Dr. Mohammad Musarraf Hussain

Professional Position:
Professor, Department of Pharmacy
Jagannath University**,** Dhaka-1100, Bangladesh
Mobile: +8801914584722
E mail: m.musarraf.hussain@gmail
mmhussain@pharm.jnu.ac.bd
Website: jnu.ac.bd/profile/portal/web/576

ORCID

Academic Qualifications:

- PhD in Chemistry, King Abdulaziz University, Saudi Arabia, 2018, Degree awarded.
- Master of Science in Chemistry, University of Bergen, Norway, 2013, Grade: C.
- Master of Pharmacy in Pharmaceutical Chemistry, University of Dhaka, Bangladesh, 2007, First class.
- Bachelor of Pharmacy (4-year Hon's), University of Dhaka, 2005, Bangladesh, First class.
- Higher Secondary Certificate (HSC), College of Development Alternative, Dhaka Board, Bangladesh, 1997, First division.
- Secondary School Certificate (SSC), Chandanpur M.A. High School, Cumilla Board, Bangladesh, 1995, First division.

Research ID: Web of Science (ISI): P-9590-2016, **Scopus:** 57190258311, **ORCID:** 0000-0001-9270-0474, and **Publons:** 1380147.

Supervision: 04, M. Pharm. students by research, Department of Pharmacy, Jagannath University.

Professional Experiences:

- ❖ Professor, Department of Pharmacy, Jagannath University (December 30, 2021 to till date), Bangladesh.
- ❖ Associate Professor, Department of Pharmacy, Jagannath University (July 09, 2017 to December 29, 2021), Bangladesh.

- Assistant Professor, Department of Pharmacy, Jagannath University (May 04, 2011 to July 08, 2017), Bangladesh.
- Assistant Professor, Department of Pharmacy, Noakhali Science and Technology University (July 22, 2009 - May 03, 2011), Bangladesh.
- Lecturer, Department of Pharmacy, Noakhali Science and Technology University (May 21, 2007- July 21, 2009), Bangladesh.
- Lecturer, Department of Pharmacy, Stamford University, Bangladesh (August 10, 2006- May 20, 2007), Bangladesh.
- Visiting Teacher, Department of Pharmacy, Marks Institute of Medical Technology (March 01, 2006- December 30, 2007), Bangladesh.
- Product Executive, Product Management Department, SOMATEC Pharmaceuticals Ltd (May 28, 2005- March 07, 2006), Bangladesh.

Administrative Position:

- Chairman, Department of Pharmacy, Jagannath University (April 01, 2022 to till date), Bangladesh.
- EX-Officio Member, M. Pharm. (Professional) Program, Department of Pharmacy, Jagannath University (April 01, 2022 to till date), Bangladesh.
- Member, M. Pharm. (Evening) program, Department of Pharmacy, Jagannath University (August 01, 2021 to March 31, 2022), Bangladesh.
- Program Director, M. Pharm. (Evening) Program, Department of Pharmacy, Jagannath University (August 01, 2019 to July 31, 2021), Bangladesh.
- Member, M. Pharm. (Evening) program, Department of Pharmacy, Jagannath University (August 13, 2018 to July 31, 2019), Bangladesh.

Publications:

1. Abdullah M. Asiri, Mohammed M. Rahman, Muhammad Nadeem Arshad, and **Mohammad Musarraf Hussain.** Electrochemical sensor for detection of heavy metal ions and methods of preparation thereof. *United States Patent*. Patent number: US 11,578,033 B1, February 14, 2023.
2. Abdullah M. Asiri, Mohammed M. Rahman, and **Mohammad Musarraf Hussain.** Surface modified electrodes, and methods of preparation thereof. *United States Patent*. Patent number: US 11,561,193 B1, January 24, 2023.
3. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Mohammad A. Hasnat, Sami Ben Aoun, Mohammed M. Rahman. Detection of acetylcholine in an enzyme-free system

based on a GCE/V_2O_5 NRs/BPM modified sensor. *ChemistrySelect*, 2022, 7, e202200079.

4. Sulaiman Y. M. Alfaifi, **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Mohammed M. Rahman. Glassy carbon electrodes decorated with HgO/CNT nanocomposite and modified with a conducting polymer matrix for enzyme-free ascorbic acid detection. *ChemistrySelect*, 2022, 7, e202200086.
5. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Jamal Uddin, Hadi M. Marwani, Mohammed M. Rahman. Development of a L-cysteine sensor based on thallium oxide coupled multi-walled carbon nanotube nanocomposites with electrochemical approach. *Chem. Asian. J.* 2022, 17, e202101117.
6. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. Sensitive detection of Penicillin-G chemical using SnO2.YbO nanomaterials by electrochemical approach. *J. Saudi Chem. Soc.* 2022, 26, 101392.
7. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Jamal Uddin, Mohammed M. Rahman. Enzyme free simultaneous detection of γ-amino-butyric acid and testosterone based on copper oxide nanoparticles. *RSC Adv.* 2021, 11, 20794-20805.
8. **Mohammad Musarraf Hussain**, A short review on the bioactive constituents from six *Terminalia* species, *Bangladesh Pharm. J.* 2021, 24, 76-82.
9. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. Enzyme-free detection of uric acid using hydrothermally prepared CuO.Fe_2O_3 nanocrystals. *New J. Chemistry*, 2020, 44, 19581 – 19590.
10. **Mohammad Musarraf Hussain,** Abdullah M. Asiri, Mohammed M. Rahman. Non-enzymatic simultaneous detection of acetylcholine and ascorbic acid using ZnO.CuO nanoleaves: Real sample analysis. *Microchemical J.* 2020, 159, 105534.
11. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri, K.A. Alamry, M.A. Hasnat. An enzyme free detection of L-Glutamic acid using deposited CuO.GdO nanospikes on a flat glassy carbon electrode. *Surfaces Interfaces*, 2020, 20, 100617.
12. Muhammad Nadeem Arshad, **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Muhammad Khalid, Ataualpa A.C. Braga, Mohammed M. Rahman. A potent synthesis and supramolecular synthon hierarchy percipience of (E)-N′-(Napthalen-1-yl-methylene)-benzenesulfonohydrazide and 1-Napthaldehyde: A combined experimental and DFT studies. *J. Molecular Structure*, 2020, 1221, 128797.

13. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Mohammed M. Rahman. A non-enzymatic electrochemical approach for L-Lactic acid sensor development based on CuO.MWCNT nanocomposites modified with a nafion matrix. *New J. Chemistry*, 2020, 44, 9775 – 9787.
14. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Mohammed M. Rahman. Simultaneous detection of L-aspartic acid and glycine using wet-chemically prepared Fe_3O_4@ZnO nanoparticles: real sample analysis. *RSC Adv.* 2020, 10, 19276–19289.
15. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Mohammed M. Rahman. Synthesis, characterization, and physicochemical studies of the synthesized dimethoxy-N′-(phenylsulfonyl)-benzenesulfonohydrazide derivatives and used as a probe for calcium ion capturing: Natural sample analysis. *J. Molecular Structure*, 2020, 1214, 128243.
16. **Mohammad Musarraf Hussain.** A Further Comprehensive Review on the Phytoconstituents from the Genus *Erythrina. Bangladesh Pharm. J*. 2020, 23, 65-77.
17. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Muhammad Nadeem Arshad, Mohammed M. Rahman. Synthesis, characterization, and crystal structure of (*E*)-*N*′-(4-Bromobenzylidene)-benzenesulfonohydrazide and its application as a sensor of chromium ion detection from environmental samples. *J. Molecular Structure*, 2020, 1207, 127810.
18. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Muhammad N. Arshad, Abdullah M. Asiri. The synthesis and application of (*E*)-*N*-(benzo[d]-dioxol-5-ylmethylene)-4-methylbenzenesulfonohydrazide for the detection of carcinogenic lead. *RSC Adv*. 2020, 10, 5316–5327.
19. **Mohammad Musarraf Hussain**, Abdullah M. Asiri, Muhammad Nadeem Arshad, Mohammed M. Rahman. A thallium ion sensor development based on the synthesized (*E*)-N'-(Methoxybenzylidene)-4-Methylbenzenesulfonohydrazide derivatives: Environmental sample analysis. *ChemistrySelect*, 2019, 4, 10543-10549.
20. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. D-Glucose sensor based on ZnO.V_2O_5 NRs by an enzyme-free electrochemical approach. *RSC Adv*. 2019, 9, 31670-31682.
21. **Mohammad Musarraf Hussain**. A mini review on the chemical compounds of the genus *Acacia. Bangladesh Pharm. J*. 2019, 22, 235-242.
22. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Muhammad N. Arshad, Md. Rabiul Awual Abdullah M. Asiri. Arsenic sensor development based on

modification with (*E*)-*N*-(2-nitrobenzylidine)-benzenesulfonohydrazide: a real sample analysis. *New J. Chem.* 2019, 43, 9066-9075.

23. **Mohammad Musarraf Hussain**. A comprehensive review on the phytoconstituents from six species of the genus *Amaranthus*. *Bangladesh Pharm. J*. 2019, 22, 117-124.
24. **Mohammad Musarraf Hussain**. A short review on phytoconstituents from the genera *Albizzia* and *Erythrina*. *Bangladesh Pharm. J*. 2018, 21, 160-172.
25. Abdullah M. Asiri**, Mohammad M. Hussain**, Muhammad N. Arshad, Mohammed M. Rahman. Sensitive and selective heavy metal ion, Mn^{2+} sensor development based on the synthesized (E)-N′-chlorobenzylidene-benzenesulfonohydrazide (CBBSH) molecules modified with nafion matrix. *J. Industrial Engr. Chem.* 2018, 63, 312-321.
26. Mohammed M. Rahman, M.M. Alam, **Mohammad M. Hussain**, Abdullah M. Asiri, M.E.M. Zayed. Hydrothermally prepared Ag_2O/CuO nanomaterial for an efficient chemical sensor development for environmental remediation. *Environ. Nanotechnol. Monitor. Management*, 2018, 10, 1-9.
27. **Mohammad Musarraf Hussain**, Muhammad Nadeem Arshad, Abdullah M. Asiri, Mohammed M. Rahman. Development of selective Co^{2+} ionic sensor based on variuos derivatives of benzenesulfonohydrazide (BSH) compounds: An electrochemical approach. *Chem. Engr. J.* 2018, 339, 133-143**.**
28. Abdullah M. Asiri**, Mohammad Musarraf Hussain**, Muhammad Nadeem Arshad, Mohammed M. Rahman. A Ce^{2+} sensor based on napthalen-1-yl-methylene-benzenesulfonohydrazide (NMBSH) molecules: ecological sample analysis. *New J. Chem.* 2018, 42, 4465-4473.
29. **Mohammad Musarraf Hussain**, Mohammed M. Rahman, Muhammad Nadeem Arshad, Abdullah M. Asiri. Fabrication of Ga^{3+} sensor probe based on Methoxybenzylidenebenzenesulfonohydrazide (MBBSH) by an electrochemical approach. *New J. Chem*. 2018, 42, 1169-1180.
30. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. Bilirubin sensor based on CuO-CdO composites deposited in a nafion/glassy carbon electrode matrixes. *Progress Nat. Sci: Mater. Intl*. 2017, 27, 566-573.
31. Mohammed M. Rahman, **Mohammad M. Hussain**, Abdullah M. Asiri. Fabrication of 3-methoxyphenol sensor based on Fe_3O_4 decorated carbon nanotube nanocomposites for environmental safety. *PLOS ONE,* 2017, 12, e0177817.
32. **Mohammad Musarraf Hussain**, Mohammed M. Rahman, Muhammad Nadeem Arshad, Abdullah M. Asiri. Electrochemical detection of Ni^{2+} ions using synthesized

(*E*)-*N′*-chlorobenzylidene-4-methylbenzenesulfonohydrazide derivatives modified with a nafion matrix. *ChemistrySelect* 2017, 2, 7455-7464.

33. **Mohammad Musarraf Hussain**, Mohammed M. Rahman, Muhammad Nadeem Arshad, Abdullah M. Asiri. Trivalent Y^{3+} ionic sensor development based on (*E*)-Methyl-*N′*-nitrobenzylidene-benzenesulphonohydrazide (MNBBSH) derivatives modified with nafion matrix. *Sci. Rep.* 2017, 7, 5832.
34. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. Ultrasensitive and label-free detection of creatine based on CdO nanoparticles: A real sample approach. *New J. Chem.* 2017, 41, 6667-6677.
35. **Mohammad Musarraf Hussain**, Mohammed M. Rahman, Abdullah M. Asiri. Ultrasensitive and selective 4-Aminophenol chemical sensor development based on nickel oxide nanoparticles decorated carbon nanotube nanocomposites for green environment. *J. Environ. Sci.* 2017, 53, 27-38.
36. **Mohammad M. Hussain**, Mohammed M. Rahman, Muhammad N. Arshad, Abdullah M. Asiri. Hg^{2+} sensor development based on (*E*)-*N′*-Nitrobenzylidine benzene sulfonohydrazide (NBBSH) derivatives fabricated on a glassy carbon electrode with a nafion matrix. *ACS Omega*, 2017, 2, 420-431.
37. Markus Baumann, **Mohammad Musarraf Hussain**, Nina Henne, Daniel Moya Garrote, Stefanie Karlshøj, Torgils Fossen, Mette M. Rosenkilde, Jon Våbenø, Bengt Erik Haug. Influence of chain length on the activity of tripeptidomimetic antagonists for CXC chemokine receptor 4 (CXCR4). *Bioorg. Med. Chem.* 2017, 25, 646-657.
38. **Mohammmad M. Hussain**, Mohammed M. Rahman, Abdullah M. Asiri. Efficient 2-nitrophenol chemical sensor development based on Ce_2O_3 nanoparticles decorated CNT nanocomposites for environmental safety. *PLOS ONE,* 2016, 11, e0166265.
39. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. A glutathione biosensor based on a glassy carbon electrode modified with CdO nanoparticle-decorated carbon nanotube in a nafion matrix. *Microchim. Acta,* 2016, 183, 3255-3263.
40. **Mohammad Musarraf Hussain**, Mohammed M. Rahman, Abdullah M. Asiri. Sensitive L-Leucine sensor based on a glassy carbon electrode modifed with SrO nanorods. *Microchim. Acta,* 2016, 183, 3265-3273.
41. **Mohammad Musarraf Hussain**, Mohammed M. Rahman, Abdullah M. Asiri, Md. Rabiul Awual. Non-enzymatic simultaneous detection of L-glutamic acid and uric acid using mesoporous Co_3O_4 nanosheets. *RSC Adv*. 2016, 6, 80511-80521.

42. Mohammed M. Rahman, **Mohammad Musarraf Hussain**, Abdullah M. Asiri. A novel approach towards the hydrazine sensor development by SrO.CNT nanocomposites. *RSC Adv*. 2016, 6, 65338-65348.
43. **Mohammad Musarraf Hussain,** Md. Tariqul Haque Tuhin, Fahima Akter, Mohammad A. Rashid. Constituents of *Erythrina*-a potential source of secondary metabolites: A review. *Bangladesh Pharm. J*. 2016, 19, 237-253.
44. **Mohammad Musarraf Hussain**, Faiza Tahia, Mohammad A. Rashid. Secondary metabolites from some species of *Albizzia*: A review. *Bangladesh Pharm. J.* 2016, 19, 1-8.
45. A.H.M Masum BILLAH, **Mohammad M. HUSSAIN**, Mohammad G DASTAGIR, Md. ISMAIL, Abdul QUADER. α-Spinasterol from *Amaranthus spinosus* stem. *Bol. Latinoam. Caribe Plant. Med. Aromat.* 2013, 12, 15-17.
46. **Mohammad M. HUSSAIN,** Mohammad G. DASTAGIR, A.H.M Masum BILLAH , Md. ISMAIL. Alpinum isoflavone from *Erythrina stricta* Roxb**.** *Bol. Latinoam. Caribe Plant. Med. Aromat.* 2011, 10, 88-90.
47. **Mohammad Musarraf Hussain**, M Mizanur Rahman Mughul, Md Masud Alam, Mohammad Golam Dastagir, AHM Masum Billah, M Ismail. Antimicrobial activity of *n*-hexane and Ethyl acetate extracts of *Erythrina stricta* Roxb. *Bangladesh J. Microbiol.* 2010, 27, 65-66.
48. Md. ISMAIL, **Mohammad M. HUSSAIN**, Mohammad M. DASTAGIR, Masum BILLAH, Abdul QUADER. Phytochemical and antimicrobial investigation of *Luffa cylindrical*. *Bol. Latinoam. Caribe Plant. Med. Aromat.* 2010, 9, 327-332.
49. **Mohammad M. HUSSAIN**, Mohammad S. RAHMAN, Abdul JABBER, Mohammad A. RASHID. Phytochemical and Biological Investigation of *Albizzia lebbek* Benth. *Bol. Latinoam. Caribe Plant. Med. Aromat*. 2008, 7, 273-278.

Book Chapters:

1. Mohammed M. Rahman, **Mohammad M. Hussain**, Abdullah M. Asiri. A glutathione sensor based on CdO-decorated CNT nanocomposites. *Glutathione biosynthesis, functions, and biological implications*. Nova Science Publishers, Inc, New York, USA, (ISBN: 978-1-53612-406-4), 2019, 313-347.
2. Mohammed M. Rahman, **Mohammad M. Hussain**, Abdullah M. Asiri. Chemical sensor development by SrO.CNT nanocomposites. *Chemosensory sensors and systems (Evolutionary significance, biological effects and new insights)*, Nova Science Publishers, Inc, New York, USA, (ISBN: 978-1-53612-406-4), 2017, 73-125.

3. Mohammed M. Rahman, **Mohammad M. Hussain**, Abdullah M. Asiri. Creatine sensors based on nanomaterials. *Biochemistry research trends (Creatine biosynthesis, health effects and clinical perspective)*, Nova Science Publishers, Inc, New York, USA, (ISBN: 978-1-53612-414-9), 2017, 127-169.

Research:

1. **PhD:** Development of new sensors for the detection of bio-molecules and heavy metal ions. Supervisor: Prof. Dr. Abdullah M. Asiri, Chemistry Department, King Abdulaziz University, Saudi Arabia.
2. **MS:** Synthetic studies towards scaffold-based CXCR4 antagonist. Supervisor: Prof. Dr. Bengt Erik Haug, Centre for Pharmacy, Department of Chemistry, University of Bergen, Norway.
3. **M. Pharm:** Phytochemical and Biological investigation of *Albizzia lebbeck*. Supervisor: Late Emeritus Prof. Dr. Abdul Jabbar, Department of Pharmaceutical Chemistry, University of Dhaka, Bangladesh.

Scientific Project:

1. **Mohammad Musarraf Hussain.** Pharmacy education in Bangladesh-a journey towards Pharm. D. Funded by Jagannath University, Dhaka, Bangladesh, 2018-2019 (Completed).

Conferences Participation:

1. Poster presentation on "A gallium ion sensor development based on methoxybenzylidene-benzenesulfonohydrazide compounds". 4th young scientist congress organized by Bangladesh Academy of Sciences (December 13-15, 2019), NMST Bhaban, Dhaka, Bangladesh.
2. Eighth international high-performance computing conference in Saudi Arabia (March 12-14, 2018), King Abdulaziz University, Jeddah, Saudi Arabia.
3. Workshop on synthesis of cyclic peptides natural products using traceless chemical ligation (April 04, 2016), Abdulaziz University, Jeddah, Saudi Arabia.
4. ISESCO-KAU international symposium on nanotechnology for environmental applications (December 20-21, 2015), King Abdulaziz University, Jeddah, Saudi Arabia.
5. Oral presentation on "selective chemical sensor development and antimicrobial activity study based on Ce_2O_3 nanoparticles conjugated CNTs nanocomposites". 7th

scientific forum (December 09-10, 2015), King Abdulaziz University, Jeddah, Saudi Arabia.

6. First international conference on applied chemistry (November 18-19, 2015), King Abdulaziz University, Jeddah, Saudi Arabia.
7. Workshop on "Direct catalytic decomposition of Nitrous oxide: New horizons" (October 25, 2015), King Abdulaziz University, Jeddah, Saudi Arabia.
8. National assembly, International Students Union (October 18-20, 2013), Oslo, Norway.
9. 28th Norwegian winter meeting on Organic Chemistry (January 10-13, 2013), Lillehammer, Norway.
10. National assembly, International Students Union (October 19-21, 2012), University of Bergen, Norway.
11. Poster presentation on "Phytochemical Studies on *Capsicum frutescens*". 4th Saudi Science Conference (March 21-24, 2010), Al-Madinah Al-Munawwarah, University of Taibah, Saudi Arabia.
12. International conference of gender participation in the development of science organized by Bangladesh Academy of Science, Inter academy Panel, Academy of science of the Developing World (TWAS) on November 14-15, 2009, NMST Bhaban, Dhaka, Bangladesh.
13. International Workshop on "Science Education**"** jointly organized by Bangladesh Academy of Science, Association of Academy of Sciences in Asia and the Federation of Asian Scientific Academic and societies (October 10, 2009), NMST Bhaban, Dhaka, Bangladesh.
14. International conference on "Food Security & Food Safety: Towards a One world, One Health Approach" jointly organized by Chittagong Veterinary and Animal Sciences University & One World One Health- Bangladesh initiative (March 17-19, 2009), Chittagong, Bangladesh.
15. Oral presentation on "Steroidal compound from chloroform extract of *Albizzia lebbeck* (Family: Leguminoseae)". 2nd International conference on Natural products and Beauty (December 17-19, 2008), Naresuan University at Phayao, Muang City, Phayao Province, 56000, Thailand.
16. International conference on "Changing World and Emerging Challenges: A One World, One Health Approach" jointly organized by Chittagong Veterinary and Animal Sciences University & One World One Health- Bangladesh initiative (March 4-6, 2008), Chittagong, Bangladesh.

Scholarships:

1. Deanship of graduate studies scholarship, 2015, PhD, King Abdulaziz University, Saudi Arabia.
2. Norwegian Govt. scholarship (Lankassen, Quota) 2011, MS, University of Bergen, Norway.
3. Graduate scholarship of Fazlul Huq Muslim Hall Foundation, 2006.
4. Merit scholarship of High court Mazer foundation, 2005.
5. Undergraduate scholarship of Fazlul Huq Muslim Hall Foundation, 2003-2004.
6. Undergraduate merit scholarship of University of Dhaka, 2002.
7. Merit scholarship of Cumilla Zilla foundation, 2000.
8. Merit scholarship of Cumilla Zilla parishad, 2000.
9. Merit scholarship of International Angel Association, 2000.
10. Board scholarship on S.S.C examination, 1995.

Awards:

1. Deanship of scientific research award, King Abdulaziz University based on articles published in 2019.
2. Best PhD thesis award, 2020 from Deanship of Graduate Studies, King Abdulaziz University.
3. Deanship of scientific research award, King Abdulaziz University based on articles published in 2018.
4. Deanship of scientific research award, King Abdulaziz University based on articles published in 2017.
5. Deanship of scientific research award, King Abdulaziz University based on articles published in 2016.
6. Travel grant awarded by the Department of Chemistry, University of Bergen, to attend the 28th Norwegian winter meeting on Organic Chemistry (January 10-13, 2013), Lillehammer, Norway.
7. Travel grant awarded by Laboratory Animal Ltd, UK to attend the international course on Laboratory Animal Science (July 06-17, 2009), Faculty of Veterinary Medicine, University of Utrecht, the Netherlands.

Membership of Professional Society:

1. Jagannath University Teacher's Association.

2. Grade A Pharmacist (A-2723), Pharmacy Council of Bangladesh.
3. Bangladesh Pharmaceutical Society.
4. King Abdulaziz University Alumni Association.
5. University of Bergen Alumni Association.
6. Dhaka University Pharmacy Alumni Association.
7. Dhaka University Pharmaceutical Chemistry Society.

Country Visited: Saudi Arabia, Norway, Germany, The Netherlands, France, Thailand, Nepal, and India.

Referees:

Prof. Dr. Abdullah M. Asiri
Chemistry Department
King Abdulaziz University
Jeddah, Saudi Arabia
Email: aasiri2@kau.edu.sa

Prof. Dr. Mohammed Muzibur Rahman
Chemistry Department
King Abdulaziz University
Jeddah, Saudi Arabia
Email: mmrahman@kau.edu.sa

Prof. Dr. Bengt Erik Haug
Department of Chemistry
University of Bergen
Allegaten 41, Norway
Email: Bengt-Erik.Haug@farm.uib.no

Prof. Dr. Mohammad Abdur Rashid
Department of Pharmaceutical Chemistry
University of Dhaka
Dhaka- 1000, Bangladesh.
Email: rashidma@du.ac.bd