QUALITY EVALUATION LABORATORY Spices Board, Cochin-682 025.

TRAINING PROGRAMMES: 2014-15

Spices Board proposes to conduct the following training programmes on the analysis of spices and spice products during 2014-2015. The training programmes will be held in the Quality Evaluation Laboratory (NABL accredited under ISO/IEC 17025:2005 and ISO 9001:2008 & ISO 14001:2004 certified by British Standards Institution, U.K.) of the Board, Sugandha Bhavan, N.H.By-pass, P.B.No.2277, Palarivattom P.O. Cochin-682 025 on the dates specified against each

programme.

The programme is open to candidates, mainly sponsored by spice export units registered with the Board (having registration with manufacturing facilities) and candidates from private laboratories & other institutions. The training fee is Rs.11,236/- (Rs.10,000/- +12.36% as service

Tax & Edu. Cess) per programme/participant.

The number of trainees in each programme will be maximum limited to eight. The minimum qualification for the participant is graduation in Science with experience in the field. Selection will be made based on the qualification and experience. Preference will be given to the candidates

sponsored by spice export units.

Trainees have to make their own arrangements for travel and accommodation. However,

working lunch, tea & snacks will be provided during the training period.

The nomination in the prescribed form (attached) along with the training fee in the form of Demand Draft drawn in favour of Secretary, Spices Board, should reach "The Senior Scientist(QC) & Head, Quality Evaluation Laboratory, Spices Board, Kochi-682 025" on or before 15th October, 2014. Applications submitted along with the training fee (fees once fee paid is non-refundable) only will be considered for the selection of participants.

K R K Menon SR.SCIENTIST(QC) & HEAD

### 1. Training programme on microbiological analysis of spices/spice products: October 27 – 31, 2014.

### Course content

Introduction to Quality Systems and Laboratory Safety with respect to Microbiological analysis Sampling and Plating for Yeast and Mould Count Sampling and Pre-enrichment for the detection of Salmonella spp. Sampling and Presumptive test for Enumeration of Coliforms and E.coli Sampling and Plating for Total Plate Count (TPC) Sampling and Plating for the Enumeration of Enterobacteriaceae Selective Enrichment of the test sample for Salmonella Confirmatory Test for E.coli Confirmatory test for Coliforms Observation of Selective plates for Enterobacteriaceae and performing Biochemical test Complete test for E.coli Plating for Salmonella on selective media *Observation and interpretation of TPC results* Biochemical characterization of Enterobacteriaceae and interpretation of results Performing Biochemical Test for E.coli, Salmonella Observation of Biochemical test for E.coli and Salmonella Serological confirmation of Salmonella spp.

## 2. Training programme on analysis of Mycotoxins and illegal dyes in spices and spice-products using HPLC & LCMS/MS: November 10 – 14, 2014.

Interpretation of Results for Yeast and Moulds, Coliforms, E.coli, Salmonella

### Course content

Introduction to Quality Systems and Laboratory Safety with respect to Residue analysis		
General introduction to Mycotoxins and Illegal Dyes		
Sample preparation and extraction for Mycotoxins		
Basics of Chromatography focusing on HPLC theory		
Clean-up of Mycotoxins		
Sample preparation and extraction for Illegal Dyes		
Basics of mass spectrometry		
Introduction to LC-MS/MS		
Demonstration of Analysis of samples by LC-MS/MS		

# 3. Training programme on physical & chemical analysis of spices/spice-products: November 17 – 21, 2014.

### Course content

ntroduction to Quality Systems and Laboratory Safety with respect to Chemical analysis
analysis of physical contaminants in spices (ASTA cleanliness parameters)
ample preparation for laboratory analysis
Noisture and volatile oil analysis in spices
Total ash and Acid insoluble ash analysis
Determination of Water activity content
analysis of Capsaicin in chillies by HPLC
tarch content in spices- gravimetric method
analysis of Curcumin in turmeric, Piperine content in pepper and Colour in Chillies using UV-lis spectrophotometer.
ulphur dioxide content estimation using modified Monier William apparatus

4. Training programme on GC/ LCMS/MS analysis of Pesticide residues in spices and spice products: November 24 – 28, 2014

### Course content

Introduction to Quality Systems and Laboratory Safety with respect to Residue analysis		
General introduction to Pesticide Residue Analysis		
Sample preparation and extraction for OC and PY Analysis		
Basics of Gas Chromatography focusing on GC theory		
Clean-up of OC and PY Analysis		
OP Extraction and Clean-up		
QA/QC measures on Pesticide Residue Analysis		
Introduction to LC-MS/MS		
OP Extraction - LC-MS/MS		

#### **QUALITY EVALUATION LABORATORY**

Spices Board, Cochin-682 025.

### REGISTRATION FORM

- 1. [ ] Training programme on microbiological analysis of spices/spice products: October 27 31, 2014\*
- 2. [ ] Training programme on analysis of Mycotoxins and illegal dyes in spices and spice products using HPLC & LCMS/MS: November 10 14, 2014\*.
- 3. [ ] Training programme on physical & chemical analysis of spices/spice products: November 17 21, 2014\*.
- 4. [ ] Training programme on GC/ LCMS/MS analysis of Pesticide residues in spices and spice products: November 24 28, 2014\*

\*Please indicate the programme with  $\sqrt{\text{mark}}$ .

Name &Address of				
the unit/Institution	<i>:</i>			
Regn.No. With the Spices Board				
(if applicable)	•			
City:	State:	Pin:		
Tel:	Mob No:	E-mail:		
	Details of the participant			
A. Name	:			
B. Designation	:			
C. Educational qualification :				
D. Nature of experie	nce :			
E. Details of DD enclosed:				
D.D.No.	Bank:	Date:		

Separate Registration form should be used for each programme per participant. The duly filled in registration form along with the training fee of Rs.11,236/- in the form of DD drawn in favour of Secretary, Spices Board should reach the following address atleast 10 days before the commencement of each program.

Sr. Scientist(QC) & Head, Quality Evaluation Laboratory Spices Board, Palarivattom P.O, Cochin-682 025 Phone No.0484 – 234913

Email: <u>sbqelkochi@gmail.com</u> ssqcqel@gmail.com