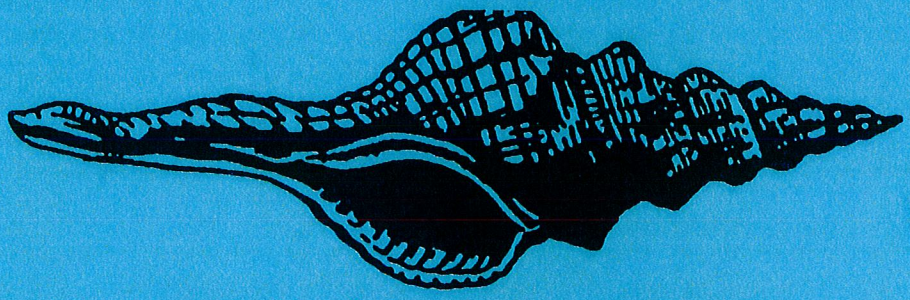
34th ANNUAL PESTICIDE RESIDUE WORKSHOP

JULY 13–16, 1997 ST. PETE BEACH, FLORIDA



TradeWinds

ON ST. PETERSBURG BEACH • FLORIDA

State of Florida
Department of Agriculture & Consumer Services

BOB CRAWFORD
COMMISSIONER of AGRICULTURE

Welcome to the 34th Annual Pesticide Residue Workshop. We appreciate your participation and your support.

We hope this year's workshop program will again provide you the opportunity for sharing, with your colleagues, knowledge, interests, problems, and solutions to some of the challenges you face in your laboratory analysis responsibilities.

Future workshops may include analytical challenges of other contaminants in food, drinking water, and the environment, such as foodborne pathogens, parasites, mycotoxins, viruses, etc.

As always, please enjoy the amenities of our Sunshine State and of the Tradewinds. We will again enjoy a fabulous reception provided by the Tradewinds. Do join us in the volleyball games and run/walk activities. Please let me know if the hotel staff or I can be any assistance to you.

Sincerely,

BOB CRAWFORD
COMMISSIONER OF AGRICULTURE

W. George Fong
Environmental Administrator

We appreciate the continuous interest and support by the exhibitors. Please be sure to visit the exhibitors and discuss your interest(s) and needs with them during the breaks and any other time.

EXHIBITORS

Analytical Research System	Ara Manukian/Rudy Strohschein
Apex Technologies, Inc.	Lindsey Pyron
CEM Corp	Bob Revesz
Dionex Corporation	Bob Moye/Karl Kastner
Hewlett Packard Company	Phil Wylie/Chip Townsand
Hitachi Instrument, Inc.	Lee Oldeen
ISCO, Inc.	Patricia Jackson
O. I. Analytical	Dennis Hodges/Mike Duffy
Perkin Elmer Corporation	Jim Wagner/Bob Riggs/Ray Thompson
Restek Corporation	Frank Dorman
SGE, Incorporated	Larry Ballard
Sci-Con	James Westmoreland/Tim Anderson
Shimadzu Scientific Instrument, Inc.	Ken Jones
Strategic Diagnostics, Inc. (formerly Ohmicron)	David Deardorff/David Nardone
Sunshine Instruments	Mickey McAllister
Supelco, Incorporated	Bob Shirey/Lydia Nolan
Thermedics Detection	David Singer
Tekmar-Dohrmann	Pete Vega
ThermoQuest Corporation (formerly Finnigan, TSP, CE Instruments)	Randy Porch
Varian	Gary Cook/Phil Tondra
Zymark Corporation	Christine Sales

34th Annual Pesticide Residue Workshop
July 13-16, 1997
St. Petersburg Beach, Florida

Short Courses

July 12 and 13, 1997

"Basic Statistics for Analytical Science" by Enigma Analytical
Instructor: Dr. Beth Mishalanie

July 13, 1997

"New Sample Preparation Technologies" by ACCTA, Inc.
Instructors: Dr. Joseph M. Levy and Dr. Merlin K. L. Bicking

Sunday / July 13, 1997 / Afternoon

4:00 - 6:00	**REGISTRATION - Pavilion**
4:00 p.m.	**Jacaranda Conference Center Available to set-up exhibits**
4:00 p.m.	**SET UP POSTERS in Jacaranda Conference Center Hallway**

Please note: Door Prizes will be drawn at the end of each morning and afternoon session. You must be ON TIME at the beginning of each session to receive a ticket and BE PRESENT AT THE DRAWING TO WIN.

Monday / July 14, 1997 / Morning

Poster Session Open All Day in the Jacaranda Conference Center Hallway
Early Morning Coffee in Exhibition Hall (Jacaranda)

7:30 - 8:30 **REGISTRATION - Pavilion**

8:30 - 9:00 Welcome
Introduction and Announcements - **George Fong**

Morning Papers Are Featured Presentations

1 9:00 - 9:45 The Impact of Food Quality Protection Act
Anne E. Lindsay, Director, Field & External Affairs Division, Office of Pesticide Programs, EPA

2 9:45 - 10:30 Global Regulations - Harmony/Conflict
Dr. Larry G. Ballantine, Director, Global Agricultural & Environmental Services, Covance Laboratories, Inc .

10:30 - 11:15 BREAK - VISIT EXHIBITS & POSTERS in Jacaranda Conference Center
Refreshments in Exhibition Area

3 11:15 - 12:00 Public Access: Empowering the Public with Environmental Data
Pat Garvey, Director of the Envirofacts Warehouse, Enterprise Information Management Division, EPA

12:00 - 12:10 **Door Prize Drawing (must be present to win)**

12:10 - 1:30 **Lunch (on your own)**

Monday / July 14, 1997 / Afternoon

Moderator - George Fong

4 1:30 - 1:50 The use of Monitoring Data in Risk Assessment
Kevin Tucker

5 1:50 - 2:10 Impact of Pesticide Screening on Residue Found in Produce
Herb Schattenberg

	2:10 - 3:00	**BREAK - VISIT EXHIBITS & POSTERS in Jacaranda Conference Center** **Refreshments in Exhibition Area**
6	3:00 - 3:15	The Mississippi State Report **Reba L. Ingram**
7	3:15 - 3:35	Determination of Pesticides In A Complex Matrix by GC/MS-MS **James (Matt) Stephens**
8	3:35 - 3:55	Comparison of High Resolution Magnetic Sector Mass Spectrometry to Bench Top MS/MS Mass Spectrometry for the Determination if PCB Congeners in Fish Tissue at low part per trillion levels - **William E. Holmes and Dr. Bert C. Lynn, Jr.**
9	3:55 - 4:15	Residue Analysis in Fish Tissues **Dr. David Klein**
10	4:15 - 4:35	Retention Time Locking - How to get Every GC and GC/MS in the Lab to Give the Same Retention Times - **Dr. Philip L. Wylie, Dr. Bruce Quimby, and Dr. Matthew S. Klee**
	4:35 - 4:45	**Door Prize Drawing (must be present to win)**

Monday / July 14, 1997 / Evening

Posters Open All Through the Evening - Jacaranda Conference Center

5:30 - 6:30 Meet poster presenters in person at each respective poster
Poster Session closes at the end of the reception

6:30 - 7:30 Get Acquainted Reception - Courtesy of TradeWinds Resort Hotel

Poster Session Papers

P1 Determination of Organophosphorus Compounds In A Complex Matrix by GC/MS-MS
James (Matt) Stephens

P2 LC/MS-MS for Pesticides - **Linda Lopez**

P3 Standards Procurement - **David Hall**

P4 Pesticides in Soil Using the Dionex ASE 200 and the Zymark ASE-Compatible Turbovap LV
Christine Sales

P5 Trace Level Pesticide Analysis by GC/MS Using Large Volume Injection
Dr. Philip L. Wylie

P6 Using Retention Time Locking and a Novel Pesticide Database to Improve the Analysis of Unidentified Analytical Responses - **Marc E. Engel**

P7 Retention Time Matching Five Instruments with Selective Detectors
Joanne M. Cook

P8 Off-line High-Performance Liquid Chromatography and Solid-phase Extraction Clean-up for Confirmation of Pesticide Residues in Fresh Produce by Gas Chromatography-Mass Spectrometry
Dr. K. C. Ting

P9 Carbon SPE for Polar Pesticides and Herbicides
Lydia Nolan

P10 Synthetic Pyrethroid Pesticides in Foods of Plant and Animal Origin
Dr. Maria Turi Szerletics

P11 Halogen Specific Detector XSD: Advantages and Disadvantages
Ghislain Gerard and Joanne Cook

P12 Determination of Sulfonylurea Residues to 0.025 ppb using SPE - **Maria Tymochenko and Robert Fitzgerald**

Tuesday / July 15, 1997 / Morning

Annual Mile-Run On The Beach

6:45 **Runners Assemble on the Beach by Tradewinds Resort Hotel**
7:00 **Run Starts**
7:30 **Run Ends**

8:00 - 8:30 **Registration - Pavilion**

Early Morning Coffee in Exhibition Hall (Jacaranda)

8:30 - 8:40 **Presentation of Mile-Run Winners**

Moderator - Joanne Cook

11 8:40 - 9:00 ImmunoAssay Screening for Benomyl & Thiabendazole in Pesticide Data Program
Michael G. Legendre

12 9:00 - 9:20 Immunochemical Methods for EPA Registration of Spinosad, a Fermentation-Derived Insect Control Agent - **Charles Mihaliak**

13 9:20 - 9:35 Immunoassay Testing for Residues: Where are we today? Where are we going?
David Nardone

14 9:35 - 9:50 Organic Carbonates as Derivatization Agents
Dr. Alan P. Thio and Milton J. Jornet

15 9:50 - 10:10 Methods for the Preparation and Analysis of Butyl Tins
Dr. Frank L. Dorman

10:10 - 11:00 BREAK - VISIT EXHIBITS in Jacaranda Conference Center
Refreshments in Exhibition Area

16 11:00 - 11:20 Mississipi Methyl Parathion Crisis: An Analytical Perspective
Dr. Bert C. Lynn, Jr. and William E. Holmes

17 11:20 - 11:40 Methyl Parathion Crisis: Investigative and Regulatory Perspectives
Randy Dominy

18 11:40 - 12:00 LIMS - Is It A Realistic Option for The Small Environmental Laboratory?
Tim Anderson and Jim Westmoreland

12:00 - 12:10 **Door Prize Drawing (must be present to win)**

12:10 - 1:30 **Lunch (on your own)**

Tuesday / July 15, 1997 / Afternoon

Moderator - Pat Beckett

19 1:30 - 1:50 Progress in Developing a Residue Screening Method for More than 500 Pesticide Residues and Potential Endocrine Disrupters - **Dr. Philip L. Wylie and Dr. Bruce D. Quimby**

20 1:50 - 2:10 GC Method for Trace Level of 2,4-D Determination in Fresh Produce
Dr. K. C. Ting

21 2:10 - 2:30 Analytical Method for the Determination of Prosulfuron and Primisulfuron-Methyl in Soil Using Liquid Chromatogarphy/Electrospray Ionization/Mass Spectrometry
Dr. Robert A. Yorkley

22 2:30 - 2:50 A Proposed LC/MS Enforcement Method for the Determination of Hexazinon and its Relevent Metabolites in Animal Tissues and Milk - **Dr. Fred W. Brill, Frederick Q. Bramble, Gwendolyn Norwood, Laura Reardon-Green, and Kent Ledeker**

2:50 - 3:30 **BREAK - VISIT EXHIBITS in Jacaranda Conference Center**
Refreshments in Exhibition Area

23	3:30 - 3:50	HPLC Method for Residues of Acetamide Herbicides and Metabolites in Crops Using Electrochemical Detection - **David A. Nortrup**
24	3:50 - 4:10	Using Supercritical CO_2 for the Extraction of Pesticides from Certain Foods and Feeds **Dr. Manfred G. Ray**
25	4:10 - 4:30	Results of SFE Pilot Studies (Thus Far) for Multiresidue Analysis of Produce **Dr. Steven J. Lehotay and Robert McIntyre**
26	4:30 - 4:45	Determination of MKH 3586 Residues in Animal Tissues: The Use of Accelerated Solvent Extraction (AES) and LC/MS/MS - **Ross A. De Haan**
27	4:45 - 5:05	Multi Residue Determination of Pesticide Residues in Crop Samples - **Dr. Andre de Kok**
	5:05 - 5:15	**Door Prize Drawing (must be present to win)**

5:45 ***** Volley Ball Games on the Beach*****

Wednesday / July 16, 1997 / Morning

Early Morning Coffee in Exhibition Hall (Jacaranda)

Moderator - George Fong

8:00 - 10:00 **"QA/QC in a Model Pesticide Residue Program"**

	I.	Introduction - **Dr. Terry Jackson, Session Organizer**
28	II.	An Overview of QA/QC Elements of the PDP Program - **Dr. Robert Epstein**
29	III.	Laboratory QC from the Participating Laboratory Perspective - **Pat Beckett**
30	IV.	Proficiency Sample Testing in the Program - **Dr. Terry Jackson**
31	V.	The Need for QA/QC from the Data User Perspective - **Martha Lamont**

10:00 - 10:30 **BREAK - VISIT EXHIBITS in Jacaranda Conference Center Refreshments in Exhibition Area**

32 10:30 - 10:45 The Metal Interference in Testing Bromocil and Diuron in Well Water and Our New Method
Fran Gao

33 10:45 - 11:05 Multiresidue Method for the Determination of Imidizolinones in Water
Heidi Hickes

34 11:05 - 11:25 On-Site Field Sampling of Pesticides Using Solid Phase Microextraction (SPME)
Robert E. Shirey

35 11:25 - 11:45 Evaluation of Stationary Phase for the Analysis of Chlorinated Pesticides and PCBs
Frank L. Dorman, Mike Feeney, and Neil Mosesman

11:45 - 12:00 **Door Prize Drawing (must be present to win)**

Main Workshop Adjourns

Thank you attending the 34th Annual Pesticide Residue Workshop!

See you next year

Wednesday / July 16, 1997 / Morning

12:00 Noon **Southern States Check Sample Program Meeting**
for Participants and Interested Parties
Gail Parker

FUTURE MEETINGS

1998

California Pesticide Residue Workshop - March 9-12, 1998
Contact: Dr, Dianne Bennett at (916) 262-2384

2nd European Pesticide Residue Workshop - May 24-27, 1998, Almeria, Spain
Contact: Dr. Antonio Valverde, Departmento de Quimica, Facutad De Ciencias Experimentales, Universidad de Almeria, 04071, Almeria, Spain
Phone: +34 50 215309 FAX: +34 50 215070

Florida Pesticide Residue Workshop - July 19-22, 1998, St. Pete Beach, FL, USA
Contact: W. George Fong at (904) 488-9670

1999

Florida Pesticide Residue Workshop - July 11-14, 1999, St. Pete Beach, FL, USA
Contact: W. George Fong at (904) 488-9670

Florida Department of Agriculture & Consumer Services
Chemical Residue Laboratory Meeting Schedules

Tuesday, July 15, 1997 Morning

8:30 - 10:10 PDP Program Milk Collectors Meeting
USDA and EPA PDP Staff and Chemical Residue Sample program staff

10:10 - 11:00 Break

11:00 - 12:00 Meeting continues

Wednesday, July 16, 1997 Afternoon

1:30 - 4:30 Chemical Residue Inspectors Meeting - State and PDP Samples
USDA and EPA PDP staff and all Chemical Residue staff attending workshop are welcome.

Thursday, July 17, 1997 Morning

8:30 - 11:30 Chemical Residue Section Meeting for those attending the workshop

PROGRAM PRESENTERS

Anderson, Tim; Khemia and Sci-Con, The Khemia Company, 8247 W. 99th Ave., Broomfield, CO 80021 **18**

Ballantine, Larry G.; Covance Laboratories, P. O. Box 7545, Madison, WI 53707-7545 **2**

Beckett, Pat; Chemical Residue Laboratory, Florida Dept. Of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **29**

Brill, Fred W.; DuPont Agricultural Products, Experimental Station, Wilmington, DE 19880-o4o2 **22**

Cook, Joanne M.; Chemical Residue Laboratory, Florida Dept. Of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **P7**

De Haan, Ross A.; Bayer Corporation, 17745 South Metcalf, Stilwell, KS 66085 **26**

De Kok, Andre; Food Inspection Service, Pesticide Anelysis Department, Burgpoelwaard 6, Alkmaar, The Netherlands **27**

Dominy, Randy; US Environmental Protection Agency, Region IV, 61 Forsyth St. S.W., Atlanta, GA 30303 **17**

Dorman, Frank L.; Restek Corp., 110 Benner Circle, Bellefonte, PA 16823 **15, 35**

Engel, Marc;Chemical Residue Laboratory, Florida Dept. Of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **P6**

Epstein, Robert; USDA/AMS, P.O. Box 96456, Washington, D.C., 20090 **28**

Fong, W. George; Chemical Residue Laboratory, Florida Dept. Of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650

Gao, Fran, Florida Dept. Of Health, Bureau of Laboratories, 1217 Pearl Street, Jacksonville, FL 32244 **32**

Garvey, Pat; US EPA, 401 M Street S.W., Mail Code 3408, Washington, D.C. 20460 **3**

Gerard, Ghislain; Chemical Residue Laboratory, Florida Dept. Of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650 **P11**

Hall, David; North Caroline Dept. Of Agriculture, Food and Drug Division, 4000 Reedy Creek Road, Raleigh, NC 27609 **P3**

Hickes, Heidi, Montana Dept. Of Agriculture, McCall Hall, Bozeman, MT 58717 **33**

Holmes, William E.; Mississippi State Chemistry Laboratory, P.O. Box CR, Mississippi State, MS 39762 **8, 16**

Jackson, Terry; California Dept. Of Food and Agriculture Center for Analytical Chemistry, 3292 Meadowview Road, Sacramento, CA 95832 **30**

Klein, David; Texas Parks and Wildlife, P.OBox 947, San Marcos, TX 78666 **9**

Lamont, Martha; US Environmental Protection Agency, MC 7509C, 401 M Street, Washington, D.C. 20460 **31**

Legendre, Michael G.; USDA APHIS-PPQ-NMRAL, 3505 25th Aveneu, Bldg. #4, Gulfport, MS 39503 **11**

Lehotay, Steven J.; USDA ARS, Bldg. 007, Rm. 224, Beltsville, MD 20705 **25**

Lindsay, Anne E.; MC 7506C, US EPA, 401 M Street, S.W., Washington, D.C. 20460 **1**

Lopez, Linda; Finnigan Corporation, 2215 Grand Avenue Parkway, Austin, TX 78728 **P2**

Mihaliak, Charles; Dow Elanco, 9330 Zionsville Rd., Indianopolis, IN 46268 **12**

Nardone, David; Strategic Diagnostics, Inc.,128 Sandy Drive, Newark, DE 19713 **13**

Nolan, Lydia; Supelco, Supelco Park, Bellefonte, PA 16823 **P9**

Nortrup, David A.; US Food & Drug Administration, 200 C St., S.W., Washington, D.C. 20204 **23**

Parker, Gail; Chemical Residue Laboratory, Florida Dept. Of Agriculture, 3125 Conner Blvd., Tallahassee, FL 32399-1650

Ray, Manfred G.; DOD Veterinary Laboratory, 2472 Schofield Rd., Bldg. 2630, Ft. Sam Houston, TX 78234 **24**

Sales, Christine; Zymark Corporation, Zymark Center, Hopkinton, MA 01748 **P4**

Schattenberg, Herb; Southwest Research Institute, 6220 Culebra Rd., San Antonio, TX 78228 **5**

Szerletics, Maria Turi; National Institute of Food Hygiene and Nutrition, Gyau ut 3/A, Budapast, Hungary H-1087 **P10**

Shirey, Robert E.; Supelco, Supelco Park, Bellefonte, PA 16823 **34**

Stephens, James (Matt); Finnigan Corporation, 2215 Grand Avenue Parkway, Austin, TX 78728 **7, P1**

Thio, Alan P.; University of Kentucky Regulatory Services, Lexington, KY 40546-0275 **14**

Ting, K. C.; California Dept. Of Food and Agriculture, Center for Analytical Services, 169 E. LibertyAvenue, Anaheim, CA 92801 **20, P8**

Tucker, Kevin; Norvigen Service, Inc., 1408 Rhode Island Avenue, NW, Washington, D.C. 20036 **4**

Tymoschenko, Maria; 3M Filtration Products, 3M Center, Building 60-1S-16, St. Paul, MN 55144-1000 **P12**

Wylie, Philip; Hewlett Packard, 2850 Centerville Road, Wilminton,DE 19808-1610 **10, 19, P5**

Yokley, Robert A.; Novartis Crop Protection, Inc. P.O. Box 18300, 410 Swing Road, Greensboro, NC **21**