

PROSPECTUS

Title: Testing the quality of commercial pesticide products

Date and Place: To be announced about 6 months before the training commences

Background

of the course: The practical implementation of Good Agricultural Practice and the production of agricultural commodities complying with the MRLs cannot be achieved without pesticides of good and constant quality. The use of products of inferior quality may result in non-compliance with Codex MRLs and may adversely affect the entire export of agricultural commodities of the country. The regulatory authority cannot make any efficient measure against the distribution and use of unregistered or low quality pesticides without an operational laboratory to monitor pesticide quality. Therefore, regular monitoring of the quality of pesticides is an integral part of the regulatory system in many countries. According to current international requirements the laboratories should work in compliance with the principles of ISO Standard 17025. Proper training of key staff is necessary in order to assure reliable operation and facilitate in-service training of further staff.

Objectives: Introduction of the concept of multi-pesticide analytical procedures, advanced laboratory methodology, instrumental techniques used in the analysis of pesticide formulations and elements of quality control quality assurance of the analytical procedures and laboratory operations.

The program comprises of lectures explaining the principles and related theory of operation. The lectures are complemented with extensive laboratory exercises in subgroups of 4 analysts, elaboration of worked examples and consultation.

Topics: (both theory and practice)

FAO Specification of pesticide products;
Practical importance of various quality parameters;
Current status of pesticide formulations, future trends;
Significance of impurities, safety evaluation of pesticides;
Sampling and sample preparation;
Testing physical properties of various formulations;
Use of TLC for screening unknown products;
Qualitative and quantitative determination with GLC, HPLC, and UV-VIS spectrophotometry, GC-MS;
Introduction of multi-pesticide analytical procedures
Basic maintenance and trouble-shooting of analytical instruments and equipment;
Statistical evaluation of the results of measurements;
Estimation of uncertainty of the measurements, expression of results;
Reporting and interpretation of the results in view of legal limits
Basic principles of quality assurance quality control in pesticide formulation laboratories;
Requirements of ISO Guide 25, preparation and use of QM and SOPs.
Principles of method validation

Accommodation: The participants will stay in single rooms with shower.

Language: English

Participation: The course is open to analysts from Member Countries of FAO or IAEA. These analysts should come from laboratories authorised by Governments to perform official control of pesticides.

**Preconditions
of participation:**

Qualification: The minimum requirements are: BSc degree in chemistry, 2 years experience in pesticide formulation analysis, sufficient knowledge in English to be able to follow the course and to express themselves in that language.

**Deadline for
nomination:**

To be announced

The nominations may be submitted by the Heads of nominating institutions through the FAO Representative, FAO National Committee or National Atomic Energy Authority.

The nominations together with the completed questionnaire and Language Proficiency Certificate, issued by a language school or cultural institution or the British Embassy, should be returned to:

Mr. Arpad Ambrus
Head Agrochemicals Unit
FAO/IAEA Agriculture and Biotechnology Laboratory
A-2444 Seibersdorf, Austria
Fax: +43-1-260028222, E-mail: A.Ambrus@iaea.org

**Acceptance of
nominations:**

The nominating institutions will be informed about the date and place of the next training workshop at the time of its announcement. The eligible participants who cannot be accepted for the first training course because of space limitations will be kept on record and will be considered for training at future courses.

**Administrative
and financial
arrangements:**

The training will be provided free of charge by FAO and IAEA. The travel cost, living expenses, accommodation, and health and accident insurance of the participants shall be born by the nominating governments. Limited funds are available to support the participation of analysts of least developed countries.

The organisers of the training do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from the training workshop. The Governments nominating participants are responsible for undertaking responsibility for such coverage.