

80th TRAINING PROGRAMME OF NITUB



A WORKSHOP ON THE USE, MAINTENANCE AND TROUBLE-SHOOTING OF COMMON LABORATORY EQUIPMENT

15 October – 20 October 2022

Organized by

**Network of Instrument Technical personnel and
User scientists of Bangladesh (NITUB)
&
Bangladesh Institute of Nuclear Agriculture (BINA),
Mymensingh-2202, Bangladesh**

Venue

**Bangladesh Institute of Nuclear Agriculture (BINA),
Mymensingh-2202, Bangladesh**

Programme Committee

Dr. M Ekramul Haque Director (Training and Planning) Bangladesh Institute of Nuclear Agriculture (BINA), Mymensingh-2202	Convener
Md. Ibrahim Ali Scientific Officer Bangladesh Institute of Nuclear Agriculture (BINA), Mymensingh-2202	Member
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Background

To improve the capability of proper use, maintenance and repair of scientific equipment, scientists and technical personnel of Bangladesh launched a network, " Network of Instrument Technical personnel and User scientists of Bangladesh (NITUB)" on 19 July 1994. NITUB is a voluntary, non-profit, non-political learned society dedicated to scientific education and research in Bangladesh.

NITUB has organized a large number of training programmes on specific groups of instruments such as AAS, HPLC, UV-VIS and IR etc. NITUB also conducts regularly training programmes on common laboratory equipment and on common medical instruments for technical personnel, college teachers and medical professionals. Another programme of NITUB is Instrument Repair Programme through which non-functioning scientific instruments are being repaired. NITUB has already trained more than one thousand faculties, scientists, graduate students, medical professionals and technical personnel of Bangladesh through its training programmes. A few regional and international scientists also attended NITUB training programmes. More than one thousand six hundred non-functioning scientific equipment of different educational and research organizations of Bangladesh and also of Nepal have been repaired through Instrument Repair Programme of NITUB.

The last training programme on the use, maintenance and trouble-shooting of common laboratory equipment was held at the Department of Chemistry, Shahjalal University of Science & Technology (SUST), Sylhet, 28 December 2019–02 January 2020. NITUB used to conduct almost every year one training programme on common laboratory equipment. However, due to COVID-19 NITUB could not conduct this hand-on training programme in 2021.

The 80th training programme of NITUB will be held at the Bangladesh Institute of Nuclear Agriculture (BINA), Mymensingh-2202, on **15 October – 20 October 2022**, on the use, maintenance and trouble-shooting of common laboratory equipment for technical personnel, user scientists, young faculties and post-graduate students of Bangladesh..

Workshop Programme

The 80th training programme of NITUB will consist of theoretical lecture and also intensive practical sessions (a tentative programme enclosed) on operation, maintenance and trouble shooting of common laboratory equipments like Spectrophotometers, Balance, Oven, Microscope, Conductometer, pH-meter, Colorimeter, Vacuum pump etc. **University professors, technical experts and engineers will conduct the workshop.**

Participants

Persons working in research organizations, universities and university colleges can apply to participate in the training programme. A maximum of **30 (Thirty)** participants will be selected from among the applications. Interested regional participants may also apply. Participants may **bring one/two of their non-functioning portable instruments and repair** the instruments during the practical sessions of the training programme.

Registration

Applications to participate in the 80th training programme on the use, maintenance and trouble-shooting of common laboratory equipment should reach the **General Secretary of NITUB** on or **before 10 October 2022** in the form given in the circular. Application must be sent through proper channel **along with a training fee of Tk. 5000/- (Taka Five thousand)** in the form of a bank draft or pay order in the name of NITUB (Sonali Bank Limited, Dhaka University Campus Corporate, Dhaka Branch, Account **No. 4405734255099**). Training fee can also be sent directly to the NITUB's bank account. Training fee will include registration, training materials, lunch and tea.

Selected participants will be informed by **10 October 2022** and the training fee of the applicants who could not be accommodated will be refunded.

Tentative Programme

15 October-2022 (Saturday)

- 0900-1000 - Registration
1000-1100 - Inauguration
1100-1130 - Tea
1130-1300 - *Lecture 1: Laboratory Safety*
1300-1400 - Lunch
1400-1630 - Practical session -I

Group – I, Lab.-A

pH-Meter, Refract meter, Colorimeter, Conductivity Meter, Magnetic Stirrer, Flame Photometer, Electric Balance etc

Group – II, Lab. - B

Autoclave, Hot plate, Rotary evaporator, Shaker, Oven, Muffle furnace, Incubator, Water bath, Distillation plant etc

Group – III, Lab. - C

Microscope, Polarimeter, Centrifuge, Freeze Dryer, High Vacuum Pump, Micro Combustion Unit, Melting point apparatus etc

- 1630-1700 - Tea

16 October -2022 (Sunday)

- 1000-1100 - *Lecture 2: Basic Principles and Fabrication of Commonly Used Laboratory Equipment.*

- 1100-1130 - Tea

- 1130-1300 - Practical session - II

Group - I; Lab. - A

Group - II; Lab. - B

Group - III; Lab. - C

- 1300-1400 - Lunch

- 1400-1630 - Practical session -II (Continuation)

- 1630-1700 - Tea

17 October -2022 (Monday)

- 1000-1100 - *Lecture 3: Use, Maintenance and Trouble-shooting of Commonly Used Laboratory Equipment.*

- 1100-1130 - Tea

- 1130-1300 -Practical session – III

Group - I; Lab. - B

Group - II; Lab. - C

Group - III; Lab. - A

- 1300-1400 - Lunch

- 1400-1630 - Practical session -III (Continuation)

- 1630-1700 - Tea

18 October -2022 (Tuesday)

- 1000-1100 - *Lecture 4: Basic Electronics.*

- 1100-1130 - Tea

- 1130-1300 - Practical session - IV

Group - I; Lab. - B

Group - II; Lab. - C

Group - III; Lab. - A

- 1300-1400 - Lunch

- 1400-1630 - Practical session -IV (Continuation)

- 1630-1700 - Tea

19 October -2022 (Wednesday)

- 1000-1100 - *Lecture 5: Fabrication of a few low-cost equipment.*

- 1100-1130 - Tea

- 1130-1300 - Practical session -V

Group - I; Lab. - C

Group - II; Lab. - A

Group - III; Lab. - B

- 1300-1400 - Lunch

- 1400-1630 - Practical session -V (Continuation)

- 1630-1700 - Tea

20 October -2022 (Thursday)

- 1000-1100 - *Lecture 6: A short power point presentation (Group- wise) from each Group of participants.*

- 1100-1130 - Tea

- 1130 -1300 - Practical session –VI

Group - I; Lab. - C

Group - II; Lab. - A

Group - III; Lab. - B

- 1300-1400 - Lunch

- 1400-1500 - Open Discussion

- 1500-1600 - Closing Ceremony & Certificate Distribution

- 1600 - Tea



th Training Programme of NITUB

**On the use, maintenance and trouble-shooting of
Common laboratory Equipment
15 October - 20 October 2022**

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