

HANDS-ON TRAINING ON SOIL, WATER AND PLANT ANALYSIS

22 – 24 SEPTEMBER, 2026

Organized by

Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad
PAKISTAN ATOMIC ENERGY COMMISSION



BACKGROUND

Soils tremendously vary in their ability to supply nutrients to plants. Nutrients concentration in plant tissue is an indicator of their availability status in soil. Transport of nutrients from soil to plants is also influenced by the quality of irrigation water which depends upon the type and quantity of dissolved salts. Therefore, analysis of water, soil and plant is essential for managing high soil productivity without having any adverse impact on soil properties and quality of farm produce. NIAB scientists working in the area of soil science have attained high level of expertise for precise analyses of soil, water and plant samples. Hands-on training course is thus designed to disseminate the knowledge and train the students, research scientists and extension workers engaged actively in the field of agriculture and allied disciplines.



OBJECTIVES

This training programme is aimed at:

- Improving awareness and skills of the participants for conventional and advanced analytical techniques used in soil, water and plant analyses
- Providing practical experience for the use of sophisticated instruments and their maintenance requirements



HOST ORGANIZATION

Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad, a premier organization of Pakistan Atomic Energy Commission (PAEC), has been engaged in agricultural research and development in the country. The R&D activities of the Institute are focused in the areas like development of new crop varieties, plant protection, animal health and soil & environmental sciences by using nuclear and other advanced techniques. Soil Science laboratories of the institute are well equipped with modern analytical instruments like UV-Visible Spectrophotometer, Flame Photometer, Atomic Absorption Spectrometer, Inductively Coupled Plasma Spectrometer, Porometer and Osmometer, etc. for precise analyses of water, soil and plant attributes.



COURSE DESCRIPTION

The three days training programme is designed to provide basic knowledge about the analyses of soil, water and plant materials. The programme is formulated to cover both theory and practical aspects of analyses with emphasis on learning by doing it practically.



SCHEDULE

Receipt of Applications/ Course Fee

Application form (duly filled) along with a copy of CNIC, photograph, and course fee as Cash or a demand draft/ pay order of Rs. 6000/- for professionals, Rs. 3000/- for students and Rs. 1500 for PIEAS students in the name of Head LAO NIAB, Faisalabad should reach the organizing committee by September 11, 2026.

Eligibility

Young scientists, extension workers, students possessing university degree in relevant field are eligible. Candidates sponsored by Govt./ Semi-Govt. organizations, fertilizer industries, and commercial companies engaged in agri. business, etc. will be given preference. The selected candidates will be informed by September 14, 2026.

Course Duration

September 22 – 24, 2026

HANDS-ON TRAINING WITH MODERN INSTRUMENTATION



Flame Photometer



Spectrophotometer



Potentiometer Titration



Atomic Absorption Spectrometer (AAS)



TRAVEL & ACCOMMODATION

The participants shall arrange their accommodation and travel by themselves.



COURSE FEE

Professionals : Rs. 6,000/-
Students : Rs. 3,000/-
PIEAS Students : Rs. 1,500/-



VENUE

Nuclear Institute for Agriculture and Biology (NIAB), Jhang Road, Faisalabad, Pakistan