

39TH TRAINING PROGRAMME OF NITUB



TRAINING PROGRAMME ON THE APPLICATION, MAINTENANCE AND TROUBLE-SHOOTING OF ATOMIC ABSORPTION SPECTROPHOTOMETER

05 - 17 June 2010

Organized by

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

Venues

Department of Soil, Water and Environment, University of Dhaka
and Plasma Plus₊ Application & Research Laboratory, Uttara
Model Town, Dhaka

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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 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 38 training programmes on various groups of instrument. NITUB is also conducting Instrument Repair Programme through which non-functioning scientific instruments are being repaired.

Since its inception, NITUB already has organized five training programmes on the use and maintenance of Atomic Absorption spectrophotometer (AAS) and the last one was held in 2008. These training programmes were a week long programme. Research scientists would like to have a hand on training programme of longer duration. The EC of NITUB, therefore, decided that the 39th training programme of NITUB be on the application, maintenance and trouble shooting for two weeks. The programme will be organized in such a way that the participants get in depth training on AAS and NITUB expects that after the training programme the participants will be able to handle their AAS machine independently.

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 for 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 and NITUB technical experts.

Participants

A maximum of 10 (Ten) participants will be selected from among the applications of scientists and technical personnel of public and private educational institutes and research organizations. Young staff member and postgraduate student having AAS facilities at his/her working place will have preference to participate in the training programme. **IFS grantees of South Asia region are welcome to participate in the programme. Limited fund is available for IFS grantees of the South Asia region to participate in the programme.**

Registration

Applications to participate in the 39th training programme on AAS should reach the General Secretary of NITUB on or **before 31st May 2010** in the proforma given in the circular. Application must be sent through proper channel **along with a training fee of Tk. 20,000/- (taka twenty thousand) in the form of a bank draft or pay order in the name of NITUB.** Training fee will include registration, teaching materials, lunch and tea.

Selected participants will be informed by **03 June 2010** and the training fee of the applicants who could not be accommodated will be refunded.

Tentative Programme

05 June 2010(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-I
1230-1400 - Lunch
1400-1700 - *Lab 1: Instrumentation of AAS*
1700- 1730 - Tea & Discussion

06 June 2010(Sunday)

- 0900-1030 - *Lecture 2* Basic principle of AAS-II
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*

07 June 2010(Monday)

- 0900-1030 - *Lecture 3* Sample preparation & standard operating procedure in AAS
1030-1100 - Tea
1100-1300 - *Lab 2 & 3; Continuation*
1300-1400 - Lunch
1400-1530 - *Lab 2 & 3; Continuation*
1530-1600 - Tea
1600-1700 - *Lab 2 & 3; Continuation*

08 June 2010(Tuesday)

- 0900-1030 - *Lecture 4* Quality assurance/ Quality control in AAS analysis
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*

09 June 2010(Wednesday)

- 0900-1030 - *Lecture 5* Instrumental trouble-shooting & maintenance of AAS
1030-1100 - Tea
1100-1300 - *Lab 4 & 5; Continuation*
1300-1400 - Lunch
1400-1530 - *Lab 4 & 5; Continuation*
1530-1600 - Tea
1600-1700 - *Lab 4 & 5; Continuation*

10 June 2010(Thursday)

- 0900-1030 - *Lecture 6* Trouble-shooting in application of 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*

11 June 2010(Friday) -(Free)

12 June 2010(Saturday)

0900-1030 - Lab 6 & 7; Continuation
1030-1100 - Tea
1100-1300 - Lab 6 & 7; Continuation
1300-1400 - Lunch
1400-1530 - Lab 6 & 7; Continuation
1530-1600 - Tea
1600-1700 - Lab 6 & 7; Continuation

13 June 2010(Sunday)

0900-1030 - *Lab 8; Group B: Analysis of environmental & biological samples*
Lab 9; Group A: Analysis of essential elements in food
1030-1100 - Tea
1100-1300 - Lab 8 & 9; Continuation
1300-1400 - Lunch
1400-1530 - Lab 8 & 9; Continuation
1530-1600 - Tea
1600-1700 - Lab 8 & 9; Continuation

14 June 2010(Monday)

0900-1030 - Lab 8 & 9; Continuation
1030-1100 - Tea
1100-1300 - Lab 8 & 9; Continuation
1300-1400 - Lunch
1400-1530 - Lab 8 & 9; Continuation
1530-1600 - Tea
1600-1700 - Lab 8 & 9; Continuation

15 June 2010(Tuesday)

0900-1030 - *Lab 10; Group A: Analysis of soil samples*
Lab 11; Group B: Analysis of geological samples

1030-1100 - Tea
1100-1300 - Lab 10 & 11; Continuation
1300-1400 - Lunch
1400-1530 - Lab 10 & 11; Continuation
1530-1600 - Tea
1600-1700 - Lab 10 & 11; Continuation

16 June 2010(Wednesday)

0900-1030 - *Lab 12; Group B: Analysis of soil samples*
Lab 13; Group A: Analysis of geological samples
1030-1100 - Tea
1030-1300 - Lab 12 & 13; Continuation
1300-1400 - Lunch
1400-1530 - Lab 12 & 13; Continuation
1530-1600 - Tea
1600-1700 - Lab 12 & 13; Continuation

17 June 2010(Thursday)

0900-1030 - *Lab 14; Individual lab session of participants choice*
1030-1130 - Tea
1100-1300 - Lab 14; Continuation
1300-1400 - Lunch
1400-1530 - Open Discussion
1600-1700 - Closing ceremony and Certificate distribution
1700 - Tea

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SHOOTING OF AAS**

05 - 17 June 2010

APPLICATION FORM

Name of the applicant :

Date of birth :

Academic qualification :

**Institute/Organization
with address** :

Telephone number :

Mobile number :

Designation :

**Any previous training,
If yes, please specify** :

Date: **Signature of the applicant**

**Recommendation from the Head of
Institution / Organization**

Date: **Signature** **:**
 Name **:**
 Designation **:**

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