

Curriculum Vitae

Name : **Mahmuda Hakim**
Present Status : Senior Scientific Officer
Mailing Address : mahmuda.silvi@yahoo.com
Sex : Female
Nationality : Bangladeshi



Field of Specialization: Chemistry

Job profile:

Scientific Officer : Aug 13, 2015- Nov 22, 2020
Senior Scientific Officer : Nov 22, 2020 – Present

Academic Background:

Degree	Field of background	University
B.Sc.	Chemistry	Jahangirnagar University
M.Sc.	Chemistry	Jahangirnagar University

List of Activities:

(i) Publications:

1. Lipy, E.P., Hakim, M*., Mohanta, L.C. *et al.* Assessment of Heavy Metal Concentration in Water, Sediment and Common Fish Species of Dhaleshwari River in Bangladesh and their Health Implications. *Biol Trace Elem Res* **199**, 4295–4307 (2021). <https://doi.org/10.1007/s12011-020-02552-7>
2. Podder M, Moni MR, Rahman ML, Biswas B, Sharmin N, Hakim M, Rahman M, Hossain MS, Ahmed MF. Exploration of properties (crystallographic, morphological, optical) of nano cobalt aluminate synthesized by facile sol–gel method: Effects of sintering temperature. *Arabian Journal of Chemistry*. 2024 Mar 1;17(3):105601. <https://doi.org/10.1016/j.arabjc.2024.105601>.
3. Turzo PI, Sarder T, Zohra FT, Khan MR, Hakim M. Preservation of goat skin using fish scale powder: An initiative to reduce pollution in tannery wastewater. *Case Studies in Chemical and Environmental Engineering*. 2023 Jun 26:100413. <https://doi.org/10.1016/j.cscee.2023.100413>
4. Hossain QS, Ahmed S, Nishat SS, Hossain MZ, Khan MN, Hasan T, Bashar MS, Hakim M, Syed IM, Hossain KS, Ahmed I. An ab initio DFT perspective on experimentally synthesized CuBi₂O₄. *RSC advances*. 2023;13(21):14291-305. DOI: 10.1039/D3RA01813J
5. Mohanta LC, Huque A, Islam D, Roy DC, Hakim M, Akhter S, Lyzu C, Lipy EP, Nabi MR. Accumulation of heavy metals in long-evans rat through feeding fishes of Buriganga river and their histopathological evaluation. *Biological Trace Element Research*. 2023 Aug;201(8):3928-40. <https://doi.org/10.1007/s12011-022-03477-z>

6. Maitra B, Khatun MH, Ahmed F, Ahmed N, Kadri HJ, Rasel MZ, Saha BK, Hakim M, Kabir SR, Habib MR, Rabbi MA. Biosynthesis of *Bixa orellana* seed extract mediated silver nanoparticles with moderate antioxidant, antibacterial and antiproliferative activity. *Arabian Journal of Chemistry*. 2023 May 1;16(5):104675. <https://doi.org/10.1016/j.arabjc.2023.104675>
7. Khatun N, Ahmed S, Hossain MS, Farhad SF, Al-Mamun M, Alam MS, Begum MH, Tanvir NI, Hakim M, Islam S. Influence of Y³⁺ and La³⁺ ions on the structural, magnetic, electrical, and optical properties of cobalt ferrite nanoparticles. *Heliyon*. 2023 Feb 1;9(2). <https://doi.org/10.1016/j.heliyon.2023.e13019>
8. Alam MS, Farhad SF, Tanvir NI, Bitu MN, Moniruzzaman M, Hakim M, Shaikh MA. Spherical and Rod-shaped Gold Nanoparticles for Surface Enhanced Raman Spectroscopy. In 2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI) 2022 Dec 17 (pp. 1-4). IEEE. <http://dx.doi.org/10.1109/STI56238.2022.10103260>
9. Lyzu C, Mitra S, Perveen K, Khan Z, Tareq AM, Bukhari NA, Husain FM, Lipy EP, Islam D, Hakim M, Emran TB. Phytochemical profiling, antioxidant activity, and in silico analyses of *Sterculia villosa* and *Vernonia patula*. *Evidence-Based Complementary and Alternative Medicine*. 2022 Jun 6;2022. <https://www.hindawi.com/journals/ecam/2022/3190496/>
10. Kabir MM, Akter MM, Khandaker S, Gilroyed BH, Didar-ul-Alam M, Hakim M, Awual MR. Highly effective agro-waste based functional green adsorbents for toxic chromium (VI) ion removal from wastewater. *Journal of Molecular Liquids*. 2022 Feb 1;347:118327. <https://doi.org/10.1016/j.molliq.2021.118327>
11. Kabir MM, Nahar N, Akter MM, Alam F, Gilroyed BH, Misu MM, Didar-ul-Alam M, Hakim M, Tijing L, Shon HK. Agro-waste-based functionalized and economic adsorbents for the effective treatment of toxic contaminants from tannery effluent. *Journal of Water Process Engineering*. 2023 Apr 1;52:103578. <https://doi.org/10.1016/j.jwpe.2023.103578>
12. Khatun R, Mamun MS, Islam S, Khatun N, Hakim M, Hossain MS, Dhar PK, Barai HR. Phytochemical-assisted Synthesis of Fe₃O₄ Nanoparticles and Evaluation of Their Catalytic Activity. *Micromachines*. 2022 Nov 26;13(12):2077. <https://www.mdpi.com/2072-666X/13/12/2077>
13. Islam D, Banerjee Shanta M, Akhter S, Lyzu C, Hakim M, Islam MR, Mohanta LC, Lipy EP, Roy DC. Cardioprotective effect of garlic extract in isoproterenol-induced myocardial infarction in a rat model: assessment of pro-apoptotic caspase-3 gene expression. *Clinical Phytoscience*. 2020 Dec;6:1-9. <https://link.springer.com/article/10.1186/s40816-020-00199-4>
14. Islam D, Lina NN, Roy RK, Lyzu C, Ahamed Z, Akhter S, Mohanta LC, Lipy EP, Hakim M, Roy DC. Relative proximate composition and mineral analysis of three garlic varieties available in Bangladesh. *European Journal of Medicinal Plants*. 2020 Jun 2;31(9):1-9.
15. Khan SI, Islam D, Bilkis K, Hakim M, Lipy EP, Mohanta LC, Haque MZ. Synthesis of atorvastatin substituted diamine and their corresponding isatin schiff bases as antibacterial and cytotoxic agent. *Iranian Journal of Organic Chemistry* Vol. 10, No. 2 (2018) 2377-2381
16. Islam D, Akter A, Huque A, Akhter S, Roy DC, Lyzu C, Hakim M, Mohanta LC, Lipy EP, Siddique MA, Khan MMRL, Rahman MN. Hypoglycemic Effect Study of a Combination of Some Stipulated Spices in Alloxan Induced Diabetic Wistar Albino Rats along with Nutritional Value Evaluation. *Journal of Diabetes Mellitus*, 2018, 8, 43-53.

(ii)Processes :

- Extraction of Sodium Alginate from the Brown Seaweed Algae of Bay of Bengal
No.:39.02.0000.043.37.943.23, Dated:11.06.2012
Accepted by Bangladesh Council of Scientific & Industrial Research, Dhanmondi, Dhaka-1205.
Bangladesh.

(iii)Others :

Id links :

- Researchgate profile: <https://www.researchgate.net/profile/Mahmuda-Hakim>,
- Googlescholar: https://scholar.google.com/citations?user=eu3ZC_oAAAAJ&hl=en

