## **62nd TRAINING PROGRAMME OF NITUB**





TRAINING PROGRAMME ON THE USE, MAINTENANCE AND TROUBLE-SHOOTING OF COMMON MEDICAL INSTRUMENTS

26 November - 01 December 2016

#### Organized by

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

#### Venue

BUHS, 125/1, Darus Salam, Mirpur, Dhaka

#### Organizing Committee

Professor Begum Rokeya Department of Pharmacology BUHS, Dhaka. Convener

Professor Liaquat Ali Vice-Chancellor BUHS, Dhaka Member

Mr. S.M.Muraduzzaman Chief Biomedical Engineer BUHS, Dhaka Member

Md. Abul Kalam Chowdhury Instrument Engineer

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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 of improving the capability of scientists and technical personnel to use, maintain and repair of scientific equipment properly.

NITUB is regularly conducting training programmes on the use and maintenance of specific groups of instruments such as AAS, HPLC, GC, UV-VIS, IR and X-ray etc. Other than specific groups of conducts training instruments, NITUB also programme on common laboratory equipment and also on common medical instruments. NITUB has already trained more than 860 scientists and technical personnel of Bangladesh through its training programmes. Other than training programmes, NITUB is also conducting Instrument Repair Programme through which non-functioning scientific instruments are being repaired. So far, NITUB has repaired about 1500 scientific equipment of different educational and research organizations of Bangladesh

NITUB already has organized six training programme on common medical instruments and the last one was organized in 2015. NITUB is getting requests from the user scientists and medical technologists from different hospitals and laboratories to organize training programme on common medical instruments on a regular basis. Therefore, NITUB plans to organize its 62<sup>nd</sup> training programme on the use and maintenance of common medical instruments.

#### Training Programme

The 62<sup>nd</sup> training programme of NITUB will include theoretical lectures and practical training sessions on operation, maintenance and trouble-shooting of common medical instruments, such as Microscope, Incubator, Sucker machine, Colorimeter, and Autoanalyzer, Semiauto Hematology analyzer, ECG, Ultrsonograph, , X-ray and on other routine laboratory equipment. The training will be conducted by professors, senior scientists and NITUB technical experts.

#### **Participants**

A maximum of **20** (**Twenty**) participants will be selected from among the applicants of various public/private hospitals and health centers. The detailed programme will be sent later to the selected participants. Selected participants may bring one/two of their non-functioning portable medical equipment and try to repair the instruments during the practical sessions of the training programme.

#### Registration

Applications for the 62<sup>nd</sup> training programme on common medical instruments should reach the General Secretary of NITUB on or before 22 November 2016 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 Branch, Account No. 34255099). Training fee will include registration, instruction materials, lunch, and tea.

Selected participants will be informed by **24 November 2016** and the training fee of the applicants who could not be accommodated will be refunded.

Tentative	Programme	13	
La de la companya del companya de la companya del companya de la c		14	
November 26	2016 (Saturday)	16	
09.00 -10.00	Inaugural Session	N	
10.00 - 10.30	Tea / Coffee	09	
10.30 –11.30	Lecture-1: Quality Sample Collection,		
	Handling, and Preservation for an	10	
	Effective Microbial	11	
11.30 - 12.30	Lecture-2: Common Medical Equipment-	11	
	microscope: maintainence &		
	troubleshooting.		
12.30 - 13.15	Practical Session: Microscope	13	
13.15-1400	Lunch	14	
14.00 - 16.00	Practical Session: Microscope	16	
	(continuation)	N	
16.00 - 16.30	Tea / Coffee	09	
November 27	2016 (Sunday)		
09.00 - 10.00	Lecture-3: Automated Blood Cell Counter		
10.00 - 11.00	and the state of t		
11.00 - 11.30	maintenance and on-site troubleshooting		
11.00 - 11.30 $11.30 - 13.00$	Tea / Coffee	11	
11.30 - 13.00	Practical Session: Biochemistry auto	11	
	analyzer and Blood Cell Counter		
	Group -A: Automated Blood Cell Counter	13	
	Group –B: Semi Auto & Biochemistry auto Analyzer	14 16	
13.00 - 14.00	Lunch	10	
14.00 - 16.00	Prostical Detation of Course A and D		
16.00 - 16.30	Tea / Coffee	09	
10.50	rear conce	10	
November 28	2016 (Monday)	11	
09.00 - 10.00	Lecture-5: Photometric techniques in	11	
	clinical laboratory	11	
10.00 - 11.00	Lecture-6: Genetic polymorphism in the	13	

disease pathogenesis & its complications

Tea / Coffee

11.00 - 11.30

11.30 - 13.00	Practical Session:			
	Group -A: Spectrophotometer, colorimeter			
	Group -B: Common troubleshoots in Gel			
	electrophoresis in DNA lab			
13.00 - 14.00	Lunch			
14.00 - 16.00	Practical: Rotation of Group A and B			
16.00 - 16.30	Tea / Coffee			
November 29 2016 (Tuesday)				
09.00 - 10.00	Lecture-7: ELISA: General guidelines and			
	troubleshooting			
10.00 - 11.00	Lecture-8: Safety in a clinical laboratory			
11.00 - 11.30	Tea / Coffee			
11.30 - 13.00	Practical Session:			
	Group -A: ELISA			
	Group -B: Electrophoresis			
13.00 - 14.00	Lunch			
14.00 - 16.00	Practical: Rotation of Group A and B			
16.00 - 16.30	Tea / Coffee			
November 30 2016 (Wednesday)				
09.00 - 10.00	Lecture-9: Classification of medical			
	equipments. Basic principles & application of imaging technology in medical field.			
10.00 - 11.00	Lecture-10: ECG, ETT & other			
	electrophysiological techniques used in			
11.00 - 11.30	cardiology Tea / Coffee			
11.30 - 13.00	Practical Session:			
	Group -A: X-Ray/ imaging			
13.00 - 14.00	Group –B: ECG, ETT Lunch			
14.00 – 14.00	Practical: Rotation of Group A and B			
16.00 - 16.30	Tea / Coffee			
December 01 2016 (Thursday)				
09.00 <b>–</b> 10.00	Lecture-11: Safety measure in radiology			
10.00 - 11.00	Lecture-12: Repair and maintenance			
	procedure of conventional X-ray machine			
11.00-11.30	Tea / Coffee			
11.30 - 13.00	Practical Session:			
	X-ray/imaging, ultra sonogram			
13.00 - 14.00	Lunch			
14.00 - 16.00	Open discussion, Concluding Session and			
	Certificate distribution			

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### 26 November - 01 December 2016

#### **APPLICATION FORM**

Name of the applicant

Date:

Date of birth	
Academic qualification	
Designation	
Institution/Organization with address	1
Phone and Cell number	
E-mail Address	<b>3</b>
Designation	•
Any previous training, If yes, please specify	
Date: Sig	nature of the applicant
Recommendation from Institution / Organizati	
2	

Signature

Designation

Name