Alifa Ara Heya | Curriculum Vitae

Troy, NY - USA

Objective

I am an aspiring chemistry graduate with a strong passion for research and am dedicated to advancing knowledge in biochemistry and structural biology. I am eager to contribute to innovative work under the guidance of a dedicated professor, where I can further develop my scientific acumen and make meaningful contributions to cutting-edge research.

Education

University of Chittagong

Chattogram, Bangladesh

Bachelor of Science in Chemistry

2016-2019 (Final exam held in 2021-2022)

• CGPA: 3.54/4.00 (Last three year average is 3.63)

• Major Courseworks: Biochemistry, Coordination chemistry, Organic reaction mechanism, Stereochemistry, Thermodynamics, Atmospheric chemistry, Organic synthesis, Electrochemistry, Environmental chemistry, Organometallic chemistry, Natural Products, etc.

Chittagong College

Higher Secondary Certificate

Chattogram, Bangladesh

2015

• GPA: 5.00/5.00

Dr. Khastagir Govt. Girls' High School

Chattogram, Bangladesh

2013

Secondary School Certificate
• GPA: 5.00/5.00

Dr. Khastagir Govt. Girls' High School

Chattogram, Bangladesh

2010

Junior School Certificate

• GPA: 5.00/5.00

Additional Courses

Computer Aided Drug & Peptide Design

Course on Computational Chemistry

Red-Green Research Center

2022

Learnt to dock, simulate and optimize drug and protein molecules using

- PyRx
- PyMol
- Discovery Studio
- FireDock
- SwissPDB viewer

Mass Spectrometry Instrumentation

& Application Training

Red-Green Research Center

2021

 Became familiar with basic Mass spectrometry data interpretation and analysis of small molecules, clusters, proteins, polymers, and antibodies.

Programming for Everybody

University of Michigan

Coursera

2020

 Got introduced with fundamental programming concepts, including data structures, using the Python programming language

Excel Skills for Business

Macquarie University

Coursera 2020

• Learnt to design sophisticated spreadsheets, including professional dashboards, and perform complex

• Learnt to design sophisticated spreadsheets, including professional dashboards, and perform complex calculations using advanced Excel features and techniques

Research interests

- Biochemistry
- Chemistry of Proteins
- Drug Design
- Cancer biology
- Structural Biology

Skills

Simulation & Visualization: Pymol, PyRx, Discovery Studio, Swiss PDB-Viewer

Programming: Fundamental Python Concepts

OS: Windows

Documentation: Microsoft Word, Microsoft PowerPoint, Google Docs

Spreadsheet: Microsoft Excel, Google Sheet

Languages: Bengali (Native), English (Professional proficiency), Arabic (Reading)

Web Languages: HTML, CSS

Graphics Design: Adobe Illustrator, Canva

Standardized Test Scores

Test of English as a Foreign Language (TOEFL)

Overall score: 98/120 09-09-2023

• Reading: 26, Listening: 21, Speaking: 25, Writing: 26

Experience

Industrial Tour

Learnt practical knowledge and techniques employed for the industrial production processes in different chemical industries.

2022

- Mohora Water Treatment Plant, WASA
- TSP Complex Limited, Chittagong
- Royal Cement Industry Ltd.
- Usmania Glass Sheet Factory

Achievements

Board General Scholarship	
Higher Secondary Certificate, Chittagong Board	2015
Board General Scholarship	
Secondary School Certificate, Chittagong Board	2013
Board Talent Pool Scholarship	
Junior Secondary School Certificate, Chittagong Board	2010

Extra-Curricular Activities

ChemFusionEducation Administration Programs 2020-2022

- Runner-up in a writing competition
- Content Writer; wrote a number of articles related to chemistry in their blog

Chittagong University Research and Higher Study Society

A career club to aspire students to pursue higher study 2021-2022

• Associate Member, Graphic Designer

Dr. Khastagir Govt. Girls' High School

Essay competition 2008-2012

Participated in several essay competitions and secured runner-up, 2nd, & 3rd positions.