

Curriculum Vitae

TASLIMA AKTER

Scientific Officer

Institute of Energy Research and Development (IERD)

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Field of Interest:

Microbiology, Enzyme Biotechnology, Molecular Biology & Genetics, Antimicrobial Resistance (AMR), Agricultural Microbiology, Biodegradation, Waste Management, Industrial Microbiology.

Academic Qualification:


Degree Earned	Institute	Result	Passing Year
Master of Science (M.Sc.) in Microbiology	Jagannath University	4 out of 4 (1 st position)	2018
Bachelor of Science (B.Sc.) in Microbiology	Jagannath University	3.98 out of 4 (1 st position)	2017
HSC (Science)	Govt. Bangla College	5 out of 5	2012
SSC (Science)	M.D.C. Model Institute	5 out of 5	2010

Research Experiences:

<i>May, 2022-Present</i>	Scientific Officer Leather Research Institute (LRI), Bangladesh Council of Scientific & Industrial Research (BCSIR) Ministry of Science & Technology Dhaka, Bangladesh
<i>Sept., 2019-Nov., 2021</i>	Research Student Centre for Advanced Research in Sciences (CARS), University of Dhaka, Bangladesh
<i>Jan., 2018- Feb., 2018</i>	Research Student Department of Applied Chemistry University of Dhaka, Bangladesh

In Research Community:

Research Gate ID: <https://www.researchgate.net/profile/Taslima-Akter-27>

ORCID ID:  <https://orcid.org/0000-0002-6487-4458>

Web of Science (Publons™) Researcher ID: HTN-5563-2023

Awards & Scholarship:

- Research grant for R&D project in 2024-25 from the Ministry of Science and Technology, Government of the People's Republic of Bangladesh.
- NST (National Science & Technology) Fellowship for M.Sc. thesis in 2020 from the Ministry of Science and Technology, Government of the People's Republic of Bangladesh.
- Crest and Merit Scholarship for Obtaining 1st Position in B.Sc. in 2018 from the Science Fiction Society.
- Merit Scholarship for Obtaining 1st Position in B.Sc. (2017) and M.Sc. (2018) from Jagannath University.
- Crest for Getting GPA-5 in HSC Examination in 2012 from Green University.
- Crest for Getting GPA-5 in SSC Examination in 2010 from M.D.C. Model Institute.
- Crest for Obtaining 1st Position in Long-jump Competition 2009 (School).

Skills:

- Adept in techniques for isolation & purification of microbial cultures, Microbial identification using microscopic techniques & biochemical tests, Antimicrobial sensitivity test of microorganisms, Preservation of microbial culture, Detection of microbial load on different samples, etc.
- Adept in PCR, Gel electrophoresis, Whole genome sequencing, DNA extraction, sequence analysis, Microbial enzyme production & purification.
- Capable of handling analytical instruments such as UV-Visible Spectrophotometer, ICPOES, FT-IR, STA, FESEM, HPLC, and so on.
- Proficient in Bibliographic database (EndNote), Graph-pad, SPSS data analysis, Communications software, Internet browsing, E-mail literacy, Online research.
- Good command of Bengali and English Reading, Writing and Speaking.

On-going R&D Projects:

1. Project Title: Exploring Halophilic Microorganisms for Protease Production & It's Potential Application. Role: Project Leader. Tenure: 2025-27.
2. Utilization of chicken slaughterhouse by-products for producing protein hydrolysate and its application in poultry feed. Project associate. Tenure: 2025-27.

Completed R&D Projects:

1. Project Title: Screening of Keratinase Producing Microorganisms for Dehairing of Hides and Skins. Role: Project Leader. Tenure: 2023-25.
2. Project Title: Isolation of microorganisms from tannery wastes for sustainable management of Cr-tanned leather waste. Role: Project associate. Tenure: 2023-25.
3. Project Title: Production of beneficial microbial enzymes from tannery waste & their application. Role: Project associate. Tenure: 2023-25.
4. Project Title: Evaluation of effectiveness of essential oil as alternative to antibiotics in commercial broiler chicken. Role: Project associate. Tenure: 2022-25.
5. Project Title: An eco-friendly method for preservation of hides and skins using *Tamarindus indica* leaf. Role: Project associate. Tenure: 2022-24.

6. Project Title: Development of a natural colorant having anti-microbial property for dyeing leather. Role: Project associate. Tenure: 2022-24.

Conference Proceedings:

1. **Taslina Akter**, Shashanka Sekhar Sarker, S. M. A. Sujan, and Sahana Parveen*, “Antimicrobial Activity of Some Natural Dyes Used in Leather Dying Process”, BCSIR Congress-2022, 01-03 December, 2022, PP-29, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh, Poster presentation.
2. **Taslina Akter**, S. M. A. Sujan, and Sahana Parveen*, “Bacterial Keratinolytic Protease Enzyme in Dehairing of Leather Hides and Skins”, International Conference on Environmental Protection for Sustainable Development (ICEPSD-2022), 2-4 September, 2022, PP- 49, Poster presentation.
3. Shashanka Shekhar Sarker, **Taslina Akter**, Nourin Tarannum, Md. Ashraful Alam, Md. Murshed Hasan Sarker, and Sahana Parveen*, “Isolation & identification of bacteria from tannery waste:chrome shavings management view point”, BCSIR Congress-2023, 08-10 March, 2024, PP-355, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh, Poster presentation.
4. Nourin Tarannum*, Sahana Parveen, Md Nazrul Islam Bhuiyan, Shashanka Shekhar Sarker, and **Taslina Akter**, “Isolation & optimization of protease producing bacteria for application on leather”, BCSIR Congress-2023, 08-10 March, 2024, OP-C23, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh, Oral presentation.
5. Md. Tushar Uddin, Yead Mahmud, Shashanka Shekhar Sarker, **Taslina Akter**, Chadni Lyzu, and Md. Abdur Razzaq*, “Application of mahogany seed pods as natural & antimicrobial colorants of leather”, BCSIR Congress-2023, 08-10 March, 2024, PP-226, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh, Poster presentation.
6. Md. Khabir Hossain, Kanish Fatema, Shimul Chakma, Yead Mahmud, **Taslina Akter**, and Md. Abdur Razzaq*, “An eco-friendly approach to preserve goatskins using *Tamarindus indica* leaf”, BCSIR Congress-2023, 08-10 March, 2024, PP-229, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh, Poster presentation.

Publications:

1. **Taslina Akter***, Murshed Hasan Sarkar, Shashanka Shekhar Sarker, Nourin Tarannum, Showti Raheel Naser, Sanjana Fatema Chowdhury, Sahana Parveen*. Screening and genomic evaluation of keratinolytic protease producing *Chryseobacterium sp.* from tannery waste and its potential application in dehairing of goat skin. Journal of Genetic Engineering and Biotechnology. **2025**; 23:100458. <https://doi.org/10.1016/j.jgeb.2025.100458>
2. Shashanka Shekhar Sarker, Md. Murshed Hasan Sarkar, Shamima Akhter Sharmin, Nourin Tarannum, **Taslina Akter**, Md. Ashraful Alam, Md. Ibrahim Miah, Md. Aftab Ali Shaikh*, Sahana Parveen*. Molecular characterization of chromium tolerant and gelatin hydrolyzing bacterial isolates from tannery wastes: Perspective on chrome-tanned leather waste biodegradation in Bangladesh. Journal of Genetic Engineering and Biotechnology. **2025**; 23:100479. <https://doi.org/10.1016/j.jgeb.2025.100479>

3. Nourin Tarannum*, Sahana Parveen, Mohammad Nazrul Islam Bhuiyan, Abhijit Chowdhury, Umma Fatema Shahjadee, Shashanka Shekhar Sarker, **Taslina Akter**, Amin Hossain, Md. Ashraf Alam, Md. Aftab Ali Shaikh*. Exploring newly isolated thermotolerant, halotolerant and antimicrobial resistant *Bacillus subtilis* ProNTL1 from tannery waste and its alkaline protease production. *Molecular Biology Reports*. **2024**; 51:1131. <https://doi.org/10.1007/s11033-024-10000-1>
4. Md. Khabir Hossain, Md. Mocarom Hossain, Kanish Fatema, Shimul Chakma, Yead Mahmud, **Taslina Akter**, Shahariar Siddique, Al-Tamanna, Md. Abdur Razzaq*. An Eco-Friendly Approach to Preserve Goatskins Using *Tamarindus Indica* Leaf. *Textile & Leather Review*. **2024**; 7:893-914. <https://doi.org/10.31881/TLR.2024.081>
5. **Taslina Akter**, Shashanka Shekhar Sarker, SMA Sujan, Sahana Parveen*. Antimicrobial Activity of Natural and Synthetic Dyes Used in Leather Dyeing: A Comparative Study. *Textile & Leather Review*. **2023**; 6:387-400. <https://doi.org/10.31881/TLR.2023.077>
6. **Taslina Akter**, SM Tanjil Shah, Md Arafat Al Mamun, Md Latiful Bari, Shamima Begum, Naziza Rahman & Md Ibrahim Miah*. Cost-effective Formulation of Bio-fertilizer using Agricultural Residues as Carriers and Determination of Shelf-life of Bio-fertilizer Inoculants. *Dhaka University Journal of Biological Science*. **2023**; 32(2): 189-199. <https://doi.org/10.3329/dujbs.v32i2.67678>
7. Shashanka Shekhar Sarker, MS, **Taslina Akter**, Sahana Parveen, Md. Tushar Uddin, Ajoy Kanti Mondal, & S. M. Asaduzzaman Sujan*. Microalgae-based Green Approach for Effective Chromium Removal from Tannery Effluent: A review. *Arabian Journal of Chemistry*. **2023**; 16, 105085. <https://doi.org/10.1016/j.arabjc.2023.105085>

Trainings:

1. Successfully completed a five days training on "High Performance Liquid Chromatography (HPLC)" from 16-20 March, 2025 organized by IFST, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh.
2. Successfully completed "28th Special Foundation Training Course for Scientific Officers of BCSIR" from 22 December, 2024-19 February, 2025 organized by National Academy for Planning and Development (NAPD), Ministry of Public Administration, Government of the People's Republic of Bangladesh, Bangladesh.
3. Successfully completed a five days training on "Field Emission Scanning Electron Microscope (FESEM)" from 26-30 May, 2024 organized by BTRI, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh.
4. Successfully completed a five days training on "Inductively Coupled Plasma Optical Emission Spectrophotometry (ICPOES)" from 12-16 May, 2024 organized by LRI, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh.
5. Successfully completed a three days training on "SARS-CoV-2 Detection by Real Time qPCR Technique" from 22-24 December, 2020 organized by Graduate Microbiologist Society Bangladesh (GMS) in association with International Society of Bangladesh-associated Microbiologist (ISBM) at RT-PCR Lab of Noakhali Science and Technology University, Noakhali, Bangladesh.

Interests:

- Keen interest in Research, Teaching, Reading Newspapers and Travelling.
- Like to play Badminton, Ride a bicycle and scooter.
- Like to listen music, watching Scientific and Historical movies.
- Interest to do any work by own Responsibility.

Sign and Date:

Taslima Akter