



## **CURRICULUM VITAE**

### **PERSONAL DETAILS**

Name : MD AHSAN HABIB  
Title : Professor  
Gender : Male  
Date of Birth : January 08, 1969  
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Permanent Address : N. Baiguni, P.O.: Sonatola,  
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Citations: 1145 (Google-based)

### **ACADEMIC QUALIFICATIONS**

2004 : Doctor of Philosophy (PhD) in Analytical and Bioanalytical Chemistry  
Saga University, Japan (Supervisor: Masaaki Tabata)  
2001 : M.Phil. in Physical Chemistry  
Bangladesh University of Engineering and Technology Bangladesh  
1991 (held in 1995) : M.Sc. (1<sup>st</sup> class) in Physical Chemistry  
University of Dhaka, Bangladesh  
1990 (held in 1993) : Bachelor of Science (1<sup>st</sup> Class Hons.) in Chemistry  
University of Dhaka, Bangladesh

### **EMPLOYMENT**

1. May 2014 – Current, Full Professor, Department of Chemistry, University of Dhaka, Bangladesh
2. November 2009 – April 2014, Associate Professor, Department of Chemistry, University of Dhaka, Bangladesh
3. May 2005 – October 2009, Assistant Professor, Department of Chemistry, University of Dhaka, Bangladesh
4. September 1996 – April 2005, Lecturer, Department of Chemistry, Khulna University of Engineering and Technology, Bangladesh
5. August 1995-August 1996, Bose Research Fellow, University of Dhaka, Bangladesh

## **AWARD AND FELLOWSHIP**

1. 2021, Research grant from the University of Dhaka, Bangladesh.
2. 2019-2020, Research grant from the Ministry of Science and Technology, Bangladesh.
3. 2017-2018, Research grant from the Ministry of Science and Technology, Bangladesh.
4. 2014-2015, Research grant from the Ministry of Science and Technology, Bangladesh.
5. 2008-2009, Research grant from MEXT, Japan.
6. 2016, JSPS Invitation fellowship for 10 months, The University of Tokyo, Japan. Development of 3D imaging system of secondary ion mass spectrometry using shave-off method.
7. 2011-2013, JST fellowship, the University of Yamanashi, Japan. Development of new ion sources for mass spectrometer.
8. 2009-2010, Global-Center of Excellence (G-COE) Fellow, Chiba University, Japan. Investigation of electronic properties of adsorbed DNA bases on HOPG studied by UPS, MAES and DFT calculation.
9. 2008-2009, Global-Center of Excellence (G-COE) Fellow, Yokohama National University, Japan. Monitoring and source identification of POPs using passive air samplers across Japan, Korea and China.
10. 2007-2008, Center of Excellence (COE) Fellow, Chiba University, Japan. Investigation of electronic properties of adsorbed DNA bases on HOPG studied by UPS, MAES and DFT calculation.
11. October 2004-March 2005, Research Fellow, Saga University, Japan. Estimation of heavy metals in sediments of Ariake-Bay by ICP-OES, Saga-Fukuoka, Japan.
12. October 2001-September 2004, MEXT scholar, Saga University, Japan. Kinetics and mechanism of gold(III)porphyrin and its interaction with DNA and toxicities on trypanosomes.

## **RECOGNITION & ACHIEVEMENT**

1. June 27, 2021, Invited Speaker on “Challenges and Strategies of Solid Waste Management in Bangladesh”. 16th International Conference on Waste Management and Technology, June 25-28, 2021, Beijing, China.
2. June 28, 2021, Invited Speaker on “Fabrication of mass-spectrometry-based environmental monitoring techniques”, Mahasarakham University, Thailand. MRCES 2021-Online Seminar Series.
3. March 12, 2021, Invited Speaker On “Fabrication of mass-spectrometry-based environmental monitoring methods”, International Conference on Science and Technology for Celebrating the Birth Centenary of Bangabandhu (ICSTB-2021), BCSIR, March 11-12, 2021, Dhaka, Bangladesh.
4. April 2021-March 2023, Editorial Board of Journal of Materials in Life Sciences (JOMALISC).
5. Visiting Professor, Guangzhou Institute of Geochemistry, Guangzhou, China.
6. Visiting Professor, Ningbo University, Ningbo, China.
7. Collaborative research on “fabrication of mass spectrometry-based environmental monitoring techniques” with Hexin Mass Spectrometry Co. Ltd., Guangzhou, China.

## **PROFESSIONAL MEMBERSHIP**

1. Member, American Chemical Society (Membership: 31136148)
2. Life Member, Bangladesh Chemical Society (Membership: LM-1001).
3. Life Member, Chemistry Alumni Association of the University of Dhaka (LM-49).

## **JOURNALS' EDITOR**

Editor, **Frontiers in Chemistry (Indexing: SCI and Scopus; Impact Factor: 5.221)**, Special Issue on Ambient Ionization Mass Spectrometry: From Fundamentals to Real-life Applications

## **REVIEWER OF JOURNALS**

1. Reviewer Analytical Chemistry
2. Reviewer Desalination and water treatment
3. Reviewer Carbohydrate polymers

4. Reviewer Journal of Photochemistry and Photobiology B: Biology
5. Reviewer Solid State Sciences
6. Reviewer Chiyen Mai Journal of Sciences
7. Reviewer WebPub Journal of Scientific Research
8. Reviewer International Journal of Environmental Research and Public Health
9. Reviewer BioMed Research International
10. Reviewer Fibers and Polymers
11. Reviewer Medicinal Chemistry Research
12. Reviewer International Journal of Environmental Science and Technology
13. Molecules

### List of publications

[Total impact factor: 188.902 (3.373/paper)]

1. D. S. Qais, M. N. Islam, M.H.D. Othman, H.N.M.E. Mahmud, M.E. Quayum, M.A. Islam, I. M.I. Ismail, A. Habib\*, Synthesis and characterization of nano-zinc oxide: adsorption of acid blue 92 dye, isotherms, thermodynamics and kinetics. Arab. J. Chem. (accepted) (IF: 5.165; Q1).
2. A. Nargis, A. Habib\*, R. Nigar, X. Liu, S. Zhao, G. Zhang, M. Cai, Monitoring of atmospheric polycyclic aromatic hydrocarbons by polyurethane foam-passive air samplers in Bangladesh: source apportionment and health risk assessment. Environ. Pollut. (Under review) (IF: 8.071; Q1).
3. M. E. Morales-McDevitt<sup>1</sup>, M. Dunn, A. Habib, S. Vojtal, J. Becanova, R. Lohmann, Poly- and perfluorinated alkyl substances in air and water from Dhaka, Bangladesh. Environ. Toxicol. Chem. (accepted) (IF: 3.742; Q1/Q2).
4. A.N. M. Al-Razee, H. B. Harun, A. K. Jhumur, F. K. Ferdousi, M. Zulfajri, A. Habib\*, Assessment of Physicochemical Parameters of Surface Water of the Karnaphuli River, Bangladesh towards identification of potential sources. Pak. J. Anal. Environ. Chem. (Under review) (Scopus Indexing).
5. A. Nargis, A. Habib\*, M. N. Islam, K. Chen, M. S. I. Sarker, A. N. M. Al-Razee, W. Liu, G. Liu, M. Cai, Source identification, contamination status and health risk assessment of heavy metals from road dusts in Dhaka, Bangladesh. J. Environ. Sci. (accepted) (IF: 5.565; Q1).
6. H. Hong, A. Habib\*, L. Bi, L. Wen, Gas phase ion-molecule reactions of nitroaromatic explosive compounds studied by mass spectrometry. Talanta, 236 (2022) 122834 (IF: 6.057; Q1).
7. A. Habib\*, S. Serniabad, M. S. Khan, R. Islam, M. Chakraborty, A. Nargis, M. E. Quayum, M. A. Alam, V. Rapozzi, M. Tabata, Kinetics and mechanism of formation of nickel(II)porphyrin and its interaction with DNA in aqueous medium. J. Chem. Sci. 133 (2021) 83 (IF: 1.573; Q2).
8. A. Habib\*, L. Bi, L. Wen, Simultaneous detection and quantification of explosives by a modified hollow cathode discharge ion source. Talanta, 233 (2021) 122596 (IF: 6.057; Q1).
9. V. Rapozzi, A. Juarranz, A. Habib, I. Alojz, R. Strgar, Is haem the real target of COVID-19? Photodiagnosis Photodyn Ther., 35 (2021)102381 (IF: 3.631; Q2).
10. A. Habib\*, L. Bi, H. Hong, L. Wen, Challenges and Strategies of Chemical Analysis of Drugs of Abuse and Explosives by Mass Spectrometry. Front. Chem., 8 (2021) 598487 (IF: 5.221; Q1).
11. A. Nargis, A. Habib\*, H.-O-. Rashid, H.B. Harun, M.S.I. Sarker, R. Jin, G. Liu, W. Liu, A.N.M. Al-Razee, K. Chen, M. Cai, Status of multielement in water of the river Buriganga, Bangladesh: Aquatic chemistry of metal ions in polluted river water. Emerging Contaminants, 7 (2021) 99 (IF: 11.864; Q1).
12. A.N.M. Al-Razee, M. N. Abser, M. A. Mottalib, A. Nargis, A. K. Jhumur, M. M. Uddin Thakur, W. Liu, S. Poddar, M. S. I. Sarker, A. Habib\*, Assessment of Heavy Metal Contamination in Sediments of the Shitalakhya River, Bangladesh. Pak. J. Anal. Environ. Chem. 22 (2021) 84-99 (Scopus indexing).
13. S. A. Alftessi, M. H. D. Othman, M. R. Adam, T. M. Farag, A. F. Ismail, M. A. Rahman, J. Jaafar, A. Habib, Y. O. Raji, S. K. Hubadillah, Novel silica sand hollow fibre ceramic membrane for oily wastewater treatment. J. Environ. Chem. Eng., 9 (2021) 104975 (IF: 5.909; Q1).
14. L. Bi, A. Habib\*, L. Chen, T. Xu, L. Wen, Ultra-trace level detection of nonvolatile compounds studied by ultrasonic cutter blade coupled with dielectric barrier discharge ionization-mass spectrometry. Talanta 222 (2021) 121673 (IF: 6.057; Q1).
15. M. N. Islam, M. O. Faruk, M. N. Rana, A. K. Das, A. Habib, Preparation and Evaluation of Rice Bran-Modified Urea Formaldehyde as Environmental Friendly Wood Adhesive. Global Challenges, 5 (2021) 2000044 (IF: 3.847; Q2).
16. A. Habib\*, R. Islam, M. Chakraborty, S. Serniabad, M.S. Khan, D.S. Qais, M.E. Quayum, M.A. Alam, I.M.I. Ismail, M. Tabata, Kinetics and mechanism of incorporation of zinc(II) into tetrakis(1-methylpyridium-4-yl)porphyrin in aqueous solution. Arab. J. Chem. 13 (2020) 6552 (IF: 5.165; Q1).
17. M. Zulfajri<sup>1</sup>, H. N. Abdelhamid, S. Sudewi, S. Dayalan, A. Rasool, A. Habib, G. G. Huang, Plant Part-Derived Carbon Dots for Biosensing. biosensors 10 (2020) 68 (IF: 5.519; Q2).

18. R. Jin, J. Fu, M. Zheng, L. Yang, A. Habib, C. Li, G. Liu. Polychlorinated Naphthalene Congener Profiles in Common Vegetation on the Tibetan Plateau as Biomonitoring of Their Sources and Transportation. *Environ Sci Technol.* 18 (2020) 2314 (IF: 9.028; Q1).
19. X. Liu R. Jin, G. Liu, Bu, M. Zheng, G. Lammel, J. Fu, L. Yang, R. Li, A. Habib, Y. Yang. New classes of organic pollutants in the remote continental environment - chlorinated and brominated polycyclic aromatic hydrocarbons on the Tibetan Plateau. *Environ. Int.* 137 (2020) 105574 (IF: 9.621; Q1).
20. A. Habib\*, T. Hara, A. Nargis, E. Nyarko, M. Tabata. DNA Cleavage and Trypanosomes Death by a Combination of Alamar Blue and Au(III) . *J. Chem. Soc. Pak.* 42 (2020) 141 (IF: 0.300; Q3).
21. M.N. Islam, A.A. Liza, M.O. Faruk, A. Habib, S. Hiziroglu, Formulation and characterization of tamarind (*Tamarindus indica* L.) seed kernel powder (TKP) as green adhesive for lignocellulosic composite industry. *Int. J. Biol. Macromol.* 142 (2020) 879 (IF: 6.953; Q1).
22. A. Nargis, H.-O.-Rashid, A. K. Jhumur, M. E. Haque, M. N. Islam, A. Habib\*, M. Cai, Contamination status and human health risk assessment of toxic elements in fish species collected from the river Buriganga, Bangladesh. *Human Ecol. Risk Assess. An Inter. J.* (2019) 120 (IF: 2.300; Q2).
23. A. Nargis, S. Sultana, M. J. Raihan, M. E. Haque, A. B. M. R. Sadique, M. S. I. Sarkar, M. M. Un-Nabie, W. Zhai, M. Cai, A. Habib\*, Multielement analysis in sediments of the River Buriganga (Bangladesh): potential ecological risk assessment. *Inter. J. Environ. Sci. Technol.* 16 (2019) 1663 (IF: 2.860; Q2/Q3).
24. R. Nadarajan, W. A. W. A. Bakar, A. Habib, N. A. Eleburuikie, Structure-Activity Relationship of TiO<sub>2</sub> Based Trimetallic Oxide Towards 1,2-Dichlorobenzene Photodegradation: Influence of Preparation Method and Its Mechanism. *Chem. Eng. J.* 351 (2018) 708 (IF: 13.273; Q1).
25. A. Habib\*, A. Nargis, L. Bi, P. Zhao, W. Luhong, Analysis of amphetaminic drug compounds in urine by headspace-dielectric barrier discharge ionization-mass spectrometry, *Arab. J. Chem.* 13 (2020) 2162 (IF: 5.165; Q1).
26. A. Habib\*, M. Furushima, H. Asakura, S.-H. Kang, Y. Kim, B. Tomiyasu, M. Owari, Angular distribution of secondary ions under FIB-shave-off condition-toward development of three-dimensional secondary ion image system-, *J. Surf. Anal.* 24 (2017) 159.
27. S.- H. Kang, M. Furushima, H. Asakura, A. Habib, Y. Kim, B. Tomiyasu, M. Owari, Development of new shave-off simulation method considering the angle between primary ion beam and sample surface, *J. Surf. Anal.* 24 (2017) 164.
28. D.T. Usmanov, S. Ninomiya, L.C. Chen, S. Saha, M.K. Mandal, Y. Sakai, R. Takaishi, A. Habib, K. Hiraoka, K. Yoshimura, S. Takeda, H. Wada, H. Nonami, Desorption in mass spectrometry, *Mass Spectrometry, J Soc. Mass. Specrom.* (review article, *Mass Spectrom (Tokyo)* 2017; 6(2): S0059) (IF: 1.400).
29. A. Hossain, M. J. Raihan, A. Nargis, I. M. I. Ismail, A. Habib\*, A. J. Mahmood, Kinetics of degradation of Eosin Y by one of the advanced oxidation processes (AOPs)-Fenton's process, *Am. J. Anal. Chem.* 7 (2016) 863.
30. A. Habib, L. C. Chen, K. Hiraoka, Detection of explosives using a hollow cathode discharge ion source, *Rapid Commu. Mass Spectrom.* 29 (2015) 601 (IF: 2.419; Q2).
31. A. Habib\*, M. Rab, M. Bahadur, I.M.I. Ismail, Thermally treated local sand is an alternative of fly ash in preparation of composite cement, *Inter. J. Eng. Res. Tech.*, 3 (2014) 966.
32. S. Islam, S. K. Bormon, M. Nadim, K. Hossain, A. Habib\*, T. S. A. Islam, Photocatalytic Degradation of p-Nitrophenol (PNP) in Aqueous Suspension of TiO<sub>2</sub>, *Am. J. Anal. Chem.* 5 (2014) 483.
33. A. Habib, S. Ninomiya, L. C. Chen, D. Usmanov, K. Hiraoka, Desorption Mass Spectrometry for Nonvolatile Compounds Using an Ultrasonic Cutter, *J. Am. Soc. Mass Spectrom.* 25 (2014) 1177 (IF: 3.109; Q1).
34. M. Muslim, A. Habib\*, T. S. A. Islam, I. M. I. Ismail, A. J. Mahmood, Decolorization of Diazo Dye Ponceau S by Fenton Process, *Pak. J. Anal. Environ. Chem.* 14 (2013) 44.
35. A. Habib, D. Usmanov, S. Ninomiya, L. C. Chen, K. Hiraoka, Alternative current corona discharge/atmospheric pressure chemical ionization (APCI) for mass spectrometry, *Rapid Commu. Mass Spectrom.* 27 (2013) 2760 (IF: 2.419; Q2).
36. A. Habib\*, M. Muslim, T. Shahadat, N. Islam, I. M. I. Ismail, T. S. A. Islam, A. J. Mahmood, Photocatalytic decolorization of Crystal Violet in aqueous ZnO suspension under visible light irradiation, *J. Nanosctruct. Chem.* 3:70 (2013) (IF: 6.391; Q2/Q3).
37. A. Habib\*, A. K. Sarker, M. Tabata, Interactions of DNA with H<sub>2</sub>TMPyP<sub>4</sub><sup>+</sup> and Ru(II)TMPyP<sub>4</sub><sup>+</sup>: Probable Lead Compounds for African Sleeping Sickness, *Bangladesh Pharmaceutical J.* 17 (2014) 79.
38. A. Habib\*, M. T. Shahadat, N. M. Bahadur, I. M. I. Ismail, A.J. Mahmood, Synthesis and characterization of ZnO-TiO<sub>2</sub> nanocomposites and their application as photocatalysts, *Int. Nnao Lett.* 3:5 (2013).
39. M. Muslem, A. Habib\*, A.J. Mahmood, T.S.A. Islam, I.M.I. Ismail. Zinc oxide-mediated photocatalytic decolorization of Ponceau S in aqueous suspension by visible light, *Int. Nano Lett.* 2:30 (2012).
40. N. Islam, K. S. Rahman, M. Bahar, A. Habib, K. Ando, N. Hattori, Pollution attenuation by roadside greenbelt in and around urban areas, *Urban Forestry Urban Greening* 11 (2012) 460 (IF: 4.537; Q1).

41. A. Habib\*, Iqbal M. I. Ismail, A. J. Mahmood, M. Rafiqueullah, Photocatalytic decolorization of brilliant golden yellow over TiO<sub>2</sub> and ZnO suspensions, *J. Saudi Chem. Soc.* 16 (2012) 423 (IF: 3.932; Q2).
42. A. Habib\*, Iqbal M. I. Ismail, A. J. Mahmood, M. Rafiqueullah, Decolorization and mineralization of Brilliant Golden Yellow (BGY) by Fenton and photo-Fenton processes, *African J. Pure Appl. Chem.*, 6 (2012) 153.
43. A. Habib\*, N. M. Bahadur, A. J. Mahmood, A. Islam, Immobilization of Metal Ions in Cementitious Matrices, *J. Saudi Chem. Soc.*, 16 (2012) 263 (IF: 3.932; Q2).
44. J. N. Hogarh, N. Seike, Y. Kobara, A. Habib, J.- J. Nam, J.- S. Lee, Q. Li, X. Liu, J. Li, G. Zhang, S. Masunaga, Passive air monitoring of PCBs and PCNs across East Asia: A comprehensive congener evaluation for source characterization, *Chemosphere*, 86 (2011) 718 (IF: 7.086; Q1).
45. A. Habib, T. Hosokai, N. Mitsuo, R. Nakagawa, S. Nagamatsu, M. Aoki, S. Masuda, S. Kera, N. Ueno, Observation and Analysis of Small Inclination of Thymine Molecules on Graphite, *J. Phys. Chem. C*, 115 (2011) 511 (IF: 4.126; Q1).
46. A. I. Mustafa, M Saiful Alam, M. N. Amin, N. M. Bahadur, A Habib\*, Phenol removal from aqueous system by jute stick, *Pak.J. Anal. Environ. Chem.*, 9 (2008) 92 (Scopus indexing).
47. A. Habib\*, M. Wahiduzzaman, H.-O. Rashid, A. Islam, F. K. Ferdoushi, A.M.S. Alam, Selective extraction of Co(II) in the presence of Mn(II), Ni(II) and Cu(II) using salting-out phase separation method, *Pak. J. Anal. Environ. Chem*, 9 (2008) 6 (Scopus Indexing).
48. A. Habib\*, N. Islam, A. Islam, A M S Alam, Removal of Copper from Aqueous Solution using Orange Peel, Sawdust and Bagasse, *Pak. J. Anal. Environ. Chem.*8 (2007) 21 (Scopus indexing).
49. A. Habib\*, T. Shireen, A. Islam, A. M. S. Alam, Cyclic voltammetric studies of copper and manganese in the presence of L-leucine using glassy carbon electrode, *Pak. J. Anal. Environ. Chem.* 7 (2006) 96 (Scopus indexing).
50. A. Habib\*, Z. Hasan, S. Rahman, A. M. S. Alam, Tuberoses Sticks as an Adsorbent in the Removal of Methylene Blue from Aqueous Solution, *Pak. J. Anal. Environ. Chem.*7 (2006) 112 (Scopus indexing).
51. A. Habib\*, A. Rahman, A.M.S. Alam, Studies on the Environmental Status of the Heavy Metals of the Road Dust in Dhaka City, *Pak. J. Anal. Chem.* 6 (2005) 65 (Scopus indexing).
52. A. Habib\*, A. Islam, D. S. Tudu, A. M. S. Alam, Studies on the Effect of Additives on the Strength of Ordinary Portland Cement, *Pak. J. Anal. Chem.* 6 (2005) 89 (Scopus indexing).
53. M. Tabata, A. Habib, K. Watanabe, DNA Cleavage by Good's Buffers in the Presence of Au(III), *Bull. Chem. Soc. Jpn.*, 78 (2005) 1263 (IF: 5.488; Q1).
54. A. Habib, M. Tabata, Y. Wu, Formation of Gold Nanoparticles by Good's Buffers. *Bull. Chem. Soc. Jpn.*,78 (2005) 262 (IF: 5.488; Q1).
55. A. Habib, M. Tabata, Y. Wu, Kinetics and Mechanism of Gold(III) Incorporation into Tetrakis(1-methylpyridium-4-yl) porphyrin in Aqueous Solution. *J. Porphyrins Phthalocyanines*, 8 (2004) 1269 (IF: 1.811; Q3).
56. A. Habib, M. Tabata, Oxidative DNA damage induced by HEPES (2-[4-(2-hydroxyethyl)-1-piperazinyl] ethanesulfonic acid) in the presence of Au(III). *J. Inorg. Biochem.*, 98 (2004) 1696 (IF: 4.155; Q2).
57. E. Nyarko, T. Hara, D. J. Grab, A. Habib, Y. Kim, O. Nikolskaia, T. Fukuma, M. Tabata, In vitro toxicity of Pd(II) and Au(III) porphyrins and their aqueous metal ion counterparts on *Trypanosoma brucei brucei* growth. *Chemico-Biological Interact.* 148 (2004) 19 (IF: 5.192; Q2).
58. E. Nyarko, N. Hanada, A. Habib, M. Tabata, Fluorescence and phosphorescence spectra of Au(III), Pt(II) and Pd(II) porphyrins with DNA at room temperature. *Inorg. Chim. Acta* 357 (2004) 739 (IF: 2.545; Q2/Q3).