

68th Training Programme of NITUB

(A Regional Training Programme)



TRAINING PROGRAMME ON THE USE, MAINTENANCE, TROUBLE-SHOOTING AND APPLICATION OF ATOMIC ABSORPTION SPECTROSCOPY (AAS)

21-26 July 2018

Organized by

**Network of Instrument Technical personnel and
User scientists of Bangladesh (NITUB)
&
Atomic Energy Centre, Dhaka (AECD)**

Venue

Analytical Chemistry Laboratory (ACL)
Chemistry Division, Atomic Energy Centre, Dhaka (AECD)
4, Kazi Nazrul Islam Avenue, Shahbag, Dhaka-1000, Bangladesh

Programme Committee

Dr. Bilkis Ara Begum Director Atomic Energy Centre Dhaka (AECD) Dhaka-1000	Convener
Professor Dr. A.M. Shafiqul Alam Executive Committee Member NITUB	Member
Dr. Shamshad B. Quraishi Chief Scientific Officer & Head Chemistry Division Atomic Energy Centre Dhaka (AECD) Dhaka-1000	Member
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Background

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

NITUB is regularly conducting training programme on the use and maintenance of specific groups of instruments such as AAS, GC, HPLC, UV-VIS, IR and X-ray etc. So far, NITUB has conducted 67 training programmes. NITUB is also conducting Instrument Repair Programme throughout the year since 1996 through which more than 1600 non-functioning scientific instruments of different public and private organizations of Bangladesh have already been repaired.

NITUB plans to organize another regional training programme on the use, maintenance, trouble-shooting and application of Atomic Absorption Spectroscopy (AAS). Young faculties / scientists/ graduate students of Bangladesh, Bhutan, Cambodia, Myanmar, Nepal, Laos and Vietnam may apply to participate in this regional AAS training programme.

The venue of 68th training programme of NITUB is the Analytical Chemistry Laboratory (ACL), Chemistry Division, AECD. ACL is one of the six accredited (ISO/IEC 17025:2005) laboratories in Bangladesh.

Training Programme

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

Participants

A maximum of 20 (Twenty) participants will be selected from among the applications of young faculties, scientists, graduate students and technical personnel of Bangladesh, Bhutan, Cambodia, Myanmar, Nepal, Laos and Vietnam. Applicants having AAS facilities at his/her working place will get preference to participate in the training programme.

Registration

Applications to participate in the 68th training programme of NITUB should reach the General Secretary of NITUB on or **before 10 July 2018** (only for local participants) in the form given in the circular. Application must be sent through proper channel *along with a training fee of U.S.\$ 125/- (One hundred twenty five U.S. dollar) / BD Taka 10,000/- (ten thousand taka)* in the form of a bank draft or pay order in the name of NITUB (Sonali Bank Limited, Dhaka University Corporate Branch, Account No. 4405734255099). Foreign participants can pay the training fee on site; however they have to register for the training programme by **15 June 2018**. Training fee will cover the cost of training materials, lunch and tea. NITUB will take care of local hospitalities (accommodation, food and local travel) of foreign participants only.

Selected **foreign participants** will be informed by **30 June 2018** and **local participants** will be informed by **18 July 2018**. Training fee of the applicants who could not be accommodated will be refunded.

Tentative Programme

21 July 2018 (Saturday)

- 0900-0930 - Registration of the Participants
- 0930-1100 - Inauguration of AAS Training Programme
- 1100-1130 - Tea
- 1130-1230 - **Lecture-1:** Basic principle of AAS
- 1230-1400 - Lunch
- 1400-1700 - *Lab 1: Instrumentation of AAS*
- 1700- 1730 - Tea & Discussion

22 July 2018 (Sunday)

- 0930-1030 - **Lecture 2:** Sample preparation & standard operating procedure in AAS
- 1030-1100 - Tea
- 1100-1300 - *Lab 2: Group A: Quantification of trace metals in water sample by flame technique*
Lab 3: Group B: Measurement & detection of Arsenic in water by HG-AAS technique
- 1300-1400 - Lunch
- 1400-1530 - *Lab 2 & 3; Continuation*
- 1530-1600 - Tea
- 1600-1700 - *Lab 2 & 3; Continuation*

23 July 2018 (Monday)

- 0930-1030 - **Lecture 3:** Arsenic determination in environmental samples in AAS
- 1030-1100 - Tea
- 1100-1300 - *Lab 4; Group B: Quantification of trace metals in water sample by flame technique*
Lab 5; Group A: Measurement & detection of Arsenic in water by HG-AAS technique
- 1300-1400 - Lunch
- 1400-1530 - *Lab 4 & 5; Continuation*
- 1530-1600 - Tea
- 1600-1700 - *Lab 4 & 5; Continuation*

24 July 2018 (Tuesday)

- 0930-1030 - **Lecture 4:** Quality assurance/ Quality control in AAS analysis
- 1030-1100 - Tea
- 1100-1300 - *Lab 6; Group A: Analysis of environmental & biological samples*
Lab 7; Group B: Analysis of essential elements in food
- 1300-1400 - Lunch
- 1400-1530 - *Lab 6 & 7; Continuation*
- 1530-1600 - Tea
- 1600-1700 - *Lab 6 & 7; Continuation*

25 July 2018 (Wednesday)

- 0930-1030 - **Lecture 5:** Instrumental trouble-shooting & maintenance of AAS
- 1030-1100 - Tea
- 1100-1300 - *Lab 8; Group B: Analysis of environmental & biological samples*
Lab 9; Group A: Analysis of essential elements in food
- 1300-1400 - Lunch
- 1400-1530 - *Lab 8 & 9; Continuation*
- 1530-1600 - Tea
- 1600-1700 - *Lab 8 & 9; Continuation*

26 July 2018 (Thursday)

- 0930-1030 - **Lecture 6:** Trouble-shooting in application of AAS analysis
- 1030-1100 - Tea
- 1100-1300 - *Lab 10; Group A: Analysis of soil samples*
Lab 11; Group B: Analysis of geological samples
- 1300-1400 - Lunch
- 1400-1530 - Open Discussion
- 1600-1700 - Closing ceremony and Certificate distribution
- 1700 - Tea



**68th Training Programme of NITUB
(A Regional Training Programme)**

Training Programme of NITUB on the use, maintenance, trouble-shooting and application of Atomic Absorption Spectroscopy (AAS)

21-26 July 2018

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	
If you have AAS in your institute, please give model number & manufacturer name.	
Did you attend any training on AAS? If yes, please specify	
Date:	Signature of the applicant

Recommendation from the Head of Institution / Organization

Date:	Signature
	Name & Seal