

INTRODUCTION

The Nuclear Institute for Food and Agriculture (NIFA), an establishment of Pakistan Atomic Energy Commission, is actively involved in basic and applied research in selected areas of food and agriculture. The institute is well equipped with modern laboratory facilities and trained manpower. It maintains an active collaboration with PAEC establishments and other national and international organizations engaged in similar pursuits. Utilizing the expertise and the facilities available, NIFA has evolved 29, high yielding and disease resistant crop varieties, (Wheat irrigated: 05, Wheat rainfed: 07, Oilseed Brassica: 06, Chickpea: 04, Mungbean: 05 and Common bean: 02). NIFA is also involved in the environment friendly management of Insect pests and disease, preservation of food through nuclear and other techniques, water and nutrients management. The key R&D achievements of NIFA are Meal Ready to Eat (MRE), nutrients spot detecting KITs, dengue guard, mushroom production technology, Bio geysers, compost tea, food preservation, and astringency removal of fruits as well as value addition of gem stone.

NIFA organizes, annually, a postgraduate training course on the applications of nuclear and other techniques in food and agricultural research for students, researchers and academicians. The course is designed to acquaint the participants with theoretical and practical aspects of nuclear and other contemporary techniques. Apart from lectures in the specialized fields, the course also provides to the participants a practical exposure to various on-going research projects at NIFA.

REQUIRED QUALIFICATION

The minimum qualification required is B.Sc. / B.Sc. (Hons.).

APPLICATION

Applications duly completed on the prescribed format should reach to the course organizer on or before October 04, 2024. In-service candidates should apply through proper channel.

Course Fee

Professionals	Rs. 4000/-
Students	Rs. 3000/-

AWARD OF CERTIFICATES

Certificates will be awarded to participants at the concluding ceremony in recognition of their attendance and successful completion of the course.

ACCOMMODATION/TRAVEL

The participants or the nominating organizations will bear the expenses for travel and stay at Peshawar. NIFA will, however, help in arranging accommodation (on payment) if requested in advance.

OUTLINE OF THE TRAINING COURSE

- A. Radiation Concepts**
- Fundamentals of Radiations
 - Food Irradiation for Food Safety & Security
 - Radioisotopes and their Applications in Food, Agriculture, Health, Industry and Environment
- B. Food Nutrition and Engineering**
- Food Canning & Extrusion Technology
 - Nutritional Evaluation of Foods

- C. Crop Improvement**
- Mutation Breeding
 - Classical Breeding
- D. Plant Protection**
- Nuclear Techniques in Insect Pest Management
 - Termite Control
 - Biological Control
 - Plant Pathology
- E. Soil and Environmental Sciences**
- Isotopes in Soil Science & Plant Nutrition
 - Crop Water Use Efficiency
 - Integrated Nutrient Management
- F. Special Lectures**
- Spectroscopy
 - Use of Statistical Designs in Agricultural Research
 - Role of Biotechnology in Agriculture
 - Environmental Issues/Global Warming
 - Current Status of Food Safety & Halal Foods

CONTACT

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