

21st to 23rd June, 2023



Three Days Hands on Training Program on Detection and Quantification of Pesticide Residues in Animal Origin Foods by Gas Chromatography



Register Now

ICAR – National Agricultural Higher Education Project (NAHEP)

Centre for Advanced Agricultural Science and Technology (CAAST)

Centre of Excellence for Advanced Research on Animal Food Safety

Department of Veterinary Public Health, Mumbai Veterinary College, Parel, Mumbai – 400 012

Maharashtra Animal and Fisheries Sciences University, Nagpur – 440 001, Maharashtra, India.

RATIONALE

The world-wide commercial food industry is well-developed and is the largest supplier of animal protein and good source of essential amino acids, vitamins and minerals for human consumption in the form of meat and eggs. Its significance is even greater in developing countries where chicken is relatively cheap and can be kept in a small area, usually providing an excellent source of high quality. However, poultry products may pose risks to human health due to contamination with pesticide residue that originate mainly from the feed, water, litter, and the environment. They are hazardous and can be transmitted through the food chain, having a toxic impact on the health of both animals and humans.

The purpose behind carrying out this training is to provide a thorough knowledge on the test methods and precautions to be taken during testing of animal origin food for detection of pesticide residue. Complete information is to be given on hands on training on “Detection and Quantification of Pesticide residue in animal origin food by Gas chromatography with ECD detector (GC-ECD)”.

This training will be beneficial to industry professionals, academia, laboratory personnel and PG/Ph.D. students etc. The training will impart complete knowledge of basic principles of Gas Chromatography system hardware, setup and operations. Optimization of operating parameters, analysis protocols, software operations for chromatography, considerations and maintenance of the instrument in thorough manner. The complete hands on experience will be provided in sample preparation using QuEChER method and demonstration of method development, data analysis and result interpretations on GC-ECD (Nexis GC-2030, Shimadzu) during training. This training will help to build skills that you can put to work. It is essentials of new techniques or master real-world applications with advanced methodologies.

COURSE OBJECTIVES

- To educate the participants about basic concept of Gas chromatography.
- To familiarize participants with sample extraction for Pesticide residue using QuEChER method.
- To train the participants on method development and validation for detection of Pesticide residues in chicken meat.

WHO CAN APPLY?

Academicians, Analyst from Government/private chemical residue analysis laboratory, Scientists, PG/Ph.D. Students of Veterinary and other allied institutions.

REGISTRATION FEES:

For Students @Rs.500/-

(PG/Ph.D. Students of Veterinary and other allied institutions)

For Participants @Rs.2500/-

(Academicians, Analyst from Government/private chemical residue analysis laboratory personals)

(Registration Includes: workshop material, participation in lectures and Hand on training sessions, morning, breakfast, lunch evening tea and snacks during the workshop)

BANK DETAILS:

Name: Pay & Account Officer MAFSU,

Bank name: State Bank of India.

Branch name: Parel

Account No: 39220817897

IFSC code: SBIN0001884

The desired participants have to **register** (<https://forms.gle/6utQcqcRWqQuBPz76>) **on or before 20th June, 2023 up to 5:00 PM**. After successful completion of registration, they will provide WhatsApp group link for further communication.

CHIEF PATRONS



Dr. Sharad R. Gadakh
Vice-Chancellor
MAFSU, Nagpur



Dr. R. C Agarwal
DDG (Education) & National Director
NAHEP, ICAR, New Delhi

PATRONS



Dr. Anuradha Agrawal
NC, NAHEP-CAAST
ICAR, New Delhi



Dr. S. V. Upadhye
DI & Dean, Faculty of Veterinary
Science, MAFSU, Nagpur



Dr. N.V. Kurkure
Director of Research
MAFSU, Nagpur



Dr. A. U. Bhikane
Director of Extension Education
MAFSU, Nagpur



Dr. P. G. Wasnik
Dean, Faculty of Dairy
Technology, MAFSU, Nagpur

COURSE DIRECTORS



Dr. (Prof.) S.U. Gulavane
Project Implementing Officer &
Associate Dean, MVC, Mumbai



Dr. R. J. Zende
Principal Investigator
NAHEP-CAAST, MVC, Mumbai

Organizing Secretaries

Dr. V. M. Vaidya
Co-PI., MVC

Dr. S. D. Ingole
Co-PI., MVC

Dr. (Mrs). R.S. Gandge
Co-PI., MVC

Co- Organizing Secretaries

Dr. R.V. Gaikwad
Co-PI., MVC

Dr. P. V. Meshram
Co-PI., MVC

Dr. V. H. Shukla
Co-PI., MVC

Program Co-ordinators

Dr. Rajpal Khillare
Research Associate
9057762293

Dr. Smita S. Ghule
Research Associate
9096199017

Dr. Snehlata P. Kamble
Research Associate
7887785430

Dr. V. V. Chandanshive
Research Associate
9096713300

Dr. Sumedha Bobade
Senior Research Fellow
9890460064

Program Co-ordinators

Ms. Shruti Jagtap
Senior Research Fellow
9773723114

Ms. Pritam Patil
Young Professional-II
9833376963

Ms. Anuksha Ghadge
Young Professional-II
8828732485

Ms. Samiksha Pednekar
Young Professional-II
9326855939

Ms. Ashwini V. Khandekar
Project Assistant
9172375376

Three days hands on training program on – “Detection and Quantification of Pesticide Residues in Animal Origin Foods by Gas Chromatography

Date	Time	Activity/Subject	Resource Person
Day One – Wednesday, 21st June, 2023			
	9:30 AM - 10:00 AM	Registration and Breakfast	
	10:00 AM –10:30 AM	Inaugural session	
	10:30 AM –11:00 AM	Pre-assessment	
	11:00 AM –11:45 AM	Introduction, Classification and sources of pesticide residues in animal origin foods.	Dr. V. M. Vaidya Co-PI, NAHEP-CAAST-MAFSU Mumbai Veterinary College, Mumbai
	11:45 AM - 12:30 PM	Gas Chromatography Basic principle and Instrumental operations	Mr. R. Girijan Application Engineer, Toshvin Analytical Pvt. Ltd
	12:30 PM - 1:30 PM	Methods of Sampling, Sample storage & preparation of samples for extraction of pesticide residue using QuEChERS method	Mr. R. Girijan Application Engineer, Toshvin Analytical Pvt. Ltd
	1:30 PM – 2.00 PM	Lunch Break	
	2:00 PM – 3:00 PM	Basic Dos and don'ts for GC-ECD	Mr. R. Girijan Application Engineer, Toshvin Analytical Pvt. Ltd
	3:00 PM – 4:00 PM	Demonstration of GC-ECD Instrumentation	Ms. Shruti Jagtap SRF Mrs. Pritam Patil YP- II
	4:00 PM - 4:30 PM	Tea	
	4:30 PM - 5:00 PM	Laboratory visit	
	5.00 PM – 5.30 PM	Discussion	
Day Two – Thursday, 22nd June, 2023			
	10:00 AM –11:00 AM	Method Development for the Determination of Pesticide Residues Analysis.	Mr. Varun Koli Application Engineer, Toshvin Analytical Pvt. Ltd
	11.00 AM -11.15 AM	Tea Break	
	11:15 AM –12:15 PM	Method Validation	Mr. Varun Koli Application Engineer, Toshvin Analytical Pvt. Ltd

	12:15 PM – 1:30 PM	Hands on practical for Extraction for Pesticide Residues from Meat	Ms. Shruti Jagtap SRF Mrs. Pritam Patil YP- II
	1:30 PM – 2.00 PM	Lunch Break	
	2:00 PM - 4:30 PM	Practical Continued and Tea Break	
	4:30 PM-5:00 PM	Discussion	

Day Three- Friday, 23rd June, 2023

	10:00AM –11:00 AM	Status and Detection of Pesticide Residues in Animal Origin Food.	Dr. R. J. Zende PI, NAHEP-CAAST- MAFSU Mumbai Veterinary College, Mumbai
	11:00 AM –11.15 AM	Tea Break	
	11:15 AM– 12:15 PM	Demonstration of Method Development and Sample Analysis on GC-ECD	Ms. Shruti Jagtap SRF Mrs. Pritam Patil YP- II
	12:15 PM – 1:15 PM	Result and Interpretation	
	1:15 PM – 1:45 PM	Lunch Break	
	1:15 PM – 2:15 PM	Overall Discussion about Training	Dr. R. J. Zende Dr. V. M. Vaidya Ms. Shruti Jagtap Mrs. Pritam Patil
	2:15 PM – 2:45 PM	Post-Assessment and Feedback	
	2:45 PM – 3:45 PM	Valedictory Function	
	3:45 PM - 4:00 PM	Tea and disperse	