

# 88th TRAINING PROGRAMME OF NITUB



## TRAINING PROGRAMME ON THE USE, MAINTENANCE AND TROUBLE- SHOOTING OF GAS CHROMATOGRAPHY - MASS SPECTROMETRY (GC-MS/MS)

23-28 AUGUST 2025



### Organized by

Network of Instrument Technical personnel and User scientists of Bangladesh (NITUB)

### Venue

Institute of Bioequivalence Studies and Pharmaceutical Sciences (IBSPS) Building, BCSIR, Dr. Quadrat-I-Khuda Road, Dhanmondi, Dhaka-1205

### Programme Committee

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## Background

The Network of Instrument Technical personnel and User scientists of Bangladesh (NITUB), a voluntary non-profit, non-political learned society, is functioning since 1994 with the aim to improve the capability of scientists and technical personnel of Bangladesh to use, maintain and repair scientific equipment.

NITUB is regularly conducting training programme on the use and maintenance of specific group of instruments such as HPLC, GC, AAS, NMR, UV-VIS, X-ray and LC-MS/MS etc. Other than these specific groups of instruments training programmes, NITUB also organizes training programmes on Common Laboratory Equipment and on Common Medical Instruments. So far, NITUB has conducted 87 training programmes in which 1328 young faculties, scientists, postgraduate students, technical personnel and medical personnel have participated. Another very popular programme of NITUB, Instrument Repair Programme, which runs throughout the year and through this programme NITUB repairs non-functioning scientific instruments of Bangladesh. NITUB has already repaired 2255 non-functioning scientific equipment of different educational and research organizations of Bangladesh. In a few programmes of NITUB, there were also participation of regional and international scientists and technical personnel.

Since its inception, NITUB has organized a few training programmes on the use and maintenance of Chromatography such GC, HPLC. NITUB got requests from faculties, scientists and graduate students to organize a training programme on GC-MS/MS in 2025. The EC of NITUB, decided to organize the 88th training programme of NITUB on the use, maintenance and trouble-shooting of **GAS Chromatography - Mass Spectrometry (GC-MS/MS)**.

## Training Programme

The GC-MS/MS training programme will include theoretical lectures and practical sessions on the use, maintenance and trouble-shooting of GC-MS/MS. A tentative time-table for the training programme is given in the brochure however, the final programme will be sent to the selected participants later. The training programme will be conducted by university professors, senior scientists and NITUB technical experts.

## Participants

A maximum of 20 (Twenty) participants will be selected from among the applications of scientists and technical personnel of public and private educational institutes and research organizations. Applicants having **GC-MS/MS** facilities at their institutes will get preference to participate in the training programme.

## Registration

Applications to participate in the 88<sup>th</sup> training programme on GC-MS/MS should reach the General Secretary of NITUB on or **before 18 August 2025** in the form given in the brochure. Application must be sent through proper channel **along with a training fee of Tk. 15,000/- (taka fifteen thousand) in the form of a bank draft or pay order in the name of NITUB (Sonali Bank PLC, Dhaka University Branch, Account No. 4405734255099)**. Training fee will include registration, teaching materials, lunch and tea.

Selected participants will be informed by **20 August 2025** and the training fee of the applicants who could not be accommodated will be refunded.

## **Tentative Programme**

### **23 August 2025 (Saturday)**

- 0900-1000 - Registration of the Participants
- 1000-1100 - Inauguration of the 88<sup>th</sup> Training Programme
- 1100-1130 - Tea
- 1130-1230 - *Lecture 1: Principles of GC-MS/MS***
- 1230-1300 - **Practical Session 1: Demonstration of GC- MS/MS**
- 1300-1400 - Lunch
- 1400-1630 - Practical Session 1: Continuation
- 1630-1700 - Tea

### **24 August 2025 (Sunday)**

- 0900-1000 - ***Lecture 2: Basic Instrumentation, Applications, Troubleshooting, and Maintenance of GC-MS/MS***
- 1000-1030 - Tea
- 1030-1300 - **Practical Session: 2**  
**Group A: Analysis of Natural Products.**  
**Group-B: Analysis of Residual Solvents.**  
**Group-C: Quantification using MRM method**
- 1300-1400 - Lunch & Prayer
- 1400-1630 - Practical Session: 2 Continuations
- 1630-1700 - Tea & Discussion

### **25 August 2025 (Monday)**

- 0900-1000 - ***Lecture 3: Method development and validation for analysis of organic pollutants.***
- 1000-1030 - Tea
- 1030-1300 - **Practical Session:3**  
**Group B: Analysis of Natural Products.**  
**Group-C: Analysis of Residual Solvents.**  
**Group-A: Quantification using MRM method**
- 1300-1400 - Lunch & Prayer
- 1400-1630 - Practical Session: 3 Continuation
- 1630-1700 - Tea & Discussion

### **26 August 2015 (Tuesday)**

- 0900 -1000 - ***Lecture 4: Bio Analysis of pharmaceuticals by GC-MS/MS***
- 1000-1030 - Tea
- 1030-1300 - **Practical Sessions: 4**  
**Group C: Analysis of Natural Products.**  
**Group A: Analysis of Residual Solvent.**  
**Group B: Quantification using MRM method.**
- 1300-1400 - Lunch & Prayer
- 1400-1630 - Practical Sessions: 4 Continuations
- 1630-1700 - Tea & Discussion

### **27 August 2025 (Wednesday)**

- 0900 -1000 - ***Lecture 5: Application of GC-MS/MS in Food Science***
- 1000-1030 - Tea
- 1030-1130 - ***Lecture 6: Application of GC-MS/MS in Pharmaceutical Analysis***
- 1130-1300 - **Practical Sessions: 5**  
***Group A, B & C: Analysis and determination of adulterants in drugs.***
- 1300-1400 - Lunch & Prayer
- 1400-1630 - Practical Sessions: 5 Continuations
- 1630-1700 - Tea & Discussion

### **28 August 2025 (Thursday)**

- 0900-1000 - ***Lecture 7: Analysis of natural products by GC-MS/MS***
- 1000-1030 - Tea
- 1030-1300 - **Practical Session 6**  
Individual problem-solving session
- 1300-1400 - Lunch & Prayer
- 1400-1530 - Practical Session 6: Continuation
- 1500-1600 - Closing ceremony & certificate distribution
- 1600-1700 - Tea



## 88<sup>th</sup> Training Programme of NITUB

On the use, maintenance and trouble-shooting of  
Gas Chromatography - mass spectrometry (GC-MS/MS)  
23-28 AUGUST 2025

### APPLICATION FORM

Name of the applicant (Block Letter)	
Date of birth	
Academic qualification	
Designation	
Institute/Organization with address	
Phone / cell phone number	
E-mail Address	
Any previous training? If yes, please specify	
Date:	Signature of the applicant

Recommendation from the Head of Institution / Organization

Date:	Signature
	Name & Seal