

# Farzana Akter Sohaly

**Address:** 556/1, North Ibrahimpur, Mirpur-14, Dhaka-1206, Bangladesh

**Email:** [farzanaa45@yahoo.com](mailto:farzanaa45@yahoo.com); **Mobile:** +8801914764365

**Academia Profile:** <https://independent.academia.edu/FarzanaAkterSohaly>

## RESEARCH INTEREST

Nanotechnology, Semiconductor technology, Material Science and related areas.

## EDUCATION

- 2017**      **M.Sc. in Electrical and Electronic Engineering**  
**University of Dhaka, Bangladesh**  
(CGPA 3.79 on a scale of 4.00. Merit Position: 5th )
- 2015**      **B.Sc. in Electrical and Electronic Engineering**  
**University of Dhaka, Bangladesh**  
(CGPA 3.48 on a scale of 4.00)
- 2010**      **Higher Secondary School Certificate: Science**  
**BAF Shaheen College--- Dhaka, Bangladesh**  
(GPA 5.00 on a scale of 5.00)
- 2008**      **Secondary School Certificate: Science**  
**Shaheed Police Smrity College --- Dhaka, Bangladesh**  
(GPA 5.00 on a scale of 5.00)

## PROFESSION

### Lecturer, Full Time (February, 2019-Present)

**Served Courses:** Physics, Digital System Design (DSD), Computer Architecture, Digital Signal Processing (DSP), Electrical and Electronic Circuit (EEC) etc.

**Department:** Computer Science and Engineering (CSE)

**Institute:** Institute of Science Trade & Technology under National University  
Dhaka, Bangladesh

## UNDERGRADUATE PROJECT

- 'Design and Development of an Obstacle Avoiding Robo-Car' under the supervision of Dr. Md. Shafiul Alam, Professor, Department of EEE, University of Dhaka.
- Used Arduino.cc software for the programming.

## M.Sc THESIS

- Research Student at Bangladesh Atomic Energy Center (BAEC).
- Worked on Sn doped ZnS Thin Films using Chemical Bath Deposition technique.
- Studied detailed structural, morphological, optical and electrical properties.
- SEM, XRD, FTIR, EDX, Thickness Profilometer, UV-Vis-NIR Spectroscopy, Four Point Probe (FPP) characterization tools to investigate the properties.
- Used Origin, Excel, ImageJ, Vesta software to analyze data.

## PUBLICATIONS

1. *Investigation of Structural and Optical Properties of CdS, ZnO, ZnS Thin Film for Heterojunction Solar Cell*; T. Kamal, **F. A. Sohaly** [International Journal for Research in Applied Science and Engineering Technology (IJRASET), Volume – 06, Issue – X, PP- 720-725, October 2018]

2. *Structural and Optical Properties of Sn doped ZnS Thin Films Synthesized by Chemical Bath Deposition Method*; **F.A. Sohaly**, K. M. A. Hussain, M.T. Chowdhury, S. M. Ullah [[International Conference on Material Science and Semiconductor Devices (ICMSSD) 2018]

3. *Structural and Electrical Characterization of Sn Doped ZnS Thin Films Synthesized by Chemical Bath Deposition* **F. A. Sohaly**, K.M.A. Hussain, M.T. Chowdhury Hussain, T. Faruque, S.M. Ullah [INTERNATIONAL CONFERENCE ON PHYSICS-2018 Organized by BANGLADESH PHYSICAL SOCIETY at Department of Physics, University of Dhaka]

4. *Design and Development of an Obstacle Avoiding Robo-Car* Iffat Arefa, **Farzana Akter Sohaly** [Student conference on science and Engineering-2017 organized by IEEEESBDU-DUSS, University of Dhaka, Bangladesh]

5. *Energy Auditing: Necessity for Energy Management System* (Mahedi Hassan, Nahid Hassan, Md. Murad Miah, **Farzana Akter Sohaly**, Iffat Arefa and Zahid Hasan Mahmood) published in [2nd International Conference on Mechanical, Industrial and Energy Engineering(ICMIEE-2014) at KUET, Paper's code: ICMIEE-PI-140379]

### TRAININGS

- **Course on Microcontroller**

**Institute:** Engineering Staff College, Dhaka, Bangladesh

**Duration:** From 28 May 2014 to 21 June 2014

36 hours (12 lectures including laboratory work)

- **Web Programming Using PHP MySQL**

**Institute:** Institute of Information Technology (Under University of Dhaka)

**Duration:** From March 2014 to May 2014.

36 hours (12 lectures including laboratory work and a project at the end of the course)

### AREA OF EXPERTISE

- **Programming Software:** C++, PHP
- **Application Software:** Origin, MS Word, MS Excel, MS PowerPoint, HTML
- **Simulation Environment:** MATLAB, PROTEUS, VESTA, IMAGE J

### LANGUAGE PROFICIENCY

- Bengali: Native
- English: English: Fluent [ILETS 6/9: Reading 5.5, Writing 6, Speaking 6, Listening 6]

### RELEVANT COURSEWORK

**Undergraduate:** Modern Physics, Applied Optics, Semiconductor Technology, Optical Fiber Communication, Material Science, Electronic Circuits, Electronic Devices, Electromagnetic Theory and Antenna, Renewable Energy Technology, Physical Electronics & Devices, Analog Electronics, Digital Electronics, Ordinary Differential Equations, Mathematical Methods, , Linear Algebra.

**Postgraduate:** Solid State Physics, Nanomaterial, Material Structure Science, Optical Integrated Circuit, Characterization of Materials & Semiconductors.

### LEADERSHIP AND AFFILIATIONS

- Vice Chair at IEEE Women in Engineering (WIE) affinity group, University of Dhaka for the year 2018.
- General member of Electrical and Electronics Club (EEC), Department of EEE, University of Dhaka for the year 2012-17.
- Volunteer at 2017 IEEE International Conference on Imaging, Vision & Pattern Recognition (icIVPR)
- Member and Volunteer at IEEE Women in Engineering (WIE) affinity group, University of Dhaka from the year 2016-2018.

### REFERENCES

1. SK. Mamunur Rashid  
Assistant Professor & Head  
Department of Computer Science  
& Engineering  
Institute of Science Trade & Technology  
Dhaka-1206, Bangladesh  
Mobile no: +8801717196665  
**Email:mamun.skrashid@gmail.com**
2. Dr. Saeed Mahmud Ullah  
Associate Professor  
Department of Electrical and Electronic  
Engineering, University of Dhaka  
Faculty of Engineering and Technology  
University of Dhaka  
Dhaka-1000, Bangladesh  
Contact: +8801732310343  
**Email: ullahsm@du.ac.bd**