

QUALITY EVALUATION LABORATORY
Spices Board, Cochin-682 025.

TRAINING PROGRAMMES : 2017-18

*Spices Board is conducting training programmes on the **analysis of spices and spice products** at its Quality Evaluation Laboratory at various centres. During 2017-18, Quality Evaluation Laboratory (NABL accredited under ISO/IEC 17025:2005 and ISO 9001:2008 & ISO 14001:2004 certified by British Standards Institution, U.K.), Sugandha Bhavan, N.H.By-pass, P.B.No.2277, Palarivattom P.O. Cochin-682 025 will be conducting four training programmes, which will be held as per the program schedule given below.*

The programme is open to candidates working in spice export units registered with the Board (having registration with manufacturing facilities) and candidates from private laboratories & other institutions. The training fee is Rs.11,000/ (Rs.11,000/- +18% GST) 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 working in spice export units.

Trainees have to make their own arrangements for the travel, accommodation and boarding. 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 Scientist-D & Head, Quality Evaluation Laboratory, Spices Board, Kochi-682 025**" **within 10 days prior to the commencement of the programme.** Applications submitted along with the training fee (fee once paid is non-refundable) only will be considered for the selection of participants.*

K R K Menon
SCIENTIST -D & HEAD

1 Training programme on analysis of Mycotoxins and illegal dyes in spices and spice-products using HPLC & LCMS/MS: 27 November -1st December 2017

Course content

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

2. Training programme on physical & chemical analysis of spices/spice-products: 13-17th November 2017

Course content

<i>Introduction to Quality Systems and Laboratory Safety with respect to Chemical analysis</i>
<i>Analysis of physical contaminants in spices (ASTA cleanliness parameters)</i>
<i>Sample preparation for laboratory analysis</i>
<i>Moisture and volatile oil analysis in spices</i>
<i>Total ash and Acid insoluble ash analysis</i>
<i>Determination of Water activity content</i>
<i>Analysis of Capsaicin in chillies by HPLC</i>
<i>Starch content in spices- gravimetric method</i>
<i>Analysis of Curcumin in turmeric, Piperine content in pepper and Colour in Chillies using UV-Vis spectrophotometer.</i>
<i>Sulphur dioxide content estimation using modified Monier William apparatus</i>

3. Training programme on GC, GCMS/MS and LCMS/MS (“Q” Trap) analysis of Pesticide residues in spices and spice products: 4-8th December 2017

Course content

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

4. Training programme on microbiological analysis of spices/spice products: 20-24 November 2017

Course content

Introduction to Quality Systems and Laboratory Safety with respect to Microbiological analysis

Day	Contents
Day 1	Briefing on Quality systems & Microbiological analysis of Spices . Sample preparation for Aerobic count & Yeast & Mould- automated enumeration
Day 2	Sample preparation for VIDAS Salmonella assay. Sample preparation for Total Coliforms, E.coli, Bacillus cereus, Staphylococcus aureus - automated enumeration Continue analysis for Aerobic count by Tempo TVC method
Day 3	Continue analysis for Yeast & Mould, Total Coliforms, E.coli, Bacillus cereus, Staphylococcus aureus by TEMPO method Sample preparation for Vitek 2 Compact Continue Salmonella assay using VIDAS
Day 4	Sample preparation and analysis using MALDI TOF Continue biochemical characterization using Vitek 2 Compact
Day 5	Demonstration on Salmonella isolation using other rapid methods. Results and discussion on the analysis conducted

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REGISTRATION FORM

1. [] *Training programme on analysis of Mycotoxins and illegal dyes in spices and spice products using HPLC & LCMS/MS: 27 November – 1 st December 2017**
2. [] *Training programme on physical & chemical analysis of spices/spice products: 13-17 November 2017 **
- 3 [] *Training programme on GC /GCMS/MS/ LCMS/MS with Q Trap analysis of Pesticide residues in spices and spice products: 4-8 December 2017 **
- 4 [] *Training programme on microbiological analysis of spices/spice products: 20-24 November 2017**

*Please indicate the programme with of choice ✓ mark.

Name &Address of the unit/Institution : 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 experience :		
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.12980/ 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 programme.*

Scientist-D& Head, Quality Evaluation Laboratory
Spices Board, Palarivattom P.O, Cochin-682 025
Phone No.0484 – 2349134

Email: sbgel@indianspices.com

Email: krk.menon740@nic.in