Dr. Mohammed Kabir Uddin
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https://scholar.google.com/citations?user=bv0LsPYAAAAJ&hl=en

Teaching Experience

- **2022- Present:** Assistant Professor, Department of Biochemistry and Microbiology, North South University, Bashundhara, Dhaka-1229, Bangladesh (9th May 2022 to Present)
- **2020 – 2022**: Assistant Professor, Department of Chemistry, CAAS, IUBAT-International University of Business Agriculture and Technology, Bangladesh (8th Oct 2020 to 7th May 2022)
- **2017 – 2020:** Assistant Professor (Part time), School of Life Sciences (SLS), Independent University, Bangladesh (IUB), Bashundhara, Dhaka-1229 (8th Sep 2017 to 7th Sep 2020)
- **2018 – 2019:** Assistant Professor (Part time), Department of Theoretical and Computational Chemistry, University of Dhaka, Bangladesh (4th Oct 2018 to 5th Jan 2019)
- **2014 -2016:** Graduate Teaching Assistant, Department of Chemistry, Murdoch University, Perth, Western Australia (Jan 2014 to Dec 2016)
- **2009 -2013:** Graduate Teaching Assistant, Department of Chemistry, Memorial University of Newfoundland, Canada (Sep 2009 to Apr 2013)

Work Experience/Professional Service

- **2023:** Mentor of 55th International Chemistry Olympiad in Switzerland, 16-25 July 2023
- **2017 – 2017:** Consultant, The Feel Great Challenge Company, Western Australia (1st Feb 2017 to 2nd Mar 2017)
- **2013 – 2013:** Research Assistant, Memorial University of Newfoundland, Canada (1st Apr 2013 to 2nd Jul 2013)
- **2005 – 2009:** Quality Control Executive, Incepta Pharmaceutical Ltd., Dhaka, Bangladesh (1st Apr 2005 to 2nd Aug 2009)
- **2002 – 2005:** Research and Development Chemist, The ACME Laboratories Ltd., Dhaka, Bangladesh (1st Aug 2002 to 2nd Apr 2005)

Academic Qualifications

- **PhD in Bioorganic Chemistry**, Murdoch University, **Australia** | **2017**
  Thesis: Investigation of the Substitution Reaction Pathways of Antidiabetic Chromium (III) Supplements
- **MS in Computational Biochemistry**, Memorial University, **Canada** | **2013**
  Thesis: Mechanism of Hydrolytic Deamination of Nucleic Acids
- **Master of Philosophy (MPhil) in Organic Chemistry,** Bangladesh University of Engineering & Technology (**BUET**), Dhaka, Bangladesh |**2006**

Thesis: Synthesis of Some New Annelated Fused Heterocyclic Derivatives of Biological Importance

- **Master of Science (MSc) in Organic Chemistry**, University of Chittagong, Bangladesh | **2001**

  Thesis: Synthesis, Characterization, and Antimicrobial Activity of Some New Annulated Fused Pyrimidines
- **Bachelor of Science (Honors) in Chemistry**, University of Chittagong, Bangladesh | **1999**
- **Higher Secondary Certificate (H.S.C),** Govt. Titumir College, Dhaka, Bangladesh | **1992**
- **Secondary School Certificate (S.S.C),** Kadamtala Purbo Bashabo High School, Dhaka, Bangladesh| **1990**

Teaching Interests

- Biophysical Organic Chemistry, Medicinal Chemistry and Drug Discovery, Natural Organic Chemistry, Biochemistry and Molecular Biology, Computational Biochemistry, Inorganic and Coordination Chemistry, Bioorganic Chemistry, Spectroscopic Analysis, Physical Chemistry, Analytical Chemistry.

Research Interests

With over 23 years of experience in teaching, research, and industry across Australia, Canada, and Bangladesh, my research focuses on the following areas:

- Medicinal and computational chemistry, drug discovery, and molecular modeling
- Synthesis and characterization of biologically active heterocyclic and metal-organic compounds
- Investigation of reaction mechanisms and structure–activity relationships of therapeutic agents
- Computer-aided drug design, including modeling of biologically active molecules and designing substrates for separation science
- Development of amino acid–transition metal complexes and fused heterocycles for medicinal applications

Publications in the International referred Journals

- **2026**

1. Noor, A. I.; Suha, H. N.; Hossain, I.; Almatarneh, M. H.; Al-Msiedeen, A. M.; Bari, M. A. U.; Poirier, R. A.; Uddin, K. M. Computational Insights into the Anti-Alzheimer Potential of Alkynyl-3-Carboxamide Derivatives. *Phys. Chem. Chem. Phys*. **2026**. *28* (35): 21444–21462. https://doi.org/10.1039/d6cp00485g *(Scopus-indexed: Q2)*
2. Shila, S. R.; Almatarneh M. H.; Suha H. N.; Hossain I.; Abdalla S.; Bari M. A. U.; Poirier R. A.; Uddin K. M. Structure-Based Design of Isoxazolidine RIPK1 Inhibitors for Neuroinflammation. *Journal of Computational Chemistry*. **2026**, *47*, e7041. https://doi.org/10.1002/jcc.70411 *(Scopus-indexed: Q1)*

3. Meem, M. H.; Almatarneh, M. H.; Abdalla, S.; Jahan, I. R.; Karim, T.; Siraji, S.; Poirier, R. A.; Uddin, K. M. In Silico Evaluation of Quinoline-4-carboxamides as Potential Antimalarial Agents. Arab. J. Chem. **2026**, Article in press. https://doi.org/10.25259/AJC_833_2025 *(Scopus-indexed: Q1)*
4. Tasnim, S. A.; Suha, H. N.; Nawar, S. E.; Almatarneh, M. H.; Al-Msiedeen, A. M.; Abdalla, S.; Hossain, I.; Bari, M. A. U.; Poirier, R. A.; Uddin, K. M. Lung Cancer Targeting by Trimethox Flavans: A Molecular Simulation Study. *Phys. Chem. Chem. Phys.* **2026**, *28*, 2467–2489. https://doi.org/10.1039/d5cp03925h *(Scopus-indexed: Q2)*
5. Suha, H. N.; Almatarneh, M. H.; Ratula; Bari, M. A. U.; Aljaafreh, M. J.; Al-Sheraideh, M. S.; Poirier, R. A.; Uddin, K. M. Computational Discovery of Novel Anticancer Agents: A Comprehensive Study of Phenothiazine Derivatives. *J. King Saud Univ. Sci.* **2026**, Article in Press. https://doi.org/10.25259/JKSUS_1377_2025 *(Scopus-indexed: Q1)*

- **2025**

6. Suha, H. N.; Almatarneh, M. H.; Poirier, R. A.; Uddin, K. M. In Silico Evaluation of Quinolone–Triazole and Conazole–Triazole Hybrids as Promising Antimicrobial and Anticancer Agents. *Int. J. Mol. Sci.* **2025**, *26*, 6752. https://doi.org/10.3390/ijms26146752 *(Scopus-indexed: Q1*
7. Suha, H. N.; Hossain, M. S.; Rahman, S.; Alodhayb, A. N.; Hossain, M. M.; Kawsar, S. M. A.; Uddin, K. M. Acetylcholinesterase (AChE) Inhibitors for Alzheimer's Treatment. *Med. Chem.* **2025**, *21* (5), 345–366. https://doi.org/10.2174/0115734064304100240511112619 *(Scopus-indexed: Q3)*
8. Almatarneh, M. H.; Rahman, S.; Alodhayb, A.; Albrithen, H.; Uddin, K. M.; Poirier, R. A. Computational Repurposing of Relatively Large Drugs for the Receptor Binding Domain of SARS-CoV-2 Spike Protein. *ChemistrySelect* **2025**, *10*, e202403872. https://doi.org/10.1002/slct.202403872 *(Scopus-indexed: Q3)*
9. Rahman, A.; Akter, S.; Sadique, A.; Alam, J.; Asrafie, S.; Tabassum, A.; Hossain, S. A.; Rahman, M. M.; Billah, M. B.; Huq, T. S.; Uddin, K. M.; Rahman, M. M.; Sharmin, A.; Hossain, M. M.; Alam, S. M. D.; Hossain, M. Draft genome sequence of *Pseudomonas aeruginosa* strain NGMBE-25A isolated from fecal samples of migratory birds at Jahangirnagar University, Bangladesh. *Microbiol. Resour. Announc.* **2025**, *13* (2), e00001-24. https://doi.org/10.1128/mra.00001-24 *(Scopus-indexed: Q3)*
10. Alam, M. J.; Ahamed, M. S.; Islam, M. S.; Halim, M. E.; Uddin, K. M. Computational Study of Nickel Complexes: Stability and Electronic Charge Insights. *Am. J. Pure Appl. Biosci.* **2025**, *7* (1), 213–220. https://doi.org/10.34104/ajpab.025.02130220 *(Scopus-indexed: NR)*

- **2024**

11. Akter, S.; Kawsar, S. M. A.; Bouzid, G.; Horchani, M.; Bulbul, M. Z. H.; Ghalla, H.; Ben Jannet, H.; Saha, S.; Fujii, Y.; Uddin, K. M.; Bhat, A. R.; Ahmed, S.; Ozeki, Y. Synthesis, Antimicrobial Activity, DFT, Molecular Docking, and Dynamic Simulations of Trityl Mannopyranoside Derivatives for Potential Antibacterial Agents. *Med. Chem.* **2024**, XX, XXX–XXX. https://doi.org/10.2174/0115734064339243241027024304
(Scopus-indexed: Q3)
12. Suha, H. N.; Tasnim, S. A.; Rahman, S.; Alodhayb, A.; Albrithen, H.; Poirier, R. A.; Uddin, K. M. Evaluating the Anticancer Properties of Novel Piscidinol A Derivatives: Insights from DFT, Molecular Docking, and Molecular Dynamics Studies. *ACS Omega* **2024**, 9, XXX–XXX. https://doi.org/10.1021/acsomega.4c07808
(Scopus-indexed: Q1)
13. Hossain, M. S.; Sakib, M.; Rahman, S.; Al-Gawati, M. A.; Alodhayb, A. N.; Albrithen, H.; Hossain, M. M.; Poirier, R. A.; Uddin, K. M. Simulating New Fusidic Acid Derivatives to Target Gram-Positive Bacteria by Using Computational Methods. *ChemistrySelect* **2024**, 9, e202404142. https://doi.org/10.1002/slct.202404142
(Scopus-indexed: Q3)
14. Karim, T.; Almatarneh, M. H.; Rahman, S.; Alodhayb, A. N.; Albrithen, H.; Hossain, M. M.; Kawsar, S. M. A.; Poirier, R. A.; Uddin, K. M. In Silico Prediction of Antibacterial Activity of Quinolone Derivatives. *ChemistrySelect* **2024**, 9, e202402780. https://doi.org/10.1002/slct.202402780
(Scopus-indexed: Q3)
15. Saif, M. Z.; Esha, N. J. I.; Quayum, S. T.; Rahman, S.; Al-Gawati, M. A.; Alsowygh, G.; Albrithen, H.; Alodhayb, A. N.; Poirier, R. A.; Uddin, K. M. Investigating the Potential of 6-Substituted 3-Formyl Chromone Derivatives as Anti-Diabetic Agents Using In Silico Methods. *Sci. Rep.* **2024**, *14*, 13221. https://doi.org/10.1038/s41598-024-63237-y
(Scopus-indexed: Q1)
16. Hossain, M. S.; Al Abbad, S. S.; Alsunaidi, Z. H. A.; Rahman, S.; Alodhayb, A. N.; Hossain, M. M.; Poirier, R. A.; Uddin, K. M. Evaluation of Novel Pyridoxal Isonicotinoyl Hydrazone (PIH) Derivatives as Potential Anti-Tuberculosis Agents: An In Silico Investigation. *Int. J. Quantum Chem.* **2024**, *124*, e27381. https://doi.org/10.1002/qua.27381
(Scopus-indexed: Q3)
17. Uddin, K. M.; Meem, M. H.; Akter, M.; Rahman, S.; Al-Gawati, M. A.; Alarifi, N.; Albrithen, H.; Alodhayb, A.; Poirier, R. A.; Bhuiyan, M. M. H. Design, Synthesis, and Bioevaluation of Novel Unsaturated Cyanoacetamide Derivatives: In Vitro and In Silico Exploration. *MethodsX* **2024**, *12*, 102691. https://doi.org/10.1016/j.mex.2024.102691
(Scopus-indexed: Q2)
18. Quayum, S. T.; Esha, N. J. I.; Siraji, S.; Al Abbad, S. S.; Alsunaidi, Z. H. A.; Almatarneh, M. H.; Rahman, S.; Alodhayb, A. N.; Alibrahim, K. A.; Kawsar, S. M. A.; Uddin, K. M. Exploring the Effectiveness of Flavone Derivatives for Treating Liver Diseases: Utilizing DFT, Molecular Docking, and Molecular Dynamics Techniques. *MethodsX* **2024**, *12*, 102537. https://doi.org/10.1016/j.mex.2023.102537
(Scopus-indexed: Q2)

19. Akter, N.; Bourougaa, L.; Ouassaf, M.; Bhowmic, R. C.; Uddin, K. M.; Bhat, A. R.; Ahmed, S.; Kawsar, S. M. A. Molecular Docking, ADME-Tox, DFT and Molecular Dynamics Simulation of Butyroyl Glucopyranoside Derivatives against DNA Gyrase Inhibitors as Antimicrobial Agents. *J. Mol. Struct.* **2024**, *1307*, 137930. https://doi.org/10.1016/j.molstruc.2024.137930 *(Scopus-indexed: Q2)*
20. Zaman, B.; Mostafa, I.; Hassan, T.; Ahmed, S.; Esha, N. J. I.; Chowdhury, F. A.; Bosu, T.; Chowdhury, H. N.; Mallick, A.; Islam, M. M. S.; Sharmin, A.; Uddin, K. M.; Hossain, M. M.; Rahman, M. Tolperisone Hydrochloride Improves Motor Functions in Parkinson's Disease via MMP-9 Inhibition and Downregulation of p38 MAPK and ERK1/2 Signaling Cascade. *Biomed. Pharmacother.* **2024**, *174*, 116438. https://doi.org/10.1016/j.biopha.2024.116438 *(Scopus-indexed: Q1)*
21. Rahman, A.; Akter, S.; Sadique, A.; Alam, J.; Asrafie, S.; Tabassum, A.; Hossain, S. A.; Rahman, M. M.; Billah, M. B.; Huq, T. S.; Uddin, K. M.; Rahman, M. M.; Sharmin, A.; Hossain, M. M.; Alam, S. M. D.; Hossain, M. Whole genome sequence of denitrifying bacterium *Stutzerimonas stutzeri* strain NGHE31, collected from an eutrophic wetland in Sunamganj, Bangladesh, following the 2017 flash floods. *Microbiol. Resour. Announc.* **2024**, *13*, e00001-https://doi.org/10.1128/mra.00001-24 *(Scopus-indexed: Q3)*
22. Meem, M. H.; Yusuf, S. B.; Al Abbad, S. S.; Rahman, S.; Al-Gawati, M.; Albrithen, H.; Alodhayb, A. N.; Uddin, K. M. Exploring the Anticancer and Antibacterial Potential of Naphthoquinone Derivatives: A Comprehensive Computational Investigation. *Front. Chem.* **2024**, *12*, 1351669. https://doi.org/10.3389/fchem.2024.1351669 *(Scopus-indexed: Q1)*
23. Labiba, A.; Al Abbad, S. S.; Rahman, S.; Alodhayb, A.; Poirier, R. A.; Uddin, K. M. Investigating Baxdrostat and Its Derivatives as Aldosterone Synthase Inhibitors for Resistant Hypertension: An In Silico Approach. *ChemistrySelect* **2024**, *9*, e202304929. https://doi.org/10.1002/slct.202304929. *(Scopus-indexed: Q3)*

- **2023**

23. Esha, N. J. I.; Quayum, S. T.; Saif, M. Z.; Almatarneh, M. H.; Rahman, S.; Alodhayb, A.; Poirier, R. A.; Uddin, K. M. Exploring the Potential of Fluoro-Flavonoid Derivatives as Anti-Lung Cancer Agents: DFT, Molecular Docking, and Molecular Dynamics Techniques. *Int. J. Quantum Chem.* **2023**, e27274. https://doi.org/10.1002/qua.27274 *(Scopus-indexed: Q3)*
24. Uddin, K. M.; Sakib, M.; Siraji, S.; Uddin, R.; Rahman, S.; Alodhayb, A.; Alibrahim, K. A.; Kumer, A.; Matin, M. M.; Bhuiyan, M. M. H. Synthesis of New Derivatives of Benzylidinemalononitrile and Ethyl 2-Cyano-3-phenylacrylate: In Silico Anticancer Evaluation. *ACS Omega* **2023**, *8*, 25817–25831. https://doi.org/10.1021/acsomega.3c01123. *(Scopus-indexed: Q1)*

- **2022**

25. Uddin, K. M.; Islam, M. S.; Islam, S. M.; Poirier, R. A. New Insight into the Substituent Effects on the Hydrolytic Deamination of Saturated and Unsaturated Cytosine. *Int. J. Quantum Chem.* **2022**, e27014. https://doi.org/10.1002/qua.27014
    (Scopus-indexed: Q3)
26. Uddin, K. M.; Hosen, M. A.; Khan, M. F.; Ozeki, Y.; Kawsar, S. M. A. Investigation of Structural, Physicochemical, Pharmacokinetics, PASS Prediction, and Molecular Docking Analysis of Methyl 6-O-Myristoyl-a-D-Glucopyranoside Derivatives against SARS-CoV-2. *Philipp. J. Sci.* **2022**, *151* (6A), 2215–2231.
    https://philjournalsci.dost.gov.ph/author/jj5167/page/6/
    (Scopus-indexed: Q3)

Before NSU:

27. **Uddin, K. M.;** Alrawashdeh, A. I.; Henry, D. J.,Warburton, P. L. Poirier, R. A. Hydrolytic Deamination Reactions of Amidine and Nucleobase Derivatives. *Int. J. Quantum Chem.* **2020**, *120(1)*, e26059. DOI: http://dx.doi.org/10.3329/jsr.v13i1.48147.
    (Scopus-indexed: Q3)
28. **Uddin, K. M.;** Alrawashdeh, A. I.; Debnath, T.; Aziz, M. A.; Poirier, R. A. Synthesis, spectroscopic characterization, and theoretical studies on the substitution reaction of chromium(III) picolinate. *J. Mol. Struct*. **2019**, *1189*, 28−39A. DOI: https://doi.org/10.1016/j.molstruc.2019.04.015.
    (Scopus-indexed: Q3)
29. Kabir, H.; Rahman, M. M.; **Uddin, K. M.** Structural, Morphological, Compositional and Optical Studies of Plasma Polymerized 2-Furaldehyde. *Appl. Surf. Sci.* **2017**, *423*, 983−994. DOI: https://doi.org/10.1016/j.apsusc.2017.06.284.
    (Scopus-indexed: Q1)
30. **Uddin, K.M.;** Henry, D. J., Alrawashdeh, I. A.; Warburton, P. L.; Poirier, R.A. Mechanism for the deamination of Ammeline, Guanine and their Analogues. *Struct Chem.* **2017**, *28*, 1467 —1477. DOI: https://doi.org/10.1007/s11224-017-0941-z.
    (Scopus-indexed: Q3)
31. **Uddin, K.M.;** Henry, D. J. Investigation of Mono-, Bis- and Tris-glycinatochromium(III): Comparisons of Computational and Experimental Results. *Polyhedron* **2017**, *130*, 81−93.
    DOI: https://doi.org/10.1016/j.poly.2017.04.003.
    (Scopus-indexed: Q3)
32. **Uddin, K.M.;** Habib, A. M.; Henry, D. J. Investigating the thermal analysis and Electrochemistry properties for tris-(glycinato)chromium(III). *ChemistrySelect* **2017**, *2*, 1950−1958. DOI: https://doi.org/10.1002/slct.201700079.
    (Scopus-indexed: Q3)
33. **Uddin, K. M.;** Henry, D. J. Further Theoretical Studies of the Aquation of Chromium(III) Chloride Nutritional Supplement: Effect of pH and Solvation. *ChemistrySelect* **2016**, *1*, 5236−5249. DOI: https://doi.org/10.1002/slct.201601305.
    (Scopus-indexed: Q3)
34. **Uddin, K. M.;** Henry, D. J. Poirier, R. A.; Warburton, P. L. Calculated Bond Dissociation Energies and Enthalpy of Formation of alpha-Amino acid Radicals. *Theor. Chem. Acc.* **2016**, *135*, 224. DOI: https://doi.org/10.1007/s00214-016-1975-9.
    (Scopus-indexed: Q3)
35. Almatarneh, M. H.; Abu-Saleh, A. A. A.; **Uddin, K. M.;** Poirier, R. A.; Warburton, P. L. A Computational Mechanistic Study of the Deamination Reaction of Melamine. Int. J. Quantum Chem. 2016, 117, 180−189. DOI: https://doi.org/10.1002/qua.25308.
    (Scopus-indexed: Q3)

36. **Uddin, K.M.;** Raymond, A. Poirier; Henry, D. J.; Mechanistic study of the aquation of nutritional supplement chromium chloride and other chromium(III) Dihalides. *J. Comp. and theor. Chem.* **2016**,*1084*, 88−97. DOI: https://doi.org/10.1016/j.comptc.2016.03.016. *(Scopus-indexed: Q2)*
37. **Uddin, K.M.;** Ralph, D.; Henry, D. J. Mechanistic investigation of halopentaaquachromium(III) complexes: comparison of computational and experimental results. *Computational and Theoretical Chemistry* **2015**, *1070*, 152−161. DOI: https://doi.org/10.1016/j.comptc.2015.08.007. *(Scopus-indexed: Q2)*
38. **Uddin, K.M.;** Flinn, C. G.; Poirier, R.A.; Warburton, P. L. Comparative computational investigation of the reaction mechanism for the hydrolytic deamination of cytosine, cytosine cyclobutane dimer and several 5,6-saturated. Computational and Theoretical Chemistry **2014**, *1027*, 91−102. DOI: https://doi.org/10.1016/j.comptc.2013.10.027. *(Scopus-indexed: Q2)*
39. Khan, M. W.; **Uddin, K.M.;** Ali, M.; Rahman, M. S.; Rashid, M. A.; Chowdhury, R. A convenient synthesis of new annelated pyrimidines and their biological importance. *J. Heterocycl. Chem.* **2014**, *51*, E216−E221. DOI: https://doi.org/10.1002/jhet.1891. *(Scopus-indexed: Q3)*
40. **Uddin, K.M.;** Warburton, P. L; Poirier, R.A. Comparative computational and experimental thermochemical properties of common a-amino acids. *J. Phys. Chem. B* **2012**, *116*, 3220−34. DOI: https://doi.org/10.1021/jp210948m. *(Scopus-indexed: Q1)*
41. **Uddin, K.M.;** Poirier, R.A. Computational study of the deamination of 8-Oxoguanine. *J. Phys. Chem. B* **2011**, *115*, 9151−9159. DOI: https://doi.org/10.1021/jp202098k. *(Scopus-indexed: Q1)*
42. **Uddin, K.M.;** Almatarneh, M.H.; Shaw, D.M.; Poirier, R.A. Mechanistic study of the deamination reaction of guanine: A computational study. *J. Phys. Chem. A* **2011**, *115*, 2065−2076. DOI: https://doi.org/10.1021/jp1120806. *(Scopus-indexed: Q2)*
43. Rahman, K. M.; Chowdhury, A. Z. M.S.; Bhuiyan, M. M. H.; Hossain, M. K.; **Uddin, K.M.** Synthesis and antimicrobial activity of some heterocycles: Part- II Pak J. Sci. Ind. Res. 2003, 46, 95−98. DOI: http://www.v2.pjsir.org/index.php/biological-sciences/article/ view/1601. *(Scopus-indexed: Q4)*
44. Rahman, K. M.; Chowdhury, A. Z. M.S.; Bhuiyan, M. M. H.; Hossain, M. K.; **Uddin, K.M.** Synthesis and antimicrobial activity of some Heterocycles: Part – II. *North Ben. Uni. Rev. (Sci. & Tec,)* **2001**, *12*, 1−12. *(Scopus-indexed: NR)*

Presentations at Scientific Meetings and Conferences

At NSU

- Kabir M. Uddin, Raymond A. Poirier. *New insight: mechanistic exploration of methyl substitution effects on picolinic acid decarboxylation pathways.* ACS Spring 2024 Conference, New Orleans, Louisiana & Hybrid, March 17–21, 2024. *(International)*
- Mohiuddin Sakib, Md. Shamim Hossian, Kabir M. Uddin. *Investigating hydrazine derivatives as prospective anticancer agents: Evaluation of physicochemical properties, molecular docking, and dynamic analysis.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*
- Md. Shamim Hossian, Mohiuddin Sakib, Kabir M. Uddin. *In-silico evaluation of novel pyridoxal isonicotinoyl hydrazone (PIH) derivatives as anti-tuberculosis agents.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*
- Humaera Noor Suha, Kabir M. Uddin. *Investigating anti-acetylcholinesterases (AChE) as potential therapies for Alzheimer's disease through in-silico analysis.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*

- Mehnaz Hossain Meem, Sumaiya Binte Yusuf, Kabir M. Uddin. *Comprehensive exploration of physicochemical properties, molecular docking, and molecular dynamics assessment of novel naphthoquinone derivatives as potential anticancer and antibacterial agents.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*
- Atiqa Labiba, Kabir M. Uddin. *A comparative in-silico assessment of baxdrostat and potential derivatives as aldosterone synthase inhibitors for the treatment of resistant hypertension.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*
- Tafsir Karim, Kabir M. Uddin. *Computational exploration of novel polyamine quinoline antibiotic enhancers against resistant Gram-negative* Pseudomonas aeruginosa *bacteria.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*
- Shairin, Kabir M. Uddin. *Investigating small compounds for cancer therapy: Exploring properties, docking, and movement.* **37th BSM Annual Conference**, January 26–27, 2024. *(Local)*
- Nusrat Jahan Ikbal Esha, Mohiuddin Sakib, Kabir M. Uddin. *Molecular docking, molecular dynamics studies, and biological evaluation of fluoro-flavonoid derivatives as potential anti-cell lung cancer agents.* **1st International Conference on Frontier in Science**, November 11–22, 2022. *(Local)*
- Asaduzzaman, Kabir M. Uddin. *DFT study, physicochemical, molecular docking, and molecular dynamics studies of novel hydrazone derivatives as anti-tuberculosis agents.* **1st International Conference on Frontier in Science**, November 11–22, 2022. *(International)*
- Minhaz Zabin Saif, Md. Emamuzzaman, Kabir M. Uddin. *Investigation of thermochemical, physicochemical, pharmacokinetics, molecular docking, and molecular dynamic analysis of 6-substituted 3-formylchromone derivatives as potential anti-inflammatory and antineoplastic agents.* **1st International Conference on Frontier in Science**, November 11–22, 2022. *(International)*
- Syeda Tasnim Quayum, Kabir M. Uddin. *Bio-evaluation, DFT study, pharmacokinetics, molecular docking, and molecular dynamics studies of novel flavonoids as potential anti-liver drug candidates.* **1st International Conference on Frontier in Science**, November 11–22, 2022. *(International)*
- Siam Siraji, Md. Abu Sayed, Md. Tanim Bin Zaman, Abdullah Bin Masud, Kabir M. Uddin. *Investigation of physicochemical, pharmacokinetics, molecular docking, and molecular dynamics analysis of novel quinoline derivatives as potential antimalarial drugs.* **1st International Conference on Frontier in Science**, November 11–22, 2022. *(International)*

Training & Workshops

NSU:

- Training workshop on biosafety and biosecurity in microbiological and biomedical research and diagnostics,, in teaching laboratories and pharmaceutical industries of North South University, June 2-3, **2024**.
- Training on enhancing chemical security awareness in academic institutions in bangladesh, November 1-3, **2023** by CRDF GLOBAL.
- Training on institutional quality assurance cell (IQAC) of North South University, August 11, **2023**

Before NSU:

- **Entrepreneutrial Research and Innovation Program** by **CERI**, Australia, February 2017
- **Laboratory Safety Training** in Science in **Murdoch University**, Australia on April 2014
- Graduate Research Integrity Program **(GRIP)** online module in **Murdoch University**, Australia on June 2014
- Graduate Research, Education and Training **(GREAT)** Program workshop in **Murdoch University**, Australia on April 2014

- Professional Skill Development Program **(PSDP)** training in **Memorial University, Canada** from September 2011 to November 2011
- **Teaching Opportunity Graduate Assistants Program** Level 2 on October, 2010 by Instructional Development Office of **Memorial University, Canada**
- **Lab Safety** and **W.H.M.I.S. Training** on October, 2009 by **Atlantic Safety Centre of Memorial University, Canada**
- **Training on Environment Control (Contamination Control)** in Bangladesh, June 15–16th, 2006 by APC (Asia Pacific Consultants Ltd.), **Australia**
- Training on HPLC, UV-Spectroscopy, FTIR, AAS, GC, TOC on Nov 2005 by ***Plasma Plus*** Ltd of Bangladesh
- Training on HPLC: Waters (Operation and Basic Troubleshooting) on March 15–18th, 2003 by ***Technoworth Associate Ltd*** of Bangladesh

Awards/Scholarships/Fellowships

NSU:

1. Special Allocation for Science & Technology, Ministry of Science and Technology (MOST): **2023-2024, 2022-2023.**
2. North South University research grant: **2023-2024, 2022-2023.**

Before NSU:

3. Industry and PhD Research Engagement Program Award, Western Australian Universities (**iPREPWA**), Perth, Western Australia, February 2017
4. The Overall **Best Graduate Poster Award** in 'the graduate research students' in the disciplines within the School of Engineering and Information Technology, Murdoch University, WA, 2017
5. International Conference on Food Chemistry and Technology (**FCT-2016**) Award, Las Vegas, USA, November 2016
6. Conference **Travel Award** from Murdoch University, WA, September 2016
7. Prestigious Scholarships International Postgraduate Research Scholarships (**IPRS**) and Australian Postgraduate Research Award (**APA**), January, 2014, at Murdoch University, WA, Australia
8. Murdoch University **Top-up Scholarship**, January 2014, Perth, WA
9. **UPA and IPTA** Awards in Spring, 2013, University of Wollongong, NSW, Australia
10. Memorial **Postgraduate Scholarship** from the School of Graduate Studies, Memorial University, St. John's, Canada, September 2009 to April 2013
11. Supervisor provided **NSERC** fund of Memorial University, Canada, 2009-2013
12. **Teaching Assistantship** Scholarship, 2009-2013 from the School of Graduate Studies, Memorial University, St. John's, Canada
13. Conference **Travel Award** from Memorial University, Canada, June 2011
14. Atlantic Computational Excellence Network (**ACENET**) Conference Travel Award (2010 and 2011)

15. **TOGA 2 Fellowship** from the School of Graduate Studies, MUN, St. John's, Canada, Winter 2010
16. **Bangladesh-Sweden Trust Fund Travel Grant** to pursue higher study at Memorial University of Newfoundland, St. John's, Canada, 2009
17. **Fellowship for M.Phil** thesis by Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh, 2006

Professional Memberships

- Member (ID # **30379633**) of the American Chemical Society (*ACS*) (2012 - present)
- Member (ID # **603567**) of the Chemical Institute of Canada (*CSC*) (2011 – present)
- Member (ID # **2594**) of the Bangladesh Chemical Society (2007 – present)

References and Collaboration

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