# 76TH TRAINING PROGRAMME OF NITUB





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

# 28 December 2019 – 02 January 2020

### Organized by

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

Shahjalal University of Science & Technology (SUST)

#### Venue

Department of Chemistry, Shahjalal University of Science & Technology (SUST), Sylhet-3114, Bangladesh

#### Programme Committee

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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 conducts also training programmes on common laboratory equipment for technical personnel, teachers and on common medical equipment for 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 1142 scientists and technical personnel of Bangladesh through its training programmes and repaired more than 1776 non functioning scientific equipment of different educational and research organizations of Bangladesh.

The last training programme on the use, maintenance and trouble-shooting of common laboratory equipment was held at the Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur-5200, October 2018. NITUB used to conduct almost every year one training programme on common laboratory equipment.

The 76<sup>th</sup> training programme of NITUB will be held at the Shahjalal University of Science & Technology (SUST), Sylhet-3114, on the use, maintenance and trouble-shooting of common laboratory equipment for technical personnel, user scientists, young faculties and post-graduate students of science faculties on 28 December 2019 – 02 January 2020.

#### Workshop Programme

The 76<sup>th</sup> training programme of NITUB will consist of theoretical lectures 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 universities, university colleges and research organizations may apply to participate in the training programme. A maximum of **20** (**Twenty**) participants will be selected from among the applications. NITUB welcomes national and regional participants in its 76<sup>th</sup> training programme.

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 76<sup>th</sup> training programme on the use, maintenance and trouble-shooting of common laboratory equipment should reach the General Secretary of NITUB on or before 20 December 2019 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, pay order or on-line payment in the name of "NITUB" (Sonali Bank Limited, Dhaka University Campus Corporate Branch, Account No. 4405734255099). Training fee will include registration, training materials, lunch and tea.

Selected participants will be informed by **24 December 2019** and the training fee of the applicants who could not be accommodated will be refunded.

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#### Tentative Programme

#### Group - III; Lab. - A 1300-1400 - Lunch 28 December-2019 (Saturday) 1400-1630 - Practical session -III (Continuation) 0900-1000 - Registration 1630-1700 1000-1100 - Inauguration Tea 1100-1130 - Tea 31 December-2019 (Tuesday) 1130-1300 - Lecture 1: Laboratory Safety 1000-1100 - Lecture 4: Basic Electronics -I. 1300-1400 - Lunch 1100-1130 - Tea 1400-1630 - Practical session -I 1130-1300 - Practical session - IV **Group** – **I,** Lab.-A Group - I; Lab. - B pH-Meter, Refract meter, Colorimeter, Conductivity Meter, Group - II; Lab. - C Magnetic Stirrer, Flame Photometer, Electric Balance etc Group - II, Lab. - B Group - III; Lab. - A 1300-1400 - Lunch Autoclave, Hot plate, Rotary evaporator, Shaker, Oven, Muffle 1400-1630 - Practical session -IV (Continuation) furnace, Incubator, Water bath, Distillation plant etc **Group – III,** Lab. - C 1630-1700 - Tea Microscope, Polarimeter, Centrifuge, Freeze Dryer, High Vacuum Pump, Micro Combustion Unit, Melting point 01 January -2020 (Wednesday) 1000-1100 - Lecture 5: Basic Electronics -II apparatus etc 1100-1130 - Tea 1630-1700 - Tea 1130-1300 - Practical session -V Group - I; Lab. - C 29 December-2019 (Sunday) Group - II; Lab. - A 1000-1100 - Lecture 2: Basic principles of some commonly used laboratory Group - III; Lab. - B equipment. 1300-1400 - Lunch 1100-1130 - Tea 1400-1630 - Practical session -V (Continuation) 1130-1300 - Practical session - II 1630-1700 - Tea Group - I; Lab. - A Group - II; Lab. - B Group - III; Lab. - C 02 January -2020 (Thursday) 1000-1100 - Lecture 6: Fabrication of few low cost Laboratory Equipment. 1300-1400 - Lunch 1100-1130 - Tea 1400-1630 - Practical session -II (Continuation) 1130 -1300 - Practical session –VI 1630-1700 - Tea Group - I; Lab. - C Group - II; Lab. - A 30 December-2019 (Monday) 1000-1100 - Lecture 3: Trouble-shooting, Methods, Techniques and Group - III; Lab. - B 1300-1400 - Lunch Procedures (Analogue and Digital Equipment) 1400-1500 - Open Discussion 1100-1130 - Tea 1500-1600 - Closing Ceremony & Certificate Distribution 1130-1300 -Practical session – III

1600

- Tea

Group - I; Lab. - B

Group - II; Lab. - C



# **76th Training Programme of NITUB**

#### On the use, maintenance and trouble-shooting of Common Laboratory Equipment 28 December 2019 – 02 January 2020

Venue: Shahjalal University of Science & Technology (SUST), Sylhet-3114

#### **APPLICATION FORM**

| Name of the applicant<br>(Block Letter)                    |                            |
|--|----------------------------|
| Date of birth  |                            |
| Academic qualification                                     |                            |
| Designation  |                            |
| Institute/Organization with address                        |                            |
| Phone / cell phone number                                  |                            |
| E-mail Address   |                            |
| Any previous training?<br>If yes, please specify           |                            |
| Date:  | Signature of the applicant |
| Recommendation from the Head of Institution / Organization |                            |
| Date:  | Signature                  |
|  |                            |
|  | Name & Seal                |
|  |                            |

