

#### PATRON-IN-CHIEF

Dr. Raja Ali Raza Anwar, Chairman PAEC  
(Sitara-e-Imtiaz, Hilal-e-Imtiaz, Pride of Performance)

#### PATRON

Dr. Shakeel Abbas Rofi, Member (Science) PAEC

#### ADVISORY COMMITTEE

Prof. Dr. M. Yussouf Saleem, CS/DG (Agri & Biotech)  
Dr. Iftikhar Ali, Consultant to Member (Science)  
Dr. Uzma Maqbool, Director NIAB  
Dr. Rehana Kausar, PS/Head ASD

#### ORGANIZING COMMITTEE

Dr. Muhammad Yasin, Course Organizer  
M. Ismail Chughtai, Co-Organizer

#### FACULTY

Dr. Uzma Maqbool, DCS NIAB  
Dr. Rashid Ahmad Khan, DCS NIAB  
Dr. M. Salah-ud-Din Shah, PS NIAB  
M. Ismail Chughtai, PS NIAB  
Dr. Muhammad Yasin, PS NIAB  
Dr. Muhammad Usman Qamar, GCUF

#### CONTACT INFORMATION

##### Dr. Muhammad Yasin

Principal Scientist / Course Organizer  
Nuclear Institute for Agriculture and Biology (NIAB),  
P.O. Box 128, Jhang Road, Faisalabad, PAKISTAN.

E-mail: [myasin@niab.org.pk](mailto:myasin@niab.org.pk); [yasinft\\_uaf@yahoo.com](mailto:yasinft_uaf@yahoo.com)

Office (Tel): +92-41-9201751-60 (Ext. 3176)

Office (Fax): +92-41-9201776

Cell: +92-3326680613; +92-3337684068

Web: [www.niab.org.pk](http://www.niab.org.pk)

Please bring your original CNIC card for participation

### Application Form (Specimen)

PHOTO

Name: -----

CNIC No. -----

(Please attach copy)

Official Position: -----

Univ./Organization: -----

Address: -----

Phone: (Off.) ----- (Cell) -----

Fax: ----- E-mail: -----

Date of birth: -----

Academic qualification:

Degree	Institution	Subject	Year
M.Sc.			
M.Phil.			
Ph.D.			

Research/training experience: -----

Particular interest for training: -----

Accommodation required (Yes/No): -----



-----  
(Signature of applicant)

Scan this code to access online registration form



### 8<sup>th</sup> TRAINING COURSE ON

## “Advanced Analytical Techniques for Food Safety Measures in Pakistan”

07-09 October 2025



## Food Safety Laboratories

### Animal Sciences Division

NUCLEAR INSTITUTE FOR

AGRICULTURE AND BIOLOGY (NIAB), FAISALABAD  
(PAKISTAN ATOMIC ENERGY COMMISSION)

---

## INTRODUCTION

Food safety and quality have gained global importance in recent years, not only for protecting consumer health but also to comply with international trade standards. Various threats to food (such as microbial contamination, heavy metals, radioactivity, pesticide residues, aflatoxins, and veterinary antibiotics/hormones) pose significant health risks. These concerns have made public quality-conscious and demanded regular large-scale monitoring. Regulatory authorities in many developing countries that export food commodities to major developed world markets, are increasingly focused on addressing these issues.

The Nuclear Institute for Agriculture and Biology (NIAB) in Faisalabad, a research and development center functioning under the auspices of Pakistan Atomic Energy Commission (PAEC), is dedicated to address applied challenges in agriculture and biology. For the past 29 years, the Food Safety Laboratories at NIAB have focused on issues such as aflatoxins, pesticide residues, and veterinary drug residues in food, feed, and environmental safety. These laboratories utilize advanced nuclear, immunochemical, and chromatographic techniques and are equipped with state-of-the-art instrumentation and validated protocols, supported by various PAEC and IAEA-funded National, Regional, and Interregional Technical Cooperation and Research programs. The lab personnel have received specialized training from renowned food safety laboratories around the world, including IAEA Austria (Seibersdorf), AFBI Belfast (UK), BVKE Turkey, NMISA South Africa, AVA Singapore, BQCLP Thailand, RIKILT Netherlands, UNBS Uganda, FSL Qatar, BRIN Indonesia and SENASA Argentina.

---

Food Safety laboratories are the first ISO/IEC 17025 accredited labs in Pakistan (PNAC Lab # 119) in veterinary drug residues testing. These labs have qualified 19 proficiency testings from Progetto, Italy and FAPAS®, UK and are providing analytical services for seven antibiotics (Chloramphenicol, Nitroimidazoles, Nitrofurans, Quinolones,  $\beta$ -Lactams, Gentamicin & Tetracycline), seven mycotoxins (Aflatoxins-B1, M1 & Total; Ochratoxin-A, DON, T2-toxin & Patulin) and one hormone (BGH/BST) in various food/feed matrices to both public and private sectors.

To improve food quality within Pakistan and promote food trade, it is crucial to develop technical expertise in the country for testing finished products that are safe for human consumption. The current training course specifically focuses on this goal, aiming to provide hands-on training to food scientists, analytical chemists, nutritionists, veterinarians, and biologists or related fields for application of advanced analytical techniques in accordance with international standards for food safety.

Technical sessions will cover theoretical as well as practical aspects. The details are as under:

**Screening Techniques:** Microbial, Immunoassay (ELISA), Radioreceptor Binding Assay (CHARM-II)

**Post-Screening techniques:** Overview of advanced analytical techniques i.e. Gas Chromatography (GC-FID/NPD), High Performance Liquid Chromatography (HPLC-FL/UV/DAD), HPLC coupled with Mass Spectrometry (UHPLC-MS/MS).

### Special lectures:

Analytical method validation & implementation as per ISO/IEC 17025 technical standard and antimicrobial resistance scenario in Pakistan.

---

## SCHEDULE

### Application:

Applications completed according to the format given in this brochure or applied online (google form) must reach the organizer before **October 1, 2025**. *(Serving personnel must apply through proper channel).*

### Selection

A fixed number of applicants will be selected for participation. The selected candidates will be informed by **October 03, 2025**.

### AWARD OF CERTIFICATE

Certificates will be awarded to the participants on successful completion of course in the concluding ceremony.

### TRAVEL AND ACCOMMODATION

The nominating institutions or the participants themselves shall bear the cost of travel and stay at Faisalabad. However, NIAB will help to secure moderate priced accommodation for the participants, if requested well in advance.

### Food

Tea and lunch are included in the registration fee

### REGISTRATION FEE

Officials (Faculty/Researchers):	<b>Rs. 3,500/-</b>
Students (MS/M.Phil/Ph.D):	<b>Rs. 2,000/-</b>

(Fee should be paid through bank draft in the favour of Head LAO, NIAB, Faisalabad)

### OUTCOME

It is expected that the training imparted through this course will enhance national capability to achieve tangible outcomes in terms of improved food safety and increased access to international trade.

---