of Glass and Ceramics Research and Testing (IGCRT), Bangladesh Council of Scientific and Industrial Research (BCSIR), Dhaka, Bangladesh	Feb., 2000 - Sept., 2001
Research Fellow	Department of Chemistry, University of Dhaka, Dhaka, Bangladesh	Oct., 1999 - Jan., 2000

Training Program/Workshop Attended

1. Workshop on Molecular Modified Electrodes for Clean Energy Conversion, October 1, **2004**, Panasonic Center at Ariake, Tokyo, Japan.
2. Afro-Asia Workshop on Advanced Topics in Chemistry, 13-17 June, **2011**, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, India.
3. Teachers' Appreciation Workshop, Bangladesh University of Engineering and Technology (BUET), 11-13 April, **2011**, Dhaka, Bangladesh.
4. Workshop on Characterization and Application of Novel Functional Materials with Emphasis on Electrochemistry, 16 February, **2012**, Department of Chemistry, University of Dhaka, Bangladesh.
5. Young Teachers Training Program, 1-6 June **2013**, Department of Chemistry, Dhaka University, Bangladesh.
6. Workshop on Preparation and Characterization of Novel Functional Materials, 31 August and 01 September, **2013**, Department of Chemistry, University of Dhaka, Bangladesh.
7. Workshop on Introduction to Gaussian: Theory and Practice, January 2014, Delhi, India.

Research Interests

Energy & Environment: New Materials and Composites, Electrochemical Gas Sensor, Fuel Cells, Water Treatment Technology and Electrochemical Capacitors

Research Experiences

Institution	Research Project	Status	Period
Physical Chemistry Research Laboratory, Department of Chemistry, University of Dhaka	▪ Photoelectrochemical studies of methylene blue	M. Sc. Student	Jun. 1998-Jul. 1999
University Grants Commission's Research in Natural Sciences University of Dhaka	▪ Electrochemical studies of organic dyes	Research Fellow	Oct. 1999 - Jan. 2000
IGCRT, Bangladesh Council of Scientific and Industrial Research, Dhaka	▪ Studies on functional ceramics ▪ Lead filter for vehicles	Scientific Officer	Feb. 2000-Sept. 2001
Department of Electronic Chemistry, Tokyo Institute of Technology, Japan	▪ Electrochemical streaming phenomena at HMDE in aprotic solution	Doctoral Student	Oct. 2001-Sept 2004
Department of Electronic Chemistry, Tokyo Institute of Technology, Japan	▪ Venture Business Laboratory (VBL) research fellowship on electrochemical streaming phenomenon at HMDE ▪ Interdisciplinary Graduate School, Tokyo Tech research fellowship on electrochemical streaming phenomenon at HMDE ▪ Joint fellowship (Teijin Comp.-Tokyo Tech-Japan Govt.) on electrochemical oxygen generation technology	Postdoctoral Research Fellow	Oct. 2004-Mar. 2006 Apr. 2006-Mar. 2007 Apr. 2007-Mar.2009
Department of Chemistry, Bangladesh University of Engineering and Technology (BUET), Dhaka	▪ Removal of organic dyes from aqueous solution by chemical adsorption method	Guide and Co-guide	Nov. 2010-Jun 2011
Department of Chemistry University of Dhaka, Dhaka	▪ Chemical and electrochemical sorptions of organic dyes ▪ Removal of organic dyes and heavy metals from aqueous solution by electrosorption approach ▪ Electrocatalytic degradation of organic dyes on polyaniline/metal oxides composite modified electrodes ▪ Catalytic reduction of molecular oxygen for fuel cell applications	Guide and Co-guide	Jun 2011-present

Ongoing Research Projects Funded by Different Organizations

- TWAS (The Academy of Sciences for the Developing World), Trieste, Italy; Year: 2012-2013.
- HEQEP, University Grants Commission of Bangladesh-World Bank, 2nd Phase, CP-2196; Year: 2012-2015.
- Dhaka University-University Grants Commission (UGC) of Bangladesh; Year: 2011-2012.
- University Grants Commission (UGC); Bangladesh; Year: 2010-2011.
- Ministry of Science and Technology, Bangladesh; Year: 2013-2014.
- Bose Centre for Advanced Study and Research in Natural Sciences, University of Dhaka, 2012.
- Ministry of Education, Bangladesh; Year: 2013-2016

Awards/Fellowships

- Dean's Award 2012 (Book Category), Faculty of Science, Dhaka University, Dhaka; Year: **2013**.
- Young Researcher Grants, Alexander von Humboldt Foundation, Wuppertal University, Germany; Year: Nov., **2012**.
- Joint Fellowship (Teijin Company-Tokyo Tech-Japan Govt.), Tokyo Tech, Japan; Year: Apr., 2007- Mar., **2009**.
- Interdisciplinary Graduate School Research Fellowship, Tokyo Tech, Japan; Year: Apr., 2006 - Mar., **2007**.
- Venture Business Laboratory (VBL) Research Fellowship, Tokyo Tech, Japan; Year: Oct., 2004- Mar., **2006**.
- Monbusho Scholarship, PhD Research, Tokyo Tech, Japan; Year: Oct., 2001-Sept., **2004**.
- Katoh Science Foundation Award, Japan; Year: **200**3.
- Research Fellowship, University Grants Commission (UGC), Bangladesh, University of Dhaka; Year: 1999-**2000**.

Publication

Theses

- Master Thesis, Title: Photoelectrochemical Studies of Methylene Blue, Dhaka University, Dhaka, Bangladesh, **1999**.
- Ph.D. Thesis, Title: Electrochemical Streaming Phenomena at HMDE in Aprotic Solution, Tokyo Institute Technology, Japan, **2004**.

Books

- M. T. Alam, M.M. Islam and T. Ohsaka, A Chapter entitled "Electrical Double Layer Structures in Room-Temperature Ionic Liquids" in the book titled "Electrochemical Properties and Applications of Ionic Liquids" edited by Angel A. J. Torriero and Muhammad J. A. Shiddiky, Nova Science Publishers, Inc., USA, Chapter 4, **2011**.
- M. M. Islam, B. N. Ferdousi, M. I. Awad, T. Ohsaka, A chapter entitled "Peroxycitric Acid: A Potential Derivative of Citric Acid" Nova Science Publishers, Inc., Chapter 10, USA, **2012**.
- Chemistry Textbook (Roshayan), Level-IX-X, National Curriculum and Textbook Board (NCTB), Bangladesh, Dhaka, **2012**.
- T. Ohsaka, A.-N. Chowdhury, M. A. Rahman and M. M. Islam (Editors), Trends in Polyaniline Research, Nova Science Publishers, Inc., USA, **2013** (ISBN: 978-1-62808-427-6).

Patent

- S. Kojima, T. Ohsaka and M. M. Islam, Removal of Water from Electrolytes and Instrument for This, and Instrument for Measuring Water Content, Japanese Patent, No. 2008-180170, Filing, July 9, **2008**.

Peer-Reviewed Journals

1. A. J. Mahmood, M. A. Jabbar, M. A. Hasnat and *M. M. Islam*, Studies on Degradation of Malachite Green in Aqueous Medium I. Fenton and Photo-Fenton Processes, *J. Bang. Chem. Soc*. (Bangladesh), *15*, 30–38 (**2002**).

2. A. J. Mahmood, A. Salam and *M. M. Islam*, Adsorption of Metal Ions on an Algal Biomass *(Oedogonium sp.)* I. Adsorption Characteristics of Some Metal Ions, *Dhaka Univ. J. Sci.* (Bangladesh), *50*, 173–177 (**2002**).

3. A. J. Mahmood, *M. M. Islam*, M. A. Hasnat and A.-N. Chowdhury, Dye Sensitized Photoelectro-chemical Cells I. Indium Tin Oxide Glass / Methylene Blue Electrode System, *Dhaka Univ. J. Sci.* (Bangladesh), *51*, 39–45 (**2003**).

4. A. J. Mahmood, M. A. Jabbar, A. Salam and *M. M. Islam*, Adsorption of Metal Ions on an Algal Biomass (*Oedegonium sp.*) II. Effect of pH on the Adsorption of Fe(III), Zn(II), Cd(II) and Hg(II) Ions (*Article*), *Dhaka Univ. J. Sci.* (Bangladesh), *51*, 197–200 (**2003**).

5. *M. M. Islam*, T. Okajima and T. Ohsaka, In Situ Color Video Observation of Polarographic Streaming Phenomenon of an HMDE Using Electrochromic Reaction, *Electrochem. Commun.* (UK), *6*, 556–561 (**2004**).

6. *M. M. Islam*, T. Okajima and T. Ohsaka, Current Oscillatory Phenomena Based on the Redox Reactions at a Hanging Mercury Drop Electrode (HMDE) in Dimethyl Sulfoxide, *J. Phys. Chem. B* (USA), *108*, 19425–19431 (**2004**).

7. *M. M. Islam*, B. N. Ferdousi, T. Okajima and T. Ohsaka, A Catalytic Activity of a Mercury Electrode towards Dioxygen Reduction in Room-Temperature Ionic Liquids, *Electrochem. Commun.* (UK), *7*, 789–795 (**2005**).

8. *M. M. Islam*, M. S. Saha, T. Okajima and T. Ohsaka, Current Oscillatory Phenomena Based on the Electrogenerated Superoxide Ion at the HMDE in Dimethylsulfoxide, *J. Electroanal. Chem.* (UK), *577*, 145–154 (**2005**).

9. *M. M. Islam*, T. Okajima and T. Ohsaka, Eccentric Phenomena at Liquid Mercury Electrode/Solution Interfaces: Upward, Downward and Circular Motions, *J. Phys. Chem. B* (USA), *110*, 8619–8625 (**2006**).

10. B. N. Ferdousi, *M. M. Islam*, M. I. Awad, T. Okajima, F. Kitamura and T. Ohsaka, Synthesis and Potentiometric Measurements of Peroxycitric Acid, *Electrochemistry* (Japan), *74*, 606–608 (**2006**).

11. A.-N. Chowdhury, S. Ferdousi, *M. M. Islam*, T. Okajima and T. Ohsaka, Arsenic Detection by Nano-Gold/Conducting Polymer-Modified Glassy Carbon Electrode, *J. Appl. Poly. Sci.* (USA), *104*, 1306–1311 (**2007**).

12. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Measurements of Differential Capacitance in Room Temperature Ionic Liquid at Mercury, Glassy Carbon and Gold Electrode Interfaces, *Electrochem. Commun.* (UK), *9*, 2370–2374 (**2007**).

13. B. N. Ferdousi, *M. M. Islam*, T. Okajima and T. Ohsaka, Electroreduction of Peroxycitric Acid Coexisting with Hydrogen Peroxide in Aqueous Solution, *Electrochim. Acta* (UK), *53*, 968–974 (**2007**).

14. *M. M. Islam*, M. T. Alam, T. Okajima and T. Ohsaka, Nonlinear Phenomena at Mercury Electrode/Room-Temperature Ionic Liquid Interfaces: Polarographic Streaming Maxima and Current Oscillation, *J. Phys. Chem. B* (USA), *44*, 12849–12856 (**2007**).

15. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Measurements of Differential Capacitance at Mercury/Room-Temperature Ionic Liquid Interfaces, *J. Phys. Chem. C* (USA), *111*, 18326–18333 (**2007**).

16. B. N. Ferdousi, *M. M. Islam*, T. Okajima and T. Ohsaka, Electrochemical, HPLC and Electrospray Ionization Mass Spectroscopic Analyses of Peroxycitric Acid Coexisting with Citric Acid and Hydrogen Peroxide in Aqueous Solution, *Talanta* (UK), *74*, 1355–1362 (**2008**).

17. *M. M. Islam* and T. Ohsaka, Roles of Ion Pairing on Electroreduction of Dioxygen in Imidazolium Cation-Based Room-Temperature Ionic Liquid, *J. Phys. Chem. C* (USA), *112*, 1269–1275 (**2008**).

18. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Ionic Liquids Structure Dependent Electrical Double Layer at Mercury, *J. Phys. Chem. C* (USA), *112*, 2601–2606 (**2008**).

19. *M. M. Islam*, T. Okajima and T. Ohsaka, In Situ CCD Video and Voltammetric Studies on Enhanced Cathodic Peak Observed during Consecutive Two One-Electron Transfer Redox Reactions at a Hanging Mercury Drop Electrode in Aprotic Solutions, *J. Electroanal. Chem.* (UK), *618*, 1–10 (**2008**).

20. *M. M. Islam*, M. T. Alam and T. Ohsaka, Electrical Double Layer Structure in Ionic Liquids: A Corroboration of the Theoretical Model by Experimental Results, *J. Phys. Chem. C* (USA), *112*, 16568–16574 (**2008**).

21. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Capacitance Measurements in a Series of Room-Temperature Ionic Liquids at Glassy Carbon and Gold Electrode Interfaces, *J. Phys. Chem. C* (USA), *112*, 16600–16608 (**2008**).

22. *M. M. Islam* and T. Ohsaka, Two-Electron Quasi-Reversible Reduction of Dioxygen at HMDE in Ionic Liquids: Observation of Cathodic Maximum and Inverted Peak, *J. Electroanal. Chem.* (UK), *623*, 147–154 (**2008**).

23. *M. M. Islam*, T. Okajima, S. Kojima and T. Ohsaka, Water Electrolysis: An Excellent Approach for the Removal of Water from Ionic Liquids, *Chem. Commun.* (UK), 5330–5332 (**2008**).

24. M. M. Hossain, *M. M. Islam*, S. Ferdousi, T. Okajima, T. Ohsaka, Anodic Stripping Voltammetric Detection of Arsenic(III) at Gold Nanoparticles-Modified Glassy Carbon Electrodes Prepared by Electrodeposition in the Presence of Various Additives, *Electroanalysis* (USA), *20*, 2435–2441 (**2008**).

25. *M. M. Islam*, T. Imase, T. Okajima, M. Takahashi, Y. Niikura, N. Kawashima, Y. Nakamura and T. Ohsaka, Stability of Superoxide Ion in Imidazolium Cation-Based Ionic Liquids, *J. Phys. Chem. A* (USA), *113*, 912–916 (**2009**).

26. *M. M. Islam*, M. T. Alam, T. Okajima and T. Ohsaka, Electrical Double Layer Structure in Ionic Liquids: An Understanding of the Unusual Capacitance-Potential Curve at Non-Metallic Electrode, *J. Phys. Chem. C* (USA), *113*, 3386–3389 (**2009**).

27. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Electrical Double Layer in Mixtures of Room-Temperature Ionic Liquids, *J. Phys. Chem. C* (USA), *113*, 6596–6601 (**2009**).

28. B. N. Ferdousi, *M. M. Islam*, T. Okajima, L. Mao and T. Ohsaka Enhanced Catalytic Reduction of Oxygen at Tantalum Deposited Platinum Electrode, *Chem. Commun.* (UK), *46,* 1165–1167 (**2010**).

29. *M. M. Islam*, B. N. Ferdousi, T. Okajima and T. Ohsaka, Liquid Chromatographic Separation and Simultaneous Analyses of Peroxycitric Acid, Citric Acid and Hydrogen Peroxide Coexisting in the Equilibrium Mixture, *J. Chrom. Sci.* (USA), *49*, 40–45 (**2011**).

30. M. T. Alam, J. Masud, *M. M. Islam*, T. Okajima and T. Ohsaka, Differential Capacitance at Au(111) in 1-Alkyl-3-Methylimidazolium Tetrafluoroborate Based Room-Temperature Ionic Liquids, *J. Phys. Chem. C* (USA), *115* (40), 19797-19804 (**2011***): DOI:10.1021/jp205800x*.

31. S. Sultana, S. Saha, M. M. Islam, M. M. Rahman, M. Y. Mollah, M. A. B. H. Susan, Electrodeposition of Nickel from Reverse Micellar Solutions of Cetyltrimethylammonium Bromide, *J. Electrochem. Soc.* (*USA)*, 160 (11), D524-D529 (**2013**): *DOI:10.1149/2.039311jes*.

32. J. J. Keya, M. M. Islam, M. M. Rahman, M. Y. A. Mollah, M. A. B.H. Susan, Effect of a Water Structure Modifier on the Aqueous Electrochemistry of Supramolecular Systems: Redox-Active versus Conventional Surfactants, *J. Electroanal. Chem.*, 712, 161–166 (**2014**). *DOI:10.1016/j.jelechem.2013.11.019.*

33. S. Saha, S. Sultana, M. M. Islam, M. M. Rahman, M. Y. A. Mollah, M. A. B.H. Susan, Electrodeposition of Cobalt with tunable morphology from Reverse Micellar Solution, Ionics (**2014**), DOI 10.1007/s11581-014-1069-4

Proceedings and Extended Abstracts

1. *M. M. Islam*, T. Okajima and T. Ohsaka, Visualization of Polarographic Streaming Phenomena at a Hanging Mercury Drop Electrode, *Proc. Bang. Chem. Congr. 2004*, **2006**, 265–270.
2. *M. M. Islam*, T. Okajima and T. Ohsaka, Visualization of Streaming Phenomena at a Hanging Mercury Drop Electrode/Solution Interface and Mechanism of Current Oscillation, *The 5th Asian Conference on Electrochemistry (ACEC 2005)*, Shanghai, China, **2005**, O-1-2.
3. T. Ohsaka, M. T. Alam, J. Masud, *M. M. Islam* and T. Okajima, Electrical Double Layer Structure in Room-Temperature Ionic Liquids, *The 3rd Asian Conference on Electrochemical Power Sources (ACEPS-3)*, Seoul, Korea, **2008**, 53-55.

Conference, since 2002 ~

1. *M. M. Islam*, M. S. Saha, T. Okajima, F. Kitamura and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 98. Current Oscillatory Phenomena during the Redox Reaction of O_2 / $O_2^{\bullet-}$ Couple at HMDE in DMSO, 2002 Autumn Meeting of the Electrochemical Society of Japan, September 12~13, **2002**, Tokyo, Japan, Abstract No. 2 I26.
2. *M. M. Islam*, M. S. Saha, T. Okajima, F. Kitamura and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 107. Current Oscillatory Phenomena Based on Electrogenerated Superoxide Ion, 2003 Spring Meeting of the Electrochemical Society of Japan, April 2~3, **2003**, Tokyo, Japan. Abstract No. 1 B17.
3. *M. M. Islam*, T. Okajima, F. Kitamura and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 120. Polarographic Streaming Phenomena and Anodic Current Oscillation at Stationary Mercury Electrode in Aprotic Media, 2004 Spring Meeting of the Electrochemical Society of Japan, March 25~26, Yokohama, Japan, Abstract No. 2 Q08.
4. *M. M. Islam*, T. Okajima and T. Ohsaka, Visualization of Polarographic Streaming Phenomena and Mechanism of Current Oscillation at HMDE, Bangladesh Chemical Congress 2004, December 9~12, 2004, Dhaka, Bangladesh, Abstract No. OP B12.
5. *M. M. Islam*, B. N. Ferdousi, T. Okajima and T. Ohsaka, Catalytic Reduction of Dioxygen at HMDE in Room-Temperature Ionic Liquids, Bangladesh Chemical Congress 2004, December 9~12, Dhaka, Bangladesh, Abstract No. PP B1.
6. *M. M. Islam*, T. Okajima and T. Ohsaka, Visualization of Streaming Phenomena at a Hanging Mercury Drop Electrode/Solution Interface and Mechanism of Current Oscillation, The 5th Asian Conference on Electrochemistry (ACEC 2005), May 9~12, 2005, Shanghai, China. Abstract No. O-1-2.
7. B. N. Ferdousi, *M. M. Islam*, T. Okajima, F. Kitamura, and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 129. Catalytic Reduction of Dioxygen at HMDE in Room-Temperature Ionic Liquid, 2005 Spring Meeting of the Electrochemical Society of Japan, April 1~3, Kumamoto, Japan, Abstract No. 3 A07.
8. *M. M. Islam*, T. Okajima, and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 131. Current Oscillatory Phenomena Based on Redox Reactions at HMDE, 2005 Spring Meeting of the Electrochemical Society of Japan, April 1~3, Kumamoto, Japan. Abstract No. 1 B21.
9. *M. M. Islam*, T. Okajima, and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 132. Visualization of Polarographic Streaming Phenomena and Mechanism of Current Oscillation at HMDE, 2005 Spring Meeting of the Electrochemical Society of Japan, April 1~3, Kumamoto, Japan, Abstract No. 1 B22.
10. *M. M. Islam*, T. Okajima, and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 132. Visualization of Polarographic Streaming Phenomena and Mechanism of Current Oscillation at HMDE, 2005 Spring Meeting of the Electrochemical Society of Japan, April 1~3, Kumamoto, Japan, Abstract No. 1 B22.

11. B. N. Ferdousi, *M. M. Islam*, T. Okajima, F. Kitamura, and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 137. Preparation and Electrochemical Characterization of Peroxycitric Acid, 2005 Autumn Meeting of the Electrochemical Society of Japan, September 8~9, Chiba, Japan, Abstract No. 1 H08.

12. A.-N. Chowdhury, S. Ferdousi, *M. M. Islam*, T. Okajima and T. Ohsaka, Arsenic Detection by Nano-Gold/Polymer Modified Glassy Carbon Electrode, IUPAC Second International Symposium on Sustainable Chemistry, January 10~13, 2006, New Delhi, India.

13. M. M. Hossain, S. Ferdousi, *M. M. Islam*, A.-N. Chowdhury, T. Okajima and T. Ohsaka Electrochemical Detection of Arsenic (III) at Gold Nanoparticles Modified Glassy Carbon Electrodes Using Anodic Stripping Voltammetry, Bangladesh Chemical Congress 2006, March 9~11, 2007, Dhaka, Bangladesh, Abstract No. OP A1, 17.

14. *M. M. Islam*, T. Okajima, and T. Ohsaka, Enhanced Cathodic Peak Observed during Consecutive Redox Reactions at HMDE in Aprotic Solutions, 2006 Spring Meeting of the Electrochemical Society of Japan, April 1~3, Tokyo, Japan, Abstract No. 2 B07.

15. B. N. Ferdousi, *M. M. Islam*, T. Okajima, F. Kitamura, and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 139. Preparation and Characterization of Peroxycitric Acid, 2006 Spring Meeting of the Electrochemical Society of Japan, April 1~3, Tokyo, Japan, Abstract No. 1 F23.

16. B. N. Ferdousi, M. M. Islam, T. Okajima, F. Kitamura, and T. Ohsaka, Synthesis and Electrochemical Characterization of Peroxycitric Acid, 30th Conference on Electro-organic Chemistry: Organic Electron Transfer Chemistry, 2006, June 22~23, Yokohama, Japan, Abstract No. P 21.

17. *M. M. Islam*, T. Okajima, and T. Ohsaka, Eccentric Phenomena at Liquid Mercury Electrode/Solution Interface: Upward, Downward and Circular Motions, 2006 Autumn Meeting of the Electrochemical Society of Japan, September 14~15, Kyoto, Japan, Abstract No. 1H 01.

18. *M. M. Islam*, T. Imase, B. N. Ferdousi, M. T. Alam, T. Okajima, M. Takahashi, Y. Niikura, N. Kawashima, F. Kitamura and T. Ohsaka, Peculiarities Observed during Electrochemical Redox Reactions in Room-Temperature Ionic Liquids, 2nd International Symposium on Organic Electron Transfer Chemistry (ISOETC-2007), January 7~10, 2007, Yokohama, Japan.

19. B. N. Ferdousi, *M. M. Islam*, T. Okajima and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 155. Characterization of Peroxycitric Acid Coexisting with Citric Acid and Hydrogen Peroxide in Aqueous Solutions with Electrochemical, HPLC and Electrospray Ionization Mass Spectroscopic Analyses, 2007 Autumn Meeting of the Electrochemical Society of Japan, September 19~20, Tokyo, Japan, Abstract No. 2E 08.

20. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Measurements of Differential Capacitances in Room-Temperature Ionic Liquid at Mercury, Glassy Carbon and Gold Electrode Interfaces, 2007 Autumn Meeting of the Electrochemical Society of Japan, September 19~20, Tokyo, Japan, Abstract No. 2K 17.

21. M. R. Rahman, M. M. Hossain, *M. M. Islam*, T. Okajima and T. Ohsaka, Anodic Stripping Voltammetric Detection of As(III) Using Au Nanoparticles-Modified Glassy Carbon Electrodes Without Interference of Copper(II) Ion, 2007 Autumn Meeting of the Electrochemical Society of Japan, September 19~20, Tokyo, Japan, Abstract No. 2K 34.

22. *M. M. Islam* and T. Ohsaka, Bioelectrochemistry of Molecular Oxygen and Reactive Oxygen Species 157. Roles of Ion Pairing on Electroreduction of Dioxygen in Imidazolium-Cation-Based Room-Temperature Ionic Liquids, 2008 Spring Meeting of the Electrochemical Society of Japan, March 29~31, Tokyo, Japan, Abstract No. 1I 30.

23. M. T. Alam, *M. M. Islam*, T. Okajima and T. Ohsaka, Measurements of Differential Capacitance at Mercury / Room-Temperature Ionic Liquid Interfaces, 2008 Spring Meeting of the Electrochemical Society of Japan, March 29~31, Tokyo, Japan, Abstract No. 1I 29.

24. M. R. Rahman, *M. M. Islam*, T. Okajima and T. Ohsaka, Cystein Modified Polycrystalline Au Electrode for Anodic Stripping Voltammetric Detection of As(III) Without Interference of Copper(II) Ion, 2008 Spring Meeting of the Electrochemical Society of Japan, March 29~31, Tokyo, Japan, Abstract No. 1l 19.

25. *M. M. Islam*, J. Masud, M. T. Alam, T. Okajima and T. Ohsaka, Roles of Ion Pairing on Electroreduction of Dioxygen in Imidazolium-Cation-Based Room-Temperature Ionic Liquids, The 6th Asian Conference on Electrochemistry (ACEC 2008), Taipei, May 11~14, 2008.

26. M. T. Alam, J. Masud, *M. M. Islam*, T. Okajima and T. Ohsaka, Measurements of Differential Capacitance at Electrode/Room-Temperature Ionic Liquids Interfaces, Pacific Rim Meeting on Electrochemical and Solid-State Science (PRiME 2008), Honolulu, Hawaii, USA, October 12~17, 2008.

27. T. Ohsaka, M. T. Alam, J. Masud, *M. M. Islam* and T. Okajima, Electrical Double Layer Structures in Room-Temperature Ionic Liquids, The 3rd Asian Conference on Electrochemical Power Sources (ACEPS-3), Seoul, Korea, 10~14 November, 2008.

28. *M. M. Islam,* T. Okajima, D. Zhang, S. Kojima and T. Ohsaka, An Excellent Approach for the Removal of Water from Ionic Liquids, 216th ECS meeting, Vienna, Austria, 04-09 October, 2009. Abstract No. 3087.

30. M. Rokonujjaman, M. Sharif, *M. M. Islam*, M. A. B. H. Susan and M. Y. A. Mollah, Preparation of Nickel Nanoclusters in Aqueous Solutions using Poly (Vinyl Alcohol) as a Capping Agent, International Workshop on Nanotechnology, 21-23 Sept., 2012, Dhaka, Bangladesh. Abstract No. PO 20.

31. S. Sultana, S. Saha, M. Y. A. Mollah, M. A. B. H. Susan and *M. M. Islam*, Electrodeposition of Metallic Nickel Nanoparticels on Copper Substrate from Aqueous Reverse Micellar Solutions, International Workshop on Nanotechnology, 21-23 Sept., 2012, Dhaka, Bangladesh. Abstract No. PO 35.

32. S. Saha, *M. M. Islam*, M. Y. A. Mollah, and M. A. B. H. Susan, Electrodeposition of Nano-Dimensional Cobalt from Aqueous Reverse Micellar and Ionic Liquids Solutions, International Workshop on Nanotechnology, 21-23 Sept., 2012, Dhaka, Bangladesh. Abstract No. PO 40.

33. Z. Zannat, *M. M. Islam*, M. Y. A. Mollah, and M. A. B. H. Susan, International Workshop on Nanotechnology, 21-23 Sept., 2012, Dhaka, Bangladesh. Abstract No. PO 41.

34. T. I. Farhana, M. A. B. H. Susan, *M. M. Islam* and M. Y. A. Mollah, Electrochemical Reduction of Dioxygen: Reaction of Reactive Oxygen Species Generated In-Situ with Methylene Blue in Aqueous Solution, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. OP C10.

35. M. B. Yeamin, A.-N. Chowdhury, and *M. M. Islam*, Biodegradable Nanomaterials as the Efficient Adsorbent for the Removal of Organic Dyes from Aqueous Solution, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. PP 61.

36. S. Saha, M. Y. A. Mollah, M. A. B. H. Susan and *M. M. Islam*, Recovery of Methylene Blue Adsorbed on Starch-Based Materials, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. PP 62.

37. S. Sultana, S. Saha, *M. M. Islam*, M. Y. A. Mollah and M. A. B. H. Susan, Electrodeposition of Metallic Nickel from Reverse Micellar Solutionsm of Cetyltrimethylammonium Bromide, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. PP 63.

38. S. Saha, *M. M. Islam*, M. Y. A. Mollah, and M. A. B. H. Susan, Electrodeposition of Cobalt with Tunable Morphology From Reverse Micellar and Non-chloroaluminate Ionic Liquid Solutions, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. PP 64.

39. J J. Keya, *M. M. Islam*, M. Y. A. Mollah, and M. A. B. H. Susan, Effect of A Water Structure Modifier on the Electrochemistry of A Redox-Active Surfactant Distinguishing from A Conventional One, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. PP 66.

40. M. Rokonuzzaman, M. S. Hossain, M. M. Islam, M. A. B. H. Susan, M .Y. A. Mollah, A Facile Route to The Preparation of Nickel Nanoparticles Using Poly(Vinyl Alcohol) as a Capping Agent. Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh.

41. S. Saha, M .Y. A. Mollah, M. A. B. H. Susan, M. M. Islam, Recovery of Methylene Blue Adsorbed on Starch-Based Materials, Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh. Abstract No. PP 64.

42. T. I. Farhana**,** M. Y. A. Mollah, M. A. B. H. Susan, and *M. M. Islam*, Electrochemical Reduction of Dioxygen: Reaction of Reactive Oxygen Species Generated In-situ with Methylene Blue in Aqueous Solution Bangladesh Chemical Congress 2012 (BCC 2012), 07-09 December, 2012, Dhaka, Bangladesh.

43. S. Sultana**,** *M. M. Islam,* M. Y. A. Mollah, and M. A. B. H. Susan Electrodeposition of Cobalt with Tunable Morphology from Aqueous, Reverse Micellar and HydrophilicIonic Liquid Solutions, International Bose Conference 2013, February 04, 2013, Dhaka, Bangladesh.

44. *M. M. Islam*, Exploring Functional Electrode Materials for the Treatment of Wastewater Containing Organic Dye (**Invited Talk**), International Conference on Advances in Material Science (ICAMS 2013), 23-24 October, Sree Sankara College Kalady, Kerala, India.

45. H. S. Roy**,** M. Y. A. Mollah, M. A. B. H. Susan, and *M. M. Islam*, Characterization of Chemically Synthesized Polyaniline-Manganese Dioxide Composite Modified Glassy Carbon Electrode as an Electrochemical Capacitor, First National Conference of Bangladesh Crystallographic Association (BCA-2013), **05 December, 2013**, Dhaka, Bangladesh.

46. S. Sultana**,** S. Saha, M. Y. A. Mollah, *M. M. Islam*, and M. A. B. H. Susan, Anisotropy of Metallic Nickel and Cobalt Deposited Tuned Electrochemically from Aqueous, Reverse Micellar and Ionic Liquid Media, First National Conference of Bangladesh Crystallographic Association (BCA-2013), **05 December, 2013**, Dhaka, Bangladesh.

47. T. I. Farhana**,** M. Y. A. Mollah, M. A. B. H. Susan, and *M. M. Islam*, Capacitive Behavior of Electrochemically Prepared Polyaniline-Manganese Dioxide Composite Modified Glassy Carbon Electrode in Aqueous Solution, First National Conference of Bangladesh Crystallographic Association (BCA-2013), **05 December, 2013**, Dhaka, Bangladesh.

48. H. S. Roy**,** M. Y. A. Mollah, M. A. B. H. Susan, and *M. M. Islam*, Preparation, Characterization and Catalytic Application of Polyaniline-Manganese Dioxide Composite Modified Carbon Electrodes, 36th Annual Conference of Bangladesh Chemical Society, **01 March, 2014**, Dinajpur, Bangladesh. Abstract No. OP B09.

49. J J. Keya, *M. M. Islam*, M. Y. A. Mollah, and M. A. B. H. Susan, Ionic Liquids As Additives for Supramolecular Interaction with Nonionic Surfactants in Aqueous Medium, 36th Annual Conference of Bangladesh Chemical Society, **01 March, 2014**, Dinajpur, Bangladesh. Abstract No. OP B10.

50. S. Sultana**,** M. Y. A. Mollah, *M. M. Islam*, and M. A. B. H. Susan, Electrochemical Capacitive Behavior of Nickel Modified Copper Electrode Prepared by Electrodeposition Method from Aqueous, Reverse Micellar Solutions and Ionic Liquid Media, 36th Annual Conference of Bangladesh Chemical Society, **01 March, 2014**, Dinajpur, Bangladesh. Abstract No. OP C03.

51. S. Saha, M.Y.A. Mollah, M. A. B. H. Susan, M. M. Islam, Electrosorption of Organic Dyes from Aqueous Solution, 36th Annual Conference of Bangladesh Chemical Society, **01 March, 2014**, Dinajpur, Bangladesh. Abstract No. OP C04.

52. T. I. Farhana**,** M. Y. A. Mollah, M. A. B. H. Susan, and *M. M. Islam*, Electrocatalytic Reduction of Oxygen at Polyaniline-Manganese Dioxide Composite/Glassy Carbon Modified Electrode in Aqueous Solution, 36th Annual Conference of Bangladesh Chemical Society, **01 March, 2014**, Dinajpur, Bangladesh. Abstract No. OP C05.

Membership of Scientific/Professional Organizations

- Bangladesh Chemical Society, Life Member # 1358, 10/11 Eastern Plaza, Dhaka-1205, Bangladesh
- Dhaka University Alumni Association, Life Member, Dhaka University
- Registered Graduate, Dhaka University
- Bangladesh Association for Advancement of Science (BAAS), Life Member # 845, Dhaka, Bangladesh
- Bangladesh Crystallographic Association, Life Member # 10, Dhaka, Bangladesh

Reviewer of Scientific Journals

- Journal of Physical Chemistry, American Chemical Society, USA
- Journal of Applied Polymer Science, Willey, USA
- Journal of Hazardous Materials, Elsevier, UK

National Duties/Other Activities

- Contributed as a writer of Chemistry Textbook (Class IX-X), 2012, National Curriculum and Textbook Board, Dhaka, Bangladesh.
- Worked as a Member of Development of Curriculum of Chemistry Textbook (Class XI-XII), National Curriculum and Textbook Board, Dhaka, Bangladesh, 2012.
- Worked as an Assistant Provost (Feb., 2010-Jun., 2010), Dr M A Rashid Hall, BUET, Dhaka.
- Worked as the Joint-Secretary, Organizing Committee, Bangladesh Chemical Congress (BCC2012), Bangladesh Chemical Society, Dhaka, Bangladesh..
- Working as an Assistant House Tutor, Fazlul Haq Muslim Hall, Dhaka University, Dhaka, Aug. 2012 ~ present.
- Working as the executive of management committee (terms: 2012 and 2013), Institute of Chemists and Chemical Technologists, Bangladesh, Bangladesh Chemical Society, Dhaka, Bangladesh.
- Chaired an Oral Presentation Session, ICAMS 2013, Kerala, India.

Country Visited

Japan, Malaysia, India, China and Germany