

FAJILATUN NESA

fajilatunnesa23@bcsir.gov.bd; fajilatunnesa07@gmail.com; Mobile: +880-1744280823

Office: Chemical Research Division, BCSIR Dhaka Laboratories
Bangladesh Council of Scientific & Industrial Research (BCSIR)
Dr. Qudrat-E-Khuda Road, Dhaka-1205, Bangladesh

Education

M. Sc. in Organic Chemistry University of Dhaka, Dhaka, Bangladesh	2022
B. Sc. (Hons.) in Chemistry University of Dhaka, Dhaka, Bangladesh	2021

Professional Experience

Research Chemist

Chemical Research Division, BCSIR Dhaka Laboratories
Bangladesh Council of Scientific & Industrial Research (BCSIR)

February 2023 to Present

Technical Skill and Competences

Analytical Chemistry; Gas Chromatography; Analytical & Characterization Techniques of Organic Polymers, Organic Synthesis

Skills on Research Tools & Techniques

- Identification and quantification of trace contaminants by Gas Chromatography-Electron Capture Detector, Gas Chromatography-Flame Ionizing Detector
- Synthesis of biopolymer (example: water soluble chitosan)
- Advanced materials characterization: FT-IR, NMR, XRD, SEM, TGA/DSC, UV-Vis spectroscopy, and Viscometry etc.

Publications

- Islam, R., Zohora, F. T., Islam, M. M., **Nesa, F.**, Akter, R., Georghiou, P., Rahman, S., Alodhayb, A. & Hossain, M. S. (2026). Method validation for quantification of anthracene and pyrene by UV-Vis spectroscopy: experimental and theoretical study. *Environ Monit Assess.*, **198:38**.

- Akter, R., Islam, M. M., Islam, W. M., Akter, T., Ali, M. H., **Nesa, F.**, Rahman, S., Alodhayb, A. & Georghiou, P. (2025). Recent Developments in the Biological Consequences of Certain Chalcone Derivatives. *ChemistrySelect*, **10(41)**.
- Pk, M. E. H., Islam, M. M., Akter, T., **Nesa, F.**, Rahman, M., Paul, T., Mustafi, S., Karim, M. R., & Rahman, S., Alodhayb, A. & Vasquez-Guardado, E., & Albrithen, H. (2024). Carboxymethyl Chitosan-based Biodegradable Films Preparation and Prospects for Food Preservation. *ChemistrySelect*, **10(1)**.
- **Nesa, F.**, Shoeb, M., Islam, M. M. & Islam, M. N. (2021). Studies of Physico-chemical Properties and Cytotoxicity of Fruits of *Syzygium jambos* L. against HeLa and Vero Cell Lines. *Bangladesh Pharm. J.*, **24(2)**:111-116.

Conference Presentations

- Poster Presentation in *1st International Conference on Science and Humanities for Sustainable Development (ICSHSD-2025)*, October 23-24, 2025, DUET, Gazipur, Bangladesh
- Oral Presentation in *BCSIR Congress 2023*, March 08-10, 2024, Bangladesh Council of Scientific and Industrial Research, Dhaka-1205, Bangladesh
- Oral Presentation in *BCSIR Congress 2022*, December 01-03, 2022, Bangladesh Council of Scientific and Industrial Research, Dhaka-1205, Bangladesh

Professional Trainings

Training on Scientific Instrumentation

- Training on Operation and Maintenance of “**Nuclear Magnetic Resonance (NMR) Spectrometer**” held on 24-28 August, 2025, organized by Bangladesh Council of Scientific and Industrial Research, Dhaka-1205, Bangladesh.
- Training on Principal, Application, Troubleshooting and Maintenance of **HPLC** held on 12 November, 2024 organized by Dhaka Laboratories, Bangladesh Council of Scientific and Industrial Research, Dhaka-1205, Bangladesh.
- Training on Operation and Maintenance of “**Gas Chromatography-Mass Spectrometer (GC-MS)**” held on 11-15 February, 2024, organized by Bangladesh Council of Scientific and Industrial Research, Dhaka-1205, Bangladesh.

References

Available up on request

Last Updated: Tuesday, 02 March, 2026