

**International training workshop on advance instrumental techniques in pesticide residue analysis  
FAO/IAEA Seibersdorf Laboratories, 7-18 October 2002**

		8.30-10.20	10.20-10.35	10.35-12.30	12.30-13.30	13.30-15.20	15.20-15.35	15.35-17.45
7-Oct-02	Monday	Principles of sampling for the determination of trace organic contaminants with non-continuous distribution. Invited Lecture by Dr. Thomas B. Whitaker USDA/ARS	coffee break	Sampling plans for detecting specified violation rate. Lecture by Dr. Thomas B. Whitaker USDA/ARS	lunch	Sampling for analysis of mycotoxins. Lecture by Dr. Thomas B. Whitaker USDA/ARS	coffee break	Discussion session
8-Oct-02	Tuesday	Operating principles of time of flight (TOF) MS detector. Lecture by LECO	coffee break	Principle and practice of fast chromatography. Lecture by LECO	lunch	Application of fast chromatography combined with thermodesorbition and TOF detector to pesticide residue analysis. LECO/ATAS	coffee break	Comprehensive GC*GC. LECO
9-Oct-02	Wednesday	Laboratory practice and demonstrations of application of fast GC coupled with MS TOF to pesticide residue analysis. LECO. Group 1	coffee break	Laboratory practice and demonstrations of application of fast GC coupled with MS TOF to pesticide residue analysis. LECO Group 1	lunch	Laboratory practice and demonstrations of application of fast GC coupled with MS TOF to pesticide residue analysis. LECO Group 2	coffee break	Laboratory practice and demonstrations of application of fast GC coupled with MS TOF to pesticide residue analysis. LECO Group 2
		Laboratory practice and demonstration of Low pressure fast GC coupled with ion trap MS. MS/MS for confirmation. Inj. Norbert Seifried. Varian. Group 2		Laboratory practice and demonstration of Low pressure fast GC coupled with ion trap MS. MS/MS for confirmation. Inj. Norbert Seifried. Varian. Group 2		Laboratory practice and demonstration of Low pressure fast GC coupled with ion trap MS. MS/MS for confirmation. Inj. Norbert Seifried. Varian. Group 1		Laboratory practice and demonstration of Low pressure fast GC coupled with ion trap MS. MS/MS for confirmation. Inj. Norbert Seifried. Varian. Group 1
10-Oct-02	Thursday	Alternative extraction technique and their application to residue analysis of organic contaminants. Lecture by Dr. Eugenia Soboleva	coffee break	Performance verification of analytical methods. Part 1. Lecture by Dr. Arpad Ambrus	lunch	Estimation of the uncertainty of calibration, SDRR. Lecture by Dr. Arpad Ambrus	coffee break	Uncertainty of sample processing. Lecture by Ms. Britt Maestroni. <b>15.35-16.35</b>

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11-Oct-02	Friday	Matrix effect as a source of uncertainty in residue analysis of pesticides. Presentation by Dr. Eugenia Soboleva. 8.30-9.30. Uncertainties of standard addition method. Presentation by Mag. Maha El-Bidaoui. 9.30-10.15	coffee break	Uncertainty of sampling for pesticide residue analysis. Lecture by Dr. Arpad Ambrus	lunch	Application of retention time locking system to fast screening of pesticides. Agilent	coffee break	
12-Oct-02	Saturday	free						
13-Oct-02	Sunday	free						
14-Oct-02	Monday	GC/MS/MS by Ion trap Quads versus GC/MS/MS by Triple Quadrupoles (technology, modes and functionality). Lecture by : Dr. Ben Baars, Chromatography Specialist, Sales Support Chromatography Products, Varian <b>8.30-9.45</b>	coffee break 9.45-10.00	Rapid-MS (based on Low Pressure GC) for faster analysis in GC/MS (1.5 h). Lecture by : Dr. Ben Baars, Chromatography Specialist, Sales Support Chromatography Products, Varian <b>10.00-11.30</b>	coffee break 11.30-11.45	The use of a Pulse Flame Photometric Detection for the Analysis of Phosphoric pesticides. Lecture and practical demonstrations. Lecture by : Dr. Ben Baars <b>11.45-12.30</b>	lunch <b>12.30-13.30</b>	Laboratory practice and demonstrations of Pulse Flame Photometric Detection. Inj. Norbert Seifried. Varian <b>3.30-17.45</b>
15-Oct-02	Tuesday	SPE: state of the art and new developments Lecture by Dr Elisabeth Korte, European Product Specialist Sample Preparation, Varian	coffee break	LC/MS, LC/MS/MS, GC/MS or GC/MS/MS with one exchangeable and upgradeable instrument. Lecture by Dr. Elisabeth Korte, Varian <b>10.35-12.00</b>	lunch	Solid Phase Micro Extraction (SPME) and GC/MS/MS for simple, selective and sensitive Pesticide Analysis (45 min). Lecture by Dr. Elisabeth Korte, Varian <b>13.30-14.45</b>	coffee break 14.45-15.00	Laboratory practice and demonstrations of SPE by Dr. Elisabeth Korte, Varian <b>15.00-16.00</b>
16-Oct-02	Wednesday	Performance verification of analytical methods. Part 2. Lecture by Dr. Arpad Ambrus	coffee break	Introduction to ADPRES.	lunch	Operating principles of Accelerated Solvent Extraction system (ASE). Lecture by Mr. Frank Hoefler, Dionex	coffee break	Laboratory practice and demonstrations of ASE 100. Practical demonstration by Mr. Frank Hoefler, Dionex.

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17-Oct-02	Thursday	Laboratory Information Management System (LIMS). Lecture by Mr. Philipp Klaus.	coffee break	Estimation of LOD/LOQ. Lecture by Dr. Arpad Ambrus.	lunch	Sources of uncertainty of analytical methods, legal implications. Lecture by Dr. Arpad Ambrus.	coffee break	Estimation of uncertainties of analytical results obtained from the evaluation of multiple peaks. Presentation by Dr. Eugenia Soboleva <b>15.30-16.15</b> . Introduction to the principles of HACCP. Lecture by Ms. Britt Maestroni. <b>16.15-17.15</b>
18-Oct-02	Friday	Optimization of analytical methods, planning field surveys. Lecture by Dr. Arpad Ambrus.	coffee break	Application of Internal quality control measures , application of system suitability test. Lecture Lecture by Dr. Eugenia Soboleva	lunch	Round table discussion on future trends, role of the laboratories in decision making process.	coffee break	