CURRICULUM VITAE

Shahina Akter, PHD

Principal Scientific Officer
Genomic Research Laboratory
Bangladesh Council of Scientific & Industrial Research (BCSIR)
Dhaka-1205, Bangladesh.
Mobile: 088-01724096941
Email: shupty2010@gmail.com
Profile URL: https://publons.com/researcher/3828346/dr-shahina-akter
Research gate- https://www.researchgate.net/profile/Shahina_Akter4
ORCID iD- https://orcid.org/0000-0001-7776-6686

CAREER OBJECTIVE:

- To ensure significant contribution towards research and development including professional growth as well.
- To acquire a challenging research position and work in a professional atmosphere.

Ph.D. Thesis Title: "Development of an edible vaccine against pneumococcal diseases using transgenic plant" in the department of Microbiology, University of Dhaka, Bangladesh.
Degree achieved in October 2018.
Thesis link:
http://repository.library.du.ac.bd:8080/bitstream/handle/123456789/1078/Sahina.pdf?sequence=1

MS Thesis Title: Differential Fluorescent banding pattern in three varieties of *Cicer arietinum.*

Current Research:

Immunoinformatics approaches for **vaccine design** of SARS-CoV-2, *Barkholderia sp, Streptococcus pneumoniae* etc. through **reverse vaccinology**.

Integrated genomic analysis of ovarian and breast **cancer related gene** in human

Production of a locally developed low-cost **molecular diagnostic kit** to tackle the COVID-19 pandemic.

Whole-genome sequencing and data analysis of Human, SARS-CoV-2 and other organisms.

Development of **Edible vaccine** using transgenic plant and conventional vaccine preparation.

Characterization of certain bacterial DNA.

TECHNICAL SKILLS

Genomics, Bioinformatics, Biotechnology, Microbiology, Molecular Biology, Cytogenetics, and Immunology

a. **Whole-genome sequencing**: Sample collection, DNA or RNA extraction, library preparation followed by NGS sequencing using NovaSeq6000, NextSeq 550 and MiniSeq.
b. **Molecular techniques**: DNA isolation, Plasmid isolation, PCR, qRT-PCR, restriction digestion, gel electrophoresis
c. **Protein analysis:** Protein extraction, SDS-PAGE profiling, Western blotting, Elisa, DAS-Elisa,
d. **Animal model**: Handling rabbit and mice with experiments for different purposes. Serum collection, IP injection, Heart puncture experiment etc. Immunological techniques like Antibodies raising in Rabbits, and mice.
e. **Plant genetic transformation**: Tissue culture technique (media preparation, inoculation, subculture), Agrobacterium-mediated genetic transformation, gene gun technique, antibiotic selection
f. **Cell culture techniques**: Seeding, culture maintenance, cell count, cell preservation etc.
g. **Bacterial study**: isolation, identification, antibiotic resistance analysis etc.
h. **Cytogenetics**: Chromosomal study by preparing conventional and fluorescent banding method.
i. **Vaccine development**: WEM preparation, sonication, protein profiling, protein transfer, immunization into animal model etc.
j. ***In silico*** **vaccine design tools:** ezbiocloud, Expasy, swiss-model, Dynumut, PSIPRED, DiANNA, VaxiJen, AllerTop, trRosetta, TMHMM, IEDB, ProSA-Web, PROCHECK, Cluspro (Molecular docking), JCat (for codon optimization) etc.
k. **Data analysis:** GeneTek, BaseSpace, IEDB, Resfinder, kmerfinder etc. Galaxy and so on. Protein and nucleotide analysis (IEDB, PDB) plasmid mapping, analysis of RE and primer designing using MEGA and SnapGene Viewer, ResFinder, MLST, KmerFinder, Swiss-model, Dynamut etc.

Job responsibility:

- Experiment design, execution, and analysis
- Liaising and coordinating with the research team to perform R & D
- Writing and editing scientific manuscripts, reports, presentations, and records of experimental plans and results
- Applying for grants, monitoring, evaluation, and report submission
- Supervising and providing technical advice to the junior lab members of the team and thesis students
- Recognize, analyze, and solve a variety of problems.

EDUCATIONAL QUALIFICATION:

Last Degree: Ph.D., Department of Microbiology, University of Dhaka, Bangladesh

Educational Details

Degree	Subjects	Institute and Year	Result
Ph.D	Microbiology & Immunology	Microbiology Department, Dhaka University, 2018	Award Achieved (31 October 2018)
M.S.	Biotechnology	Botany Department, Dhaka University, 2001 (held in 2005)	Grade A
B.Sc.	Biotechnology	Botany Department, Dhaka University, 2000 (held in 2003)	Grade A
H.S.C.	Science	Govt. Begum Badrunnesa Mohila College, 1995	76.10%
S.S.C.	Science	Dhanmondi Government Girl's High School, 1993	76.90%

Professional Experience

Organization: Bangladesh Council of Scientific and Industrial Research (BCSIR)

Duration: 11 June 2006 to present

Current position: **Principal Scientific Officer** from 2019 to present
Senior Scientific Officer at BCSIR from 2011 to 2019
Scientific Officer at BCSIR from 2006 to 20011

More than 16 years of working experience on Molecular Biology. Specialization on Microbiology and Immunology (*in silico* vaccine design), Molecular Cytogenetics, Plant Tissue Culture, Animal Harvesting and Cell Culture Techniques and Biotechnology, Bioinformatics as well.

Specialization on immunoinformatics, Genomics (Human whole Genome sequencing and data analyses) and Proteomics.

Publications: (46 published article, 7 under review)

1. Shahab M, **Akter S***, Sarkar MH, Banu TA, Goswami B, Chowdhury SF, Naser SR, Habib A, Shaikh AA, Saki M, Zheng G, & Khan S. (2023). Computational design of medicinal compounds to inhibit RBD-hACE2 interaction in Omicron variant: Unveiling a vulnerable target site. *Informatics in Medicine Unlocked*, 101281. https://doi.org/10.1016/j.imu.2023.101281
2. Sarkar MH, Rahman S, Islam R, Rahman A, Islam S, Banu TA, **Akter S**, Goswami B, Khan S, et al. Comparative Phylogenetic Analysis and Transcriptomic Profiling of Dengue (DENV-3 genotype I) Outbreak in 2021 in Bangladesh. (2023). *Virology Journal*. (Accepted)
3. Sayem M, Khan S, Martini C, Sarkar MH, **Akter S,** Goswami B , Sinha SQ , Husain Z. SARS-CoV-2 testing and its role in understanding the evolving landscape of the pandemic in Bangladesh. (2023). *Journal of Biosciences.* (Accepted).
4. Mazumder L, Shahab M, Islam S, Begum M, Nobre J I O, Begum S, and **Akter S.** An immunoinformatics approach to epitope-based vaccine design against PspA in *Streptococcus pneumoniae*. *Journal of Genetic Engineering and Biotechnology* (2023) 21:57. https://doi.org/10.1186/s43141-023-00506-9

5. Banu TA, Akter S, **Akter S**, Goswami B, Mollaka SR, Momtaz N, Habib A, Amin G, Khan S. Effects of light intensity on *in vitro* regeneration of *Stevia rebaudiana* Bertoni, *Bacopa Monnieri* L. and *Solanum tuberosum*. *Bangladesh J. Bot.* **52**(1): 53-60, 2023 (March). DOI: https://doi.org/10.3329/bjb.v52i1.65232
6. Mahmud, A.S.M., Seers, C.A., Shaikh, Md. Ahashan Habib, **Akter S** *et al.* A multicenter study reveals dysbiosis in the microbial co-infection and antimicrobial resistance gene profile in the nasopharynx of COVID-19 patients. *Sci Rep* **13**, 4122 (2023). https://doi.org/10.1038/s41598-023-30504-3
7. Etminani F, Etminani A, X Hasson SO, Kareem Judi H, **Akter S**, Saki M. (2023). *In silico* study of inhibition effects of phytocompounds from four medicinal plants against the Staphylococcus aureus β-lactamase. Informatics in Medicine Unlocked. 37, 2023, 101186. https://doi.org/10.1016/j.imu.2023.101186
8. Hoque MN, Rahman MS, Sarkar M.MH, Habib MA, **Akter S,** Banu TA, et al. (2023). Transcriptome analysis reveals increased abundance and diversity of opportunistic fungal pathogens in nasopharyngeal tract of COVID-19 patients. PLoS ONE 18(1): e0278134. https://doi. org/10.1371/journal.pone.0278134.
9. Farooq U; **Akter S**; Qureshi AQ; Hayaa M. A; Farzana M; Shahab M et al. Arbutin Stabilized Silver Nanoparticles: Synthesis, Characterization, and Its Catalytic Activity against Different Organic Dyes. Catalysts 2022, Volume 12, Issue 12, 1602
10. **Akter S**, Shahab M, Sarkar MH, Hayat C, Banu TA et al. Immunoinformatics approach to epitope-based vaccine design against the SARS-CoV-2 in Bangladeshi patients. *Journal of Genetic Engineering and Biotechnology*, 2022, *20*(1), 1-14. https://doi.org/10.1186/s43141-022-00410-8
11. Hoque, Sarkar, Khan, Habib, **Akter S** et al. Differential gene expression profiling reveals potential biomarkers and pharmacological compounds against SARS-CoV-2: Insights from machine learning and bioinformatics approaches. Front in Immun. (2022). DOI: 10.3389/fimmu.2022.918692
12. Shahab M, Hayat C, Sikandar S, Zheng G, **Akter S**. *In Silico* Designing of a Multi-Epitope Vaccine against *Burkholderia pseudomallei*: Reverse Vaccinology and Immunoinformatics. Jour. of Gen. Engi. and Biotech. (2022) 20:100 https://doi.org/10.1186/s43141-022-00379-4
13. Goswami B, Banu TA, **Akter S**, Afrin S, Habib A, Khan S. *In vitro* regeneration of Aromatic rice (*Oryza sativa* L. Var. Doairgura). Bangladesh J. Bot. 51(4): 677-682, 2022 (December). DOI: https://doi.org/10.3329/bjb.v51i4.63485
14. **Akter S**, Towfikee SH, Banu TA, Sarkar MH, Goswami B, et al. Aetiology in a female bronchiectasis patient presenting with shortness of breath. J Clin Images Med Case Rep. 2022; 3(5): 1828. DOI: www.doi.org/10.52768/2766-7820/1828

15. Hoque N, Sarkar MH. Rahman S, **Akter S**, et al. SARS-CoV-2 Infection Reduces Human Nasopharyngeal Commensal Microbiome With Inclusion of Pathobionts. Scientific Reports, (2021) 11:24042. https://doi.org/10.1038/s41598-021-03245-4
16. Rahman M, Sarkar MH, Rahman S, **Akter S**, et al. Genomic characterization of the dominating Beta variant carrying vaccinated (Oxford-AstraZeneca) and non-vaccinated COVID-19 patient samples in Bangladesh: A metagenomics and whole genome approach. J Med Virol. 2021;94:1670–1688.; DOI: 10.1002/jmv.27537
17. **Akter S**, Banu T A, G Barna, Osman E, Uzzaman S M, et al. Coding-Complete Genome Sequences of Three SARS-CoV-2 Strains from Bangladesh. Microbiology Resource Announcement (2020), DOI: 10.1128/MRA.00764-20
18. Khan S, **Akter S**, Goswami B, Habib A, Banu TA, Barton C et al. Whole genome mapping and identification of single nucleotide polymorphisms of four Bangladeshi individuals and their functional significance. BMC Res Notes (2021) 14:105 https://doi.org/10.1186/s13104-021-05514
19. Sarkar M, Rabbi M, **Akter S**, Banu TA, Goswami B, et al. Genome Sequence of a SARS-CoV-2 P.1 Variant of Concern (20J/501Y.V3) from Bangladesh. https://doi.org/10.1128/MRA.00524-21.
20. Banu TA, Sarkar MH, **Akter S**, Goswami B, Jahan I, et al. Genome Sequencing of the SARS-CoV-2 Delta (B.1.617.2) Variant of Concern Detected in Bangladesh. Microbiology Resource Announcement, 04 December 2021, 10(48). DOI: 10.1128/MRA.00849-21
21. Goswami B, Khan S, Banu TA, **Akter S**, Islam M, Habib A. *In vitro* mass propagation of *Withania somnifera* (L.) Dunal an important medicinal plant of Bangladesh. Bangladesh J. Bot. 51(2): 191-197, 2022 (June). DOI: https://doi.org/10.3329/bjb.v51i2.60414
22. Yeasmin S, Banu TA, Goswami B. Sarkar MH, Jahan E, Habib A, Khan Salim and **Akter S.** Development of an effective *in vitro* regeneration protocol of Strawberry from leaf explants. Plant Tissue Cult. & Biotech. **32**(1): 67-75, 2022 (June). Doi: https://doi.org/10.3329/ptcb.v32i1.60473
23. Banu T A, Khan S, Goswami B, Afrin S, Habib A and **Akter S**. Indirect organogenesis and somatic embryogenesis for regeneration of *Rauvolfia serpentina* L. from root explants. Bangladesh J. Bot. 49(4): 1021-1027, 2020. https://doi.org/10.3329/bjb.v49i4.52534
24. Shilpi A, Banu T A, Khan S, **Akter S**, Habib A, Islam, Goswami B and Sarkar B K. Micropropagation of Two Varieties of Bell pepper (*Capsicum annuum* L.). Plant Tissue Cult. & Biotech. 30(2): 267-275, 2020. https://doi.org/10.3329/ptcb.v30i2.50696
25. Goswami B, Shamoly A , Nandi N C , Banu T A, **Akter S**, Afrin S , Habib A and Khan S. Antioxidant and Antibacterial Activities of Four Local Medicinal Plants. Plant Tissue Cult. & Biotech. 30(2): 179-187, 2020. https://doi.org/10.3329/ptcb.v30i2.50688
26. Akter S, Goswami B, Khan S, **Akter S**, Mollika S R, and Banu T A. Rapid Micropropagation, antioxidant and antibacterial assays of Ocimum Spp. Bangladesh J. Bot. 49(3): 459-465, 2020. DOI:

10.3329/bjb.v49i3.49332

27. Rahe A, Mollika SR, M. Khan S, Banu TA, Amin G. M. Al, Habib A, **Akter S**, Islam M and Sharmin *RS. In vitro* Micropropagation of *Bacopa monnieri* (L.) Penn.-An Important Medicinal Plant. Plant Tissue Cult. & Biotech. 30(1): 57-63, 2020 (June). DOI: 10.3329/ptcb.v30i1.47790
28. Islam M, Habib A, Khan S, **Akter S**, Goswami B, Banu TA. Molecular characterization of oil seed *Brassica* using RAPD markers. *Bang. J Sci. Ind. Res.* 55(1), 1-8, 2020. DOI: 10.3329/bjsir.v55i1.46726
29. M. Naimur, Banu TA, Mollika SR, Goswami B, Islam M, **Akter S**, Sharmin RA and M. Khan S. *In vitro* Regeneration of Ginger (*Zingiber officinale* Roscoe). *Plant Tissue Cult. & Biotech. 29(2): 151-159*, 2019. https://doi.org/10.3329/ptcb.v29i2.44504
30. S. Khan, Goswami B, **Akter S**, Islam M, Noon A, Habib A and Banu TA 2018. *In vitro Mass Propagation of Piper betel* L. *Bang. J Sci. Ind. Res.* 48(3), 2018.
31. M. Billah , T. A. Banu1, M. Islam1 , N. A. Banu2 , S. Khan1 , **Akter S** and A. Habib. *In vitro* regeneration and molecular characterization of some varieties of *Lycopersicon esculentum* Mill. in Bangladesh. Bangladesh J. Sci. Ind. Res. 54(2), 117-124, 2019. https://doi.org/10.3329/bjsir.v54i2.41667
32. Rahman S., Mouri S, Nandi N, **Akter S** and Khan S. *In vitro* Micropropagation of *Jasminum grandiflorum* L. an important medicinal plant. *Bang. J Sci. Ind. Res.* 53(4), 277-282, 2018. *https://doi.org/10.3329/bjsir.v53i4.39191*
33. S. Khan, T. A. Banu, **Akter S**, B. Goswami, M. Islam, U. Hani and A. Habib 2018. *In vitro* regeneration protocol of *Rauvolfia serpentina* L. Bang. J Sci. Ind. Res. 53(2): 133-138. https://doi.org/10.3329/bjsir.v53i2.36674
34. Banu TA, Goswami B**, Akter S**, Islam M, Tanjin T, Habib A and Khan S 2017. High Frequency *In vitro* Regeneration of *Gynura procumbens* (Lour.) Merr.Plant Tissue Cult.& Biotech. **27**(2): 207-216.
35. Khan S, **Akter S**, Habib S, Akhtar B, Islam M, Khan N, Ferdousi A and Islam S. *In vitro* regeneration of *Piper nigrum* L. Bangladesh Journal of Botany, 46(2);789-793, 2017.
36. Khan S, **Akter S**, Habib S, Akhtar B, Islam M, Khan N, Ferdousi A and Islam S. Establishment of *in vitro* regeneration Protocol for *Adhatoda vasica* (Nees.), BJSIR, 51(1), 75-80, 2016. https://doi.org/10.3329/bjsir.v51i1.27077
37. Zeenat J, Iztiba M. D, **Akter S,** Tasmina R., Ashikun N., Mahmuda Y., Jamalun N., Chowdhury R. A. Immunogenicity of Streptococcus pneumoniae 74 kDa Surface Protein in Rabbit Model. Bangladesh J Microbiol, Volume 31, Number 1-2, pp 25-28, 2014. https://doi.org/10.3329/bjm.v31i1.28461
38. Mahmud S., **Akter S**, Jahan I. A., Khan S., Islam S. Comparative Analyses of Stevioside Between Leaf and Callus from *In-vitro* Regenerated *Stevia rebaudiana* Bert. using HPLC, BJSIR, 49(4), 199-204, 2014. DOI: 10.3329/bjsir.v49i4.22621

39. **Akter S,** Akhtar, T., Habib, A., Khan, S. and Islam S. *In vitro* clonal multiplication of *Aegle marmelos* (L.) through cotylodinary node culture. BJSIR 48(1): 13-18, 2013. https://doi.org/10.3329/bjsir.v48i1.15408
40. Jaheduzzaman, Habib, A**. Akter S**, Banu N. A., Rahman R., Banu T., Khan S and Islam S. *In vitro* regeneration of an important medicinal plant *Centella asiatica* L. Urban. BJSIR 47(3): 269-272, 2012. https://doi.org/10.3329/bjsir.v47i3.13058
41. Huq A**, Akter S**, Islam, S., Khan S. *In vitro* regeneration in Banana (Musa sp.) cv.sabri. BJSIR 47(2): 143-146, 2012. https://doi.org/10.3329/bjsir.v47i2.11444
42. Huq A, **Akter S**, Islam, S., Khan S. *In vitro* micropropagation of pointed gourd from shoot tip and nodal segment. BJSIR 47(2): 217-222, 2012. https://doi.org/10.3329/bjsir.v47i2.11457
43. Khan, S, Islam, S., **Akter S**, Akhtar, T., Habib, A. Admixture of Isubgol husk together with conventionally used agar as gelling agent for Potato and Stevia regeneration. BJSIR 47(2): 161-166, 2012. https://doi.org/10.3329/bjsir.v47i2.11447
44. Islam, S., Zahan, M., **Akter S**, Akhtar, T., Habib, A., Khan, S. Mass propagation of *Feronia limonia* L. BJSIR 45(1): 75-78, 2010. DOI: 10.3329/bjsir.v45i1.5186
45. Formuzul, K.M, Yasmin, S., **Akter S**. Collection, Identification and Biochemical Analyses of Some seaweeds from Saint Martin's Island. BJAR 34(1):59-65, 2009. DOI: 10.3329/bjar.v34i1.5754
46. **Akter S**. and Alam Sk. S. Differential Fluorescent Banding Pattern in Three Varieties of *Cicer arietinum* L., *Cytologia (Japan Mendel Society)* 70(4):441-45, 2005. DOI: 10.1508/cytologia.70.441

Achievement:

I am a team member of the great invention of the "BCSIR-Covid Kit" in Bangladesh

#I have developed a plant-based Edible Vaccine for the first time in Bangladesh which has been submitted for patent.

Supervision: Eight MS students were completed their thesis work under my supervision and four of the students are continuing their works.

Peer Review: # Scientific Report
BMC Bioinformatics
Journal of Genetic Engineering and Biotechnology (JGEB)
FEMS Microbiology Letter
Plant Science Today
Biosciences Biotechnology Research Asia
Expert review of vaccine

Editorial Board Member: Insights of clinical and medical image (ICMI)

AWARDES and Grant:

Awards:

- Research Training Fellowship 2007-2008 for Developing Country Scientists (RTFDCS) given by CCSTDS, Chennai, India.
- Dutch-Bangla Bank Foundation Fellowship Program.
- Best poster presenter award given by American Society of Microbiology (ASM).

Grants:

- Bangabandhu Fellowship on Science and ICT.
- Special Allocation from Ministry of Science and Technology, Government of Bangladesh 2017-18.
- Special Allocation from Ministry of Science and Technology, Government of Bangladesh 2021-22.
- Special Allocation from Ministry of Science and Technology, Government of Bangladesh 2022-23.

Seminar Presentation (Oral/poster presentation-mentionable)

- Reverse Vaccinology: An Immunoinformatics Approach to Epitope-Based Vaccine Design against SARS-CoV-2 in Bangladeshi Patients. BCSIR Congress-22, Dhaka, Bangladesh
- Coding-Complete Genome Sequences of Three SARS-CoV-2 Strains from Bangladesh, presented at ICSTB in 2021, Dhaka, Bangladesh.
- Development of an Edible Vaccine against Pneumococcal Diseases using Transgenic Plant, presented at ICSTB in 2021, Dhaka, Bangladesh.
- Transformation of GUS & alternative marker gene into tobacco plant using *Agrobacterium tumafeciens* and gene gun at 9th International Plant Tissue Culture and Biotechnology Conference held in Botany Department, University of Dhaka, Bangladesh.
- Transformation of GUS & alternative marker gene into tobacco plant using *Agrobacterium tumafeciens* and gene gun at 4th International Microbiology Conference held in Microbiology Department, University of Dhaka, Bangladesh.
- Conservation and Propagation of Indigenous Medicinal Plants. in The National Workshop on Biodiversity Awareness, Conservation and Utility, October 12-13, 2009, Bangalore, India.
- Differential fluorescent banding pattern in three varieties of *Cicer arietinum*L. at BCSIR, Dhaka.
- Differential fluorescent banding pattern in three varieties of *Cicer arietinum* L. at the 3rd to 5th International Botanical conference.
- Differential fluorescent banding pattern in three varieties of *Cicer arietinum* L. at 5th to 7th International Plant Tissue Culture and Biotechnology Conference held in Botany Department, University of Dhaka, Bangladesh.
- Cytotaxonomic studies in *Vigna* IV. Variation of the number of active and silent rDNA sites in *Vigna unguiculata* populations, at Botany Department, University of Dhaka.

- ❖ Studies of *Stevia rebaudiana* plantation in BCSIR laboratories, Chittagong.
- ❖ *In-vitro* regeneration protocol development of *Feronia limonia,* at the conference organized by Bangladesh Woman Scientists Association.

TRAINING PROGRAMMES ATTENDED (Mentionable):

- ➢ Training program on Bioinformatics Training Course at Senate Building, University of London, UK. Duration two months.
- ➢ Training on Beginner's Introduction to Next Generation Sequencing, Microbial Genomics and SARS-CoV-2 Bioinformatics provided by the Bioscience Factory. https://credsverse.com/credentials/2f81ca0a-1cbb-49e2-ac8e-e0f260b2c979
- ➢ Training on Basic Cell and Tissue culture Technique, CARS, DU.
- ➢ Attended a three months training programme on "Development of plant based edible vaccine through genetic transformation, at UAS, GKVK, Bangalore, India.
- ➢ Attended a training program on Molecular Biotechnology, jointly organized by University of Texas at Austin and the City University of New York, USA and Department of Botany, University of Dhaka.
- ➢ Participation in the Regional Training-Workshop on "Awarness Building on the Recent Advances of Agricultural Biotechnology and Biosafety, organized by Bangladesh Agricultural Research Council (BARC) and Agriculture & Biotechnology Strategies (AGBIOS) at BRAC Centre INN, Dhaka, Bangladesh.
- ➢ Training on Scanning Electron Microscope (SEM).
- ➢ Training on "Monitoring and Evaluation on Project Development" at National Academy for Planning and Development (NAPD), Ministry of Planning.
- ➢ Training on STI Policy for Socio-Economic Development (SPED), 30 August – 3 September 2021, Malaysia

---

Member

1. American Society of Microbiology (ASM)
2. Scientist Forum of Bangladesh Council of Scientific and Industrial Research.
3. Bangladesh Association of Women Scientists.
4. Bangladesh Academy of Science (BAS).
5. Asian Federation of Biotechnologist (AFOB)
6. Bangladesh Botanical Society (BBS)
7. Bangladesh Association of Plant Tissue Culture & Biotechnology (BAPTC&B)
8. Bangladesh Bioinformatics and Computational Biology Association (BBCBA)
9. Global Network of Bangladeshi Biotechnologists (GNOBB)

Personal Details	Father's Name	Late S.M. Azaher Uddin
	Mother's Name	Late Anjumonoara Begum

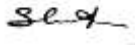
	Husband's Name	Md. Shahadath Hossain Towfikee
	Son's name	Saabiq IBN Tawfiq
	Permanent Address Phone No.	759, West Shewrapara, Mirpur, Dhaka-1216. Bangladesh 088-01724096941, 088-01711838874
	E-Mail Address	shupty2010@gmail.com; shahinaakter@bcsir.gov.bd
	Date & Place of Birth	1-02-1978, Dhaka.
	Blood Group	O+ve
	Nationality	Bangladeshi
	Marital Status	Married

REFERENCE:

Dr. Sarwar Jahan
Director,
Bangladesh Council of Scientific and Industrial Research,
Dhaka, Bangladesh
Email: sarwar2065@hotmail.com

Chowdhury Rafiqul Ahsan, Ph.D.
Professor
Department of Microbiology
University of Dhaka, Dhaka-1000
Cell: 01819401185
Email: crahsan@du.ac.bd

Declaration: I hereby declare that the particulars furnished herein by me are true to the best of my knowledge and belief.



Dr. Shahina Akter