



# Women *in* STEM

## EVENT BOOKLET

# WOMEN IN STEM

SYMPOSIUM BY STEM COMMUNITY, IUB

Dec 2-4, 2022



RAJ LAPTOP GALLERY  
We believe in satisfaction

# Table of Contents

Welcome Message	1
STEMcIUB Background	2
Women in STEM Int'l Symposium	3
Organizing Committee	4
Event Schedule	5
Panel of Distinguished Speakers	6
Judges	8
Trainers & Workshops	9
Idea Competition	10
Winning Project	11
STEMc Newsletter	12
Sponsors & Partners	13

# Welcome Message



I'd like to thank STEM community, IUB, for having me in the "Women in STEM symposium" being held virtually. It's always great to see our students have been organizing various events and contests for incorporating more young minds to the field of STEM. As a growing concept, the number of people participating and engaging in such activities will gradually and hopefully increase.



**Prof. Shamima K  
Choudhury**

As a woman of STEM, it is wonderful to encounter the rising number of women in this field. I think engaging in these particular fields open up ways to critically think and address the issues our nation and the global community face every year. Stereotypes and educational differences can lead to the decline of women in STEM fields. Progressively, the gaps would get filled with more women getting involved into such fields.

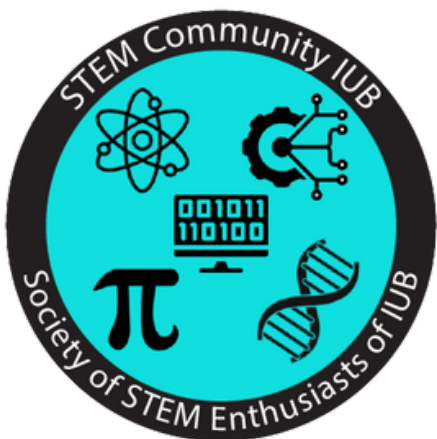
STEM community, IUB, is doing a wonderful job by taking steps towards this magnificent cause. I thank all the participants and the viewers for their enthusiasm and eagerness to join us today.

Lastly, all this would not have been possible without the involvement of the incredible team of organizers who provided their utmost effort and time to make this event successful.

# STEMcIUB Background



STEM education is rapidly emerging and people who pursue it, attain abilities which increase their employability and readiness to satisfy requirements of current job fields. It includes the full spectrum of experiences and skills. Each STEM element contributes significantly to a well-structured education. Learners gain a thorough awareness of their world through science. It aids in their research and analytical skills. Thanks to technology, the youth are better prepared to work in a high-tech workplace. Students can develop their problem-solving abilities and apply their knowledge to new projects through engineering. On the other hand, Mathematics prepares them to examine data, eliminate errors and make deliberate decisions when searching for solutions. STEM education integrates these fields into a single, cohesive system. As a result, it trains professionals who can innovate and find sustainable solutions to change society.



STEMcIUB is a platform that plans to integrate a wide range of activities and events that create opportunities for students that promote and demand knowledge and skill-application in these specific areas. By encouraging and engaging students STEMc will provide guidance and training necessary to prepare a community with greater academic and career success.

# Women in STEM International Symposium

STEM Community of Independent University, Bangladesh (IUB) is organizing an International Symposium titled "Women in STEM: Heroes among us" celebrating the incredible women in STEM (Science, Technology, Engineering and Mathematics) as important role models for our youth.

-**Idea Competition** with monetary prize are waiting for the problem solving enthusiasts!

-**Free Workshops** on 3D printing and Genome sequence data analysis

-**Scientific sessions**, Panel discussion by national and international scientists, researchers, educators and entrepreneurs!



# Organizing Committee



**Salman Khan Promon**  
Lecturer, IUB

**Sneha Ashrafi**  
Undergraduate Student, IUB

**Mohammad Nahid Al Islam**  
Undergraduate Student, IUB

**Sudepto Saha**  
Undergraduate Student, IUB

**Tanfia Khan Disha**  
Undergraduate Student, IUB

**Soha Rashid**  
Undergraduate Student, IUB

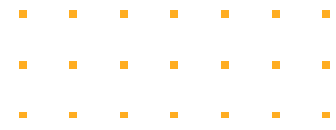
**Sadiq Rahman Samin**  
Undergraduate Student, IUB

# Event Schedule



Day 1: December 2, 2022 (Friday)	
Time (BST)	Sessions
07:00-07:10pm	<b>Inauguration</b> <ul style="list-style-type: none"> <li>Welcome and Introduction by the organizer</li> <li>Sponsors acknowledgement</li> </ul>
07:10-07:50pm	<ul style="list-style-type: none"> <li><b>Speech by Speaker 1</b></li> <li>Question/Answer from the audiences</li> </ul>
07:50-08:30pm	<ul style="list-style-type: none"> <li><b>Speech by Speaker 2</b></li> <li>Question/Answer from the audiences</li> </ul>
08:30-08:45pm	<b>Break</b>
08:45-08:50pm	<ul style="list-style-type: none"> <li>Introduction to Idea Competition</li> <li>Introduction to the Judges</li> <li>Sponsors acknowledgement</li> </ul>
08:50-09:35pm	<b>Idea Presentation (Online)</b>
09:35-09:45pm	<ul style="list-style-type: none"> <li>Engagement Sessions</li> <li>Words from the Judges</li> </ul>
09:45-09:50pm	<ul style="list-style-type: none"> <li>Sponsors acknowledgement</li> <li>Closing with thanks</li> </ul>
Day 2: December 3, 2022 (Saturday)	
07:00-07:05pm	<ul style="list-style-type: none"> <li>Welcome and Introduction by the event organizer</li> <li>Sponsors acknowledgement</li> </ul>
07:05-07:45pm	<ul style="list-style-type: none"> <li><b>Speech by Speaker 3</b></li> <li>Question/Answer from the audiences</li> </ul>
07:45-08:25pm	<ul style="list-style-type: none"> <li><b>Speech by Speaker 4</b></li> <li>Question/Answer from the audiences</li> </ul>
08:25-08:30pm	<b>Break</b>
08:30-08:35pm	<ul style="list-style-type: none"> <li>Panel introduction</li> <li>Sponsors acknowledgement</li> </ul>
08:35-09:20pm	<b>Panel discussion:</b> Rising STEM Stars
09:20-09:35pm	Winner announcement
09:35-09:55pm	Cultural session
09:55-10:00pm	Vote of Thanks
<b>Workshops</b>	<b>Day 3:</b> December 4, Sunday 2022 (Online)- WS1: 04:00pm-6:00pm & WS2: 7:00pm-9:00pm

# Session Speakers



**Zeba Islam Seraj**

Professor, Dept of Biochemistry and Molecular Biology, University of Dhaka, Bangladesh  
Honorary Visiting Researcher, UT Austin, USA



**Alejandra Sierra**

Researcher, ICVV Logroño, Spain  
Former President,  
National Biotech Commission, Guatemala



**Yumna Majeed**

Space Educator  
Founder & CEO at Exploration  
Space education-based organization, Pakistan

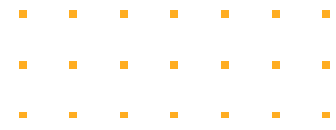


**Dr. Munima Haque**

Biotechnology Program Director & Associate Professor, Dept. of Mathematics and Natural Sciences School of Data and Sciences (SDS), BRAC University, Bangladesh



# Panel Speakers



**Dr. Amanda L. Strawhacker**

STEM Education Researcher and Designer  
Associate Director of the Early Childhood Technology (ECT),  
Tufts University, USA



**Bushra E Anjum**

Co-founder,  
Shapla Wellbeing and Wizkit  
IUB Alumni, Bangladesh



**Johanna Nyström**

STEM Educator & Coordinator,  
Vetenskapshuset Markaryd  
(Science Museum), Sweden

# Judges



## **Iqbal Rouf Mamun, PhD**

Professor, Department of Chemistry,  
University of Dhaka



## **Rumana Dowla**

Founder & Chairperson,  
Palliative & Supportive Care Foundation,  
Bangladesh



## **Khan Asad, PhD**

Assistant Professor,  
Dept. of Physical Sciences, Center for Computational  
and Data Sciences, IUB



## **Anowara Aana**

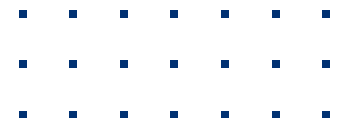
Cofounder and Secretary,  
CHILD Foundation



## **Farah Tanjeem**

Senior HR Business Partner,  
Grameenphone

# Trainers & Workshops



## WS 1

### 3D Printing Basics



Fahin Uddin Enam  
CEO, MECHAMIND

- ✓ Basics of 3D design
- ✓ Software and tools
- ✓ Operation of 3D printer

## WS 2

### Sequencing & Genomic Data Analysis

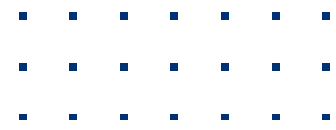


Syed Muktadir Al Sium

Scientific Officer, Bangladesh Council of  
Scientific and Industrial Research (BCSIR)

- ✓ Sequence data analysis
- ✓ Software & computational tools
- ✓ Application

# Idea Competition



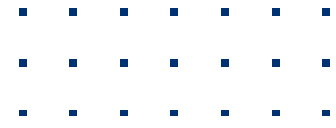
## Themes



- ✓ Skill based STEM education system for people with learning disabilities.
- ✓ Minimizing water pollution caused by industrial waste and oil spill.
- ✓ Point of care medical devices - disease detection (any 1 disease).
- ✓ Minimizing social media addiction and mental fatigue.
- ✓ Efficient implementation of renewable energy systems in remote areas.
- ✓ Physically challenged and elderly people friendly home automation.

Project Proposal	
Project Title:	
Problem statement:	
Proposed solution:	
Method:	
Implementation strategy:	
Expected outcome:	
Reference (IEEE format):	
Design diagram/ Figure:	

# Winning Project

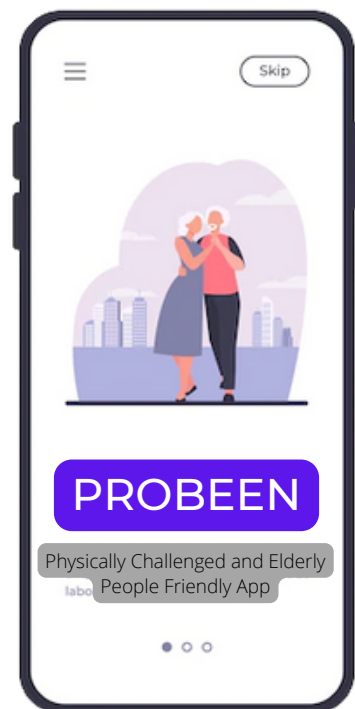


## Probeen

Physically Challenged and Elderly People Friendly App

## Description

Technology use among older adults has even been linked to better self-rated health, fewer chronic conditions, higher subjective well-being, and lower depression, as it can help reduce the side effects of loneliness. Probeen app has automated system for Pill Reminder, Emergency Contact, Doctors and hospital, Location detection, Digital companion, Health monitoring, Lifestyle suggestion, Socializing etc.



## Team Members

### Sabrina Monsur

Dhaka Medical College

### Asif Billah

Bangladesh University of Engineering and Technology

# STEMc Newsletter

DECEMBER 2022

ISSUE #01

## STEMCIUB OFFICIAL NEWSLETTER FOR STEMMERS

### THE STORY OF RESISTANCE

By Sneha Ashrafi



image: AMR Awareness at IUB Campus

Sitting in that hospital chair, as I waited for my uncle's verdict in his fight against death. As the bacteria in his lungs resisted with all its might, I noticed more with similar stories. It's a common theme in these hospital walls, the antibiotics aren't effective. Patients of all ages suffer endlessly for various lengths of time in the Intensive Care Unit from these "superbugs" as their stressed family members pray, plead and negotiate with God and the next most powerful being in their eyes- the Doctor; The tireless attempts of whom fail to ease the despair in the hearts of these loved ones. I pretended not to notice when my uncle needed blood more frequently; Septicemia, I subconsciously recalled. I told my cousin it would be alright as their visits to the ICU grew more frequent and urged. I wondered as he went through several operative procedures, about how responsible he had always been with medication. My uncle had acquired the infection right after finishing the construction of his

beloved new house. He would humbly break the bricks for his own walls. Somewhere along the line a strain of multi-resistant bacteria had entered his body and began to shut it down not long after he moved into his much-awaited home, meaning he received combination upon combinations of

**"I realized it wasn't up to individuals, humans collectively contribute to the formation of drug-resistant microbes."**

of antibiotics which ultimately failed to be effective. It wasn't just him, I heard similar accounts of multi-resistant infections related to construction throughout the hospital. I realized it wasn't up to individuals, humans collectively contribute to the formation of drug-resistant microbes. These microorganisms rapidly adapt and grow resistant to drugs, often multiple of them, exhausting our already limited stock of antibiotics, and along with it, our hope.

PAGE 01

DECEMBER 2022

STEMCIUB ACTIVITIES

ISSUE #01

**Sci-Fi Writing Competition: Creativity Unleashed**  
By SYZ



By SYZ  
There are only a few new authors in progress, and most of them are...  
There are only a few new authors in progress, and most of them are...  
There are only a few new authors in progress, and most of them are...

**WOMEN IN STEM: The Online International Symposium**  
By SYZ



By SYZ  
The online symposium was...  
The online symposium was...  
The online symposium was...

**Verge: The Company with Prophetic AI**  
By Sharpa Karlin



By Sharpa Karlin  
Verge, where I worked, was...  
Verge, where I worked, was...  
Verge, where I worked, was...

**Author of Sherlock Holmes: A Science Mage**  
By Anmol Bhatia



By Anmol Bhatia  
Consciousness...  
Consciousness...  
Consciousness...

**What's It Like To Study Abroad?**  
By Nizza



By Nizza  
Most folks...  
Most folks...  
Most folks...

**Sites to Find More About Scholarships!**  
By Nizza

By Nizza  
Contrary to popular belief...  
Contrary to popular belief...  
Contrary to popular belief...

There are only a few new authors in progress, and most of them are...  
There are only a few new authors in progress, and most of them are...  
There are only a few new authors in progress, and most of them are...

The online symposium was...  
The online symposium was...  
The online symposium was...

Verge, where I worked, was...  
Verge, where I worked, was...  
Verge, where I worked, was...

Consciousness...  
Consciousness...  
Consciousness...

Most folks...  
Most folks...  
Most folks...

Contrary to popular belief...  
Contrary to popular belief...  
Contrary to popular belief...

Meet the Team

Meet the Team

### HIGHLIGHTS OF FIRST ISSUE:

WOMEN IN STEM: The International Symposium  
PAGE 02

Author of Sherlock Holmes: A Science Mage  
PAGE 03

What's It Like To Study Abroad?  
PAGE 03

More About Scholarships!  
PAGE 04

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**Email:** [rajlaptopgallery2017@gmail.com](mailto:rajlaptopgallery2017@gmail.com)

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# Community Partners



**ExomeIT**

A Graphics Designing & Web Development Company





# Contact Information



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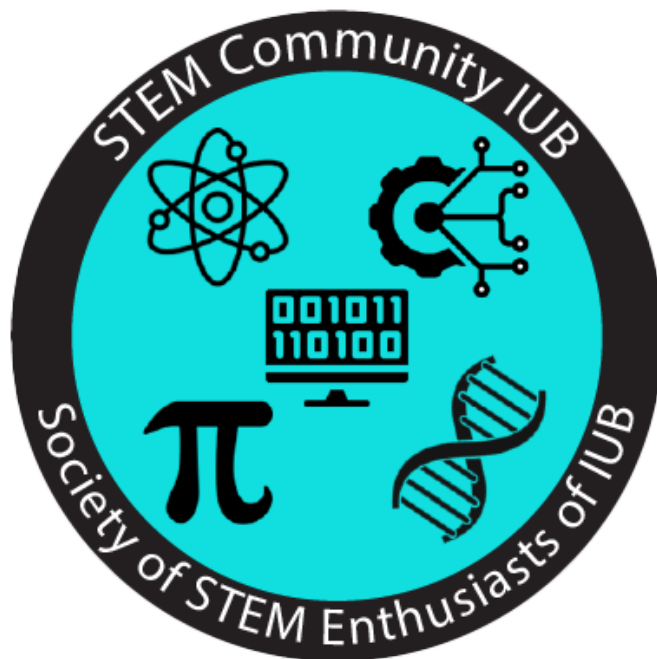
[stemciub@gmail.com](mailto:stemciub@gmail.com)



[www.linkedin.com/STEMciUB](http://www.linkedin.com/STEMciUB)



[www.wistem.info](http://www.wistem.info)





STEMciUB is Presenting

International Symposium

# WOMEN in STEM

December 2-4, 2022

Celebrating the incredible women in STEM as important role models for young STEM students



## Free Workshops

- ✓ 3D printing & operation
- ✓ DNA sequence analysis



## Idea Competition

- ✓ Online Poster
- ✓ Esteemed Judge Panel
- ✓ BDT 5000 Prize
- ✓ Certificate



## Scientific Sessions

- ✓ Talks by STEM Leaders
- ✓ Panel Discussion
- ✓ Career in STEM
- ✓ Scientific Talks

## Open For All



Free Registration

 iubstemc@gmail.com

 www.wistem.info

 +8801755032985



STEMcIUB is Presenting  
**WOMEN IN STEM** Symposium

# Idea Competition

December 2-4, 2022



**BDT 5000**  
Winning Prize & More



Open for All  
Deadline: November 30, 2022

## Themes

- ✓ Skill based STEM education system for people with learning disabilities.
- ✓ Minimizing water pollution caused by industrial waste and oil spill.
- ✓ Point of care medical devices - disease detection (any 1 disease).
  - ✓ Minimizing social media addiction and mental fatigue.
- ✓ Efficient implementation of renewable energy systems in remote areas.
- ✓ Physically challenged and elderly people friendly home automation.

## Free Registration!



SCAN ME

QR code or Website

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 [iubstemc@gmail.com](mailto:iubstemc@gmail.com)

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