

International Conference on Life Sciences

Current Research, Innovations, and Future Perspectives

Organized by

School of Life Sciences, SUST, Sylhet, Bangladesh

October 17, 2025 (Day 1)

Shahjalal University of Science and Technology (SUST), Sylhet

9.00 AM - 10.30 AM Opening Ceremony

Venue: Central Auditorium

9.00 AM - 9.05 AM	Welcome	
9.05 AM - 9.15 AM	Recitation From the Holy Quran	Mawlana Motiur Rahman Grand Imam, Central Mosque, SUST
9.15 AM - 9.25 AM	Welcome Speech	Prof. Dr. Mohammad Jakir Hosen Organizing Secretary ICLS- 2025
9.25 AM - 9.35 AM	Speech of the Special Guest	Prof. Dr. Md. Shajedul Karim Pro Vice Chancellor Shahjalal University of Science and Technology, Sylhet, Bangladesh
9.35 AM - 9.45 AM	Speech of the Patron	Dr. Md. Alimul Islam Vice Chancellor, Sylhet Agricultural University, Sylhet, Bangladesh
9.45 AM - 9.55 AM	Speech of the Guest of Honor	Prof. Dr. Mohammad Abdur Rob Vice Chancellor (Acting), Manarat International University (MIU), Dhaka, Bangladesh
9.55 AM - 10.05 AM	Presenting Crest	
10.05 AM - 10.20 AM	Speech of the Chief Guest	Prof. Dr. A. M. Sarwaruddin Chowdhury Vice Chancellor, Shahjalal University of Science and Technology, Sylhet, Bangladesh
10.20 AM - 10.30 AM	Vote of Thanks and Closing	Prof. Dr. Md. Abdullah Al Mamun Convenor, ICLS-2025

10.45 AM - 12.45 AM Plenary Session

Chairs	Dr. Khondoker Moazzem Hossain Professor, Daffodil International University, Savar, Bangladesh Dr. Md. Abul Kalam Azad Professor, Department of Genetic Engineering & Biotechnology, SUST, Bangladesh	
10.45 AM - 11.45 AM	Plenary Lecture Bringing Zinc for Healthcare in Bangladesh	Prof. Dr. Mohammad Tariqur Rahman Deputy Executive Director [Dev, Research & Innovation], International Institute of Public Policy and Management Associate Member, UM LEAD Universiti Malaya, Kuala Lumpur, Malaysia
11.45 AM - 12.45 PM	Plenary Lecture: Science and Education in the Era of AI and ChatGPT: How to Nurture Human Creativity?	Dr. Abed Chaudhury Chairman, Krishan Foundation; Co-Founder & Chief Scientist, Genofax

12.45 PM - 2.45 PM Prayer and Lunch Break

2.45 PM - 4.45 PM Parallel Session, 3 Segments

Parallel Session 1

Microbial, Environmental, and Industrial Biotechnology

Time: 2.45 PM – 4.45 PM

Venue: Central Auditorium

Chairs:

Prof. Dr. A.T.M. Mahbub-E-Elahi, Treasurer, Sylhet Agricultural University, Sylhet
Prof. Dr. Abdull Manan Mat Jais, Founder and Project Leader of Abmanan Biomedical Sdn Bhd, Malaysia

Time	Keynote Talk
2.45 PM- 3.05 PM	Prof. Dr. Md. Alimul Islam Vice Chancellor Sylhet Agricultural University Title: Increasing Productivity of Livestock, Poultry and Fische's Sustainable Health Management Against Economically Important Diseases is Mandatory
	Invited Talk
3.05 PM - 3.20 PM	Dr. Abdullah Harun Chowdhury Professor, Environmental Science Discipline, Khulna University, Khulna, Bangladesh Title: Environmental Threats and Sustainable Conservation of Algal Flora of St. Martin's Island of Bangladesh
3.20 PM - 3.35 PM	Dr. Md. Abdul Alim Al-Bari Professor, Department of Pharmacy, University of Rajshahi, Rajshahi, Bangladesh Title: Repurposing Drug Development against Antibiotic Resistant Bacterial Pathogens: Approaches and Challenges
3.35 PM - 3.50 PM	Dr. Mohamamd Tofazzal Hossain Howlader Professor, Insect Biotechnology and Biopesticide Laboratory, Department of Entomology, Bangladesh Agricultural University, Mymensingh, Bangladesh Title: Development of Fungal Biopesticides for Smart and Sustainable Pest Management in Bangladesh
Talks from Selected Abstracts	
3.55 PM – 4.03 PM	M Rabiul Islam Biotechnology and Genetic Engineering Discipline, Life Science School, Khulna University, Khulna, Bangladesh MEI027: Characterization of Salt-tolerant Phosphate-solubilizing Bacteria from Saline Soils of Coastal Bangladesh
4.05 PM – 4.13 PM	Amzad Hossain Molecular Biology Laboratory, Dept of Biochemistry and Molecular Biology, University of Dhaka, Dhaka, Bangladesh MEI069: Process Development for Enhanced Production of Novel Lantibiotic (Homicorcin) Through a Heterologous Expression System
4.15PM – 4.23 PM	Ali Wahab Showhardo Department of Genetic Engineering and Biotechnology, Shahjalal University of Science and Technology, Sylhet, Bangladesh MEI076: Bacteriophages from Respiratory Medical Devices: Isolation and Characterization Against Multidrug-Resistant (MDR) Pathogens
4.25 PM – 4.33 PM	Md. Mehedi Hasan Faculty of Agricultural Engineering and Technology, Sylhet Agricultural University, Sylhet, Bangladesh

	MEI089: Optimizing Phosphate Removal and Recovery from Eutrophic Wastewater Using Zirconium Oxychloride (ZrOCl)
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Parallel Session 2 Plant, Agriculture, and Food Biotechnology Time: 2.45 PM – 4.45 PM Venue: A Building, Room-129 Gallery Chairs: Prof. Dr. Md. Mominul Hoque, Department of Biochemistry & Molecular Biology, University of Rajshahi, Bangladesh Prof. Dr. Md. Mizanur Rahman, Department of Biotechnology and Genetic Engineering, Islamic University, Kushtia, Bangladesh

Time	Keynote Talk
2.45 PM- 3.05 PM	Prof. Dr. Md. Atiar Rahman Vice Chancellor Rangamati Science and Technology University, Rangamati, Bangladesh Title: Inevitability of Plant-based Nanodrugs: A Move to a Paradigm Shift
	Invited Talk
3.05 PM - 3.20 PM	Yamin Kabir Professor, Agrotechnology Discipline, Khulna University, Khulna, Bangladesh Title: Effects of Postharvest Treatments on the Quality Attributes of Guava (<i>Psidium guajava</i> L.)
3.20 PM - 3.35 PM	Mohammad Riazul Islam Molecular Biology Laboratory, Dept. of Biochemistry and Molecular Biology, Faculty of Biological Sciences, University of Dhaka, Dhaka, Bangladesh Title: From Lab to Field: A Comprehensive Approach to Enhance Jute Retting with a Novel Microbial Formulation
3.35 PM - 3.50 PM	Shamsul H. Prodhan Professor, Department of Genetic Engineering and Biotechnology, Shahjalal University of Science and Technology, Sylhet, Bangladesh Title: Genetic Engineering: Prospects and Challenges in Bangladesh to Attain Food Security and SDGs
Talks from Selected Abstracts	
3.55 PM – 4.03 PM	Md. Tareq Bin Salam Soil, Water and Environment Discipline, Khulna University, Khulna, Bangladesh PAF039: Biodegradation of Dinotefuran Insecticide Using Rhizosphere Bacteria Isolated from Dinotefuran-Treated Soil: A Study In Batch and In-Situ Microcosm Analysis
4.05 PM - 4.13 PM	Tasmiah Binte Sayeed Human Genetics Research & Training Center, Dhaka, Bangladesh PAF068: Health Benefits of Fermented Pigmented Rice-Based Products: Nutritional Evaluation and Future Public Health Interventions in Bangladesh

Parallel Session 3
Medical, Pharmaceutical, and Nano-Biotechnology
Time: 2.45 PM – 4.45 PM
Venue: Mini Auditorium
Chairs:

Prof. Dr. Md Shah Amran, Dept. of Pharmacy, School of Pharmacy and Public Health
Dr. Md Masuder Rahman, Professor, Department of BGE, MBSTU, Tangail, Bangladesh

Time	Keynote Talk
2.45 PM – 3.05 PM	Prof. Dr. Md. Abdul Mazid Vice Chancellor Jashore University of Science and Technology, Jashore, Bangladesh Title: Endophytic Fungi: Sources of Putative Anticancer and Antibacterial Metabolites
	Invited Talk
3.05 PM – 3.20 PM	Dr. Mohammad Al-Forkan Professor, Department of Genetic Engineering and Biotechnology, University of Chittagong, Chattogram, Bangladesh Title: Association of KRAS, PIK3CA, PTEN and ETS-1 Genes and Microsatellite Instability with Colorectal Cancer in Bangladeshi Population
3.20 PM – 3.35 PM	Dr. Mohammad Salim Hossain Professor, Department of Pharmacy, Noakhali Science and Technology University, Noakhali, Bangladesh Title: XXL is the Size of Problems: Reprogramming Adipose Tissue Functions by Targeting COX-2/PPAR Axis with Natural Products
3.35 PM – 3.50 PM	Dr. Md. Zahidul Islam Professor, Department of Biotechnology and Genetic Engineering, Jahangirnagar University, Savar, Dhaka, Bangladesh Title: Deciphering Bacterial Cell Death Mechanisms at the Single-Cell Level Using Antimicrobial Peptide Magainin
	Talks from Selected Abstracts
3.55PM - 4.03 PM	Farhadul Islam Department of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi, Bangladesh MPN002: Antiproliferative and Apoptotic Activity of a Zn(II) Complex against Cancer Cells, both <i>In Vitro</i> and <i>In Vivo</i>
4.05 PM -4.13PM	Md. Monirul Islam Department of Pharmacy, Noakhali Science and Technology University, Noakhali, Bangladesh MPN007: Bioactive Metabolites from LAB-Fermented Products Mitigate CCl4-Induced Liver Injury: Biochemical and <i>In-silico</i> Insights
4.15 PM - 4.23 PM	Tazrin Kabir Badhon Biotechnology and Genetic Engineering Discipline, Life Science School, Khulna University, Khulna, Bangladesh MPN009: Anxiolytic, Hypnotic, and Anti-seizure Activities of <i>Sonneratia apetala</i> (Buch.-Ham.) Fruit through the GABAAergic and Opioidergic Receptors
4.25 PM – 4.33 PM	Dr. Tanvir Uz Zaman Deputy Director, Medical Service, Mount Adora Hospital Akhalia, Sylhet, Bangladesh MPN017: Empirical Antibiotic Therapy Recommendations at Mount Adora Hospital

4.35 PM – 4.43PM	Md. Mahbub Hasan Department of Genetic Engineering and Biotechnology, University of Chittagong, Chittagong, Bangladesh. MPN039: The Chemical Evolution of Pyrrolobenzodiazepines: Shaping Novel Therapeutics from DNA Alkylators to PROTACs and Beyond
4.45 PM – 4.53 PM	Kamrun Nahar icddr,b, Mohakhali, Dhaka, Bangladesh MPN113: Resurgence of Chikungunya Outbreak in Bangladesh, 2024: Epidemiological Patterns, Clinical Implications, and Molecular Evolution

Sponsor Session	
5.00 PM - 5.30 PM	Representative from Mount Adora Hospital, Akhalia, Sylhet Representative from UniMed Uni Health, Dhaka, Representative from Bio Trade, Dhaka Representative from Invent, Dhaka
5. 30 PM – 7.30 PM Poster Presentation	
7.30 PM- 9.30 PM Gala Dinner , Cafeteria, SUST	

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October 18, 2025 (Day 2)

Shahjalal University of Science and Technology (SUST), Sylhet

9.00 AM - 11.00 AM Parallel Session, 3 Segments

Parallel Session 4

Bioinformatics and Computational Biotechnology

Time: 9.00 AM – 11.00 AM

Venue: Central Auditorium

Chairs:

Prof. Dr. Mohammad Shahedur Rahman, BGE, JU, Savar, Dhaka

Prof. Dr. Shamim Ahmed, BMB, SUST, Sylhet, Bangladesh

Time	Keynote Talk
9.00 AM - 9.20 AM	Prof. Dr. Hossain Uddin Shekhar Vice Chancellor Gopalganj Science & Technology University, Gopalganj, Bangladesh Title: Transforming Biomedical Research through Bioinformatics and Artificial Intelligence
	Invited Talk
9.20 AM - 9.40 AM	Dr. Md. Nazmul Hasan Professor, Laboratory of Pharmaceutical Biotechnology & Bioinformatics, Department of Genetic Engineering & Biotechnology, Jashore University of Science & Technology, Jashore-7408, Bangladesh Title: Novel Insights into PCGF4 in Pediatric Glioma: Therapeutic Promise of Marine Algae
9.40 AM-10.00 AM	Dr. Shahnaz Parvin Sweety Professor, Department of Pharmacy, University of Rajshahi, Rajshahi-6205, Bangladesh Title: Anti-Inflammatory and Anticancer Potential of Lagerstroemia speciosa Bark Explored through Experimental Models and Computational Simulations
	Talks from Selected Abstracts
10.05 AM -10.13 AM	Md. Faruk Hasan Department of Microbiology, University of Rajshahi, Rajshahi, Bangladesh BCB004: Assessment of Potential Compounds to Combat Microbial Multidrug Resistance of Bacterial Multidrug Resistance Regulator (Bmrr) from Chenopodium album (L.)
10.15 AM – 10.23 AM	Rakibul Islam Akanda Department of Genetic Engineering & Biotechnology, Shahjalal University of Science & Technology, Sylhet, Bangladesh BCB071: Identification of Novel Small Molecule Inhibitors Targeting Multiple Methyltransferase Like Proteins Against Hepatocellular Carcinoma
10.25 AM – 10.33 AM	Md. Sabbir Hossain Department of Pharmacy, University of Rajshahi, Rajshahi, Bangladesh

	BCB074: Anti-Inflammatory Potential of <i>Curcuma wallichii</i> Chloroform Fraction and Its Phytoconstituents: Insights from <i>In Vivo</i> and <i>In Silico</i> Studies
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Parallel Session 5 Biochemistry and Molecular Biotechnology Time: 9.00 AM – 11.00 AM Venue: A Building, Room-129 Gallery Chairs: Prof. Dr. Md. Sohel Hasan, Pro Vice Chancellor, Gopalganj Science & Technology University, Gopalganj, Bangladesh Prof. Dr. Arzuba Akter, Head. Department of BMB, SUST, Bangladesh
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Time	Keynote Talk
9.00 AM - 9.20 AM	Prof. Dr. Md. Anwarul Azim Akhand Vice Chancellor Mawlana Bhashani Science and Technology University, Tangail, Bangladesh Title: Effects of Heavy Metals on Health and Environment: Bangladesh Perspective
	Invited Talk
9.20 AM - 9.40 AM	Dr. Abdull Manan Mat Jais Professor of Biotechnology at Universiti Putra Malaysia (UPM), Founder and Project Leader of Abmanan Biomedical Sdn Bhd, 7319, Jalan 18/11, Taman Sei Serdang, Selangor, Malaysia Title: Back to Nature for Your Food and Medication
9.40 - 10.00 AM	Dr. Khaled Hossain Professor, Department of Biochemistry and Molecular Biology, University of Rajshahi, Bangladesh Title: Sarcopenic Obesity: A New Insight into Arsenic-Related Cardiometabolic Diseases
10.00 AM - 10.20 AM	Dr. Farjana Islam Assistant Professor, Department of Biochemistry and Molecular Biology, Shahjalal University of Science and Technology, Sylhet Title: Regulation of γ T Cell Homeostasis by Inflammatory Signalling Pathways
10.20 AM - 10.40 AM	Dr. Mohammed Mohasin Professor, Department of Biochemistry and Molecular Biology, University of Dhaka, Bangladesh Title: Capsular Polysaccharide Secondary Structure Impacts <i>Streptococcus pneumoniae</i> Interactions with the Host
	Talks from Selected Abstracts
10.40 AM - 10.48 AM	Md. Anwarul Haque Department of Pharmacy, University of Rajshahi, Rajshahi, Bangladesh BMB004: Mushroom-Derived Grifolin Suppresses AKT Signaling and Tumor Progression in Triple-Negative Breast Cancer
10.48 AM - 10.56 AM	Sohel Hasan Gopalganj Science and Technology University, Gopalganj BMB009: Yogurt Supplementation can Ameliorate Fatty Liver Diseases and Metabolic Syndrome in High Fat Induced Conditions in Mice
10.56 AM – 11.14 AM	H M Jubayer Azam Bappy Department of Neurosurgery, National Institute of Neurosciences and Hospital, Sher-E-Bangla Nagar, Dhaka BMB028: Assessment of ki-67 alternative messenger RNA (mRNA) in patients with pituitary adenomas based on immunohistochemical findings

Parallel Session 6
Animal Science, Fisheries and Livestock

Time: 9.00 AM – 11.00 AM

Venue: Mini Auditorium

Chairs:

Dr. Sheikh Julfikar Hossain, Professor, Khulna University, Khulna, Bangladesh
Prof. Dr. Md Kamrul Islam, Head, Department of GEB, SUST, Sylhet, Bangladesh

Time	Keynote Talk
9.00 AM - 9.20 AM	Professor Dr. Mohammad Raknuzzaman Vice Chancellor Jamalpur Science & Technology University Title: Current Research, Innovations, and Future Perspectives of Animal, Fisheries and Livestock in Bangladesh
	Invited Talk
9.20 AM - 9.40 AM	Sohel Rana Department of Dairy Science, Faculty of Veterinary, Animal and Biomedical Sciences, Sylhet Agricultural University, Sylhet, Bangladesh Title: Bacteriophage-based Biocontrol of Shiga Toxin-producing <i>Escherichia coli</i>: An Alternative Solution to Mitigate Antimicrobial Resistance
9.40AM -10.00 AM	Dr. Md. Delwer Hossain Department of Fisheries, University of Rajshahi, Rajshahi, Bangladesh Title: Parasitic Infections in Coastal <i>Lates calcarifer</i> and <i>Liza parsia</i> of Bangladesh
	Talks from Selected Abstracts
10.05AM-10.13AM	Nabil Jahan Mahim Sylhet Agricultural University, Sylhet, Bangladesh AFL041: Uncovering Knowledge Gaps and Molecular Detection of Inclusion Body Hepatitis in Poultry
10.13AM-10.21AM	Md. Jubayer Ahmed Department of Genetic Engineering and Biotechnology, Shahjalal University of Science and Technology, Sylhet, Bangladesh AFL046: Blood Profiling and <i>In Silico</i> Analysis of Hemoglobin Gene of Hilsa Shad, <i>Tenualosa Ilisha</i> across Diverse Salinity Habitats

11.30 AM to 12.30 PM

Prize Giving and Closing Ceremony

12.30 PM -2.30 PM

Lunch

1.00 PM - 7.00 PM

Sightseeing