

# Mohammad Jahirul Alam

STUDYING ATMOSPHERIC SCIENCE · GAS CHROMATOGRAPHY EXPERT

Houston, Texas, 77054, US

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## Summary

Currently contributing to analyzing volatile and semi-volatile through multidimensional gas chromatography. Discovering the traces of gases and particles in the atmosphere is something I'm curious about. Their characteristics and reactivity would be revealed. On the other hand, by doing data analysis and modeling, the future impact of these gases will be figured out. Having proper knowledge of sources, environmental pollution will be prevented.

## Education

### University of Houston *Texas, USA*

Ph.D. in EARTH AND ATMOSPHERIC SCIENCE *Aug. 2025*

• CGPA: 3.51/4.00

• Academic Advisor: Dr. Bernhard Rappenglueck · E-mail: brappenglueck@uh.edu

### University of Dhaka *Dhaka, Bangladesh*

MASTER OF SCIENCE IN CHEMISTRY *Nov. 2016 - Feb. 2018*

• CGPA: 3.52/4.00 (32 credits)

### University of Dhaka *Dhaka, Bangladesh*

BACHELOR OF SCIENCE IN CHEMISTRY *Jan. 2011 - Jul. 2016*

• CGPA: 2.97/4.00 (140 credits) (GPA 3.10/4.0 for the last 72 credits) instruments.

## Work Experience

### Medi Graphic Trading Limited (Shimadzu Authorized company in Asia Pacific) *Dhaka, Bangladesh*

APPLICATION CHEMIST *Dec. 2020 - Jul. 2021*

- Around 30 Operational Qualifications, Performance Qualification had been done for Shimadzu GCxGCMS and GC.
- Calibration of GC, Sample Analysis in pharmaceuticals product had been operated.
- Validation of Shimadzu Lab solution Software.
- Installation Qualification, Preliminary Maintenance had been completed for GC, GCMS, and GCxGCMS instruments.
- As a GC Trainer, contributed to teaching around 300 people about the way of maintenance and operation in various models of GC.

## Research

### 5th Conference of Bangladesh Crystallographic Association *Dhaka, Bangladesh*

POSTER PRESENTATION *Jan. 2019*

- Computational Investigation of Hydrated Nickel Ion Ligand and Successive Reaction Energy with Chloride

### International Conference on Chemical Science and Technology *Khulna, Bangladesh*

POSTER PRESENTATION *Feb. 2018*

- Computational Structure analysis of Hydrated Nickel Ion Ligand.

## Skills AND Specializations

### Language and Application Software

• Programming language: R; Compound modeling Software: Gaussian09, Gaussian16.

MS Office: MS Word, MS Excel, MS PowerPoint, Adobe Photoshop. Plot Drawing Software: Sigma plot 10.

### Lab equipment's

• Shimadzu GCxGC/MS, Shimadzu HPLC, UPLC, Dissolution tester/Agilent, Electronic pH Meter, Atomic Absorption Spectrophotometer (AAS), UV/VIS Spectrophotometer.

## Program Committees

2022 Judge (Senior Division) in Biochemistry, TEXAS Science and Engineering Fair *USA*.

## Community Involvement

### Cougar Cupboard *Texas, USA*

VOLUNTEER *Sep. 2021 - Present*

- free food, toiletries, and supplies to University of Houston students in need

### Ghuri (non-profit Children's organizations) *Dhaka, Bangladesh*

FOUNDER *Jan. 2015 - Jul. 2020*

- Providing Education to Children from lower income families.
- Provide food, and cloth to low-income families during the festival, and winter session.