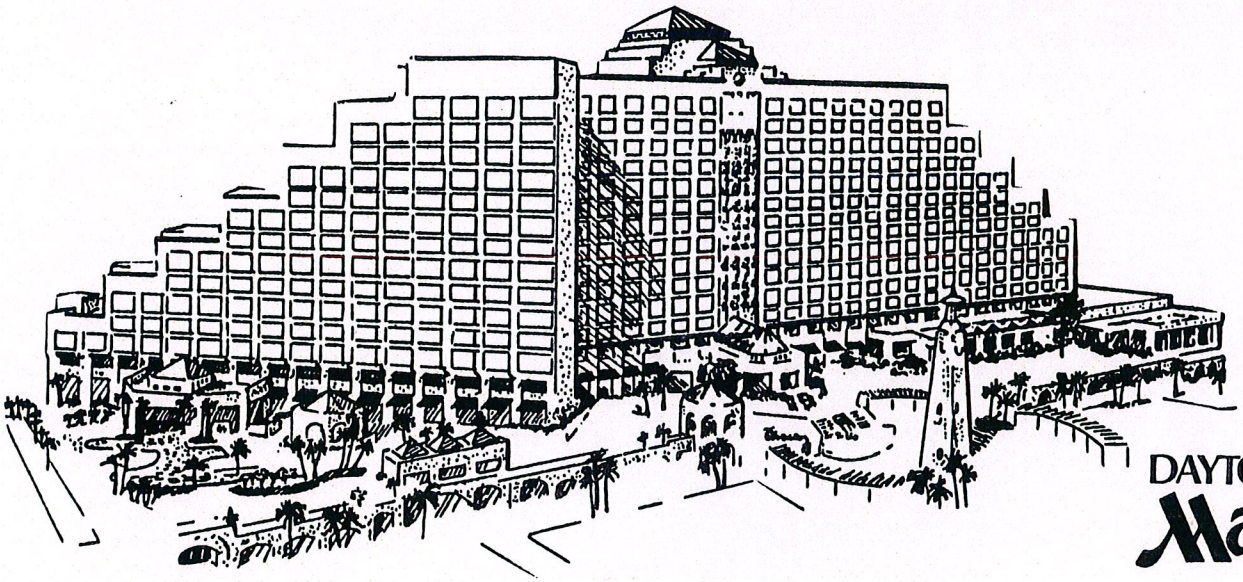
26 th ANNUAL PESTICIDE RESIDUE WORKSHOP

JULY 16-19, 1989



DAYTONA BEACH
Marriott.

WELCOME TO THE 26TH ANNUAL PESTICIDE RESIDUE WORKSHOP! As usual, you will benefit from top-quality technical presentations in a relaxed, informal and friendly atmosphere.

Pesticide residues in food and in the environment are on the national agenda as never before. Particularly, the food safety issue regarding pesticide residues has drawn unprecedented attention. I think most of you would agree that the food supply in this country is among the safest, if not the safest, in the world, and the concern appears to be one of perception rather than reality. However, the enormous amounts of unbalanced information publicized over the years by the media has created public anxiety and raised consumers' fears. There is a growing need to communicate scientific facts to the public so that the relatively low risks of pesticide residues in food can be placed in proper perspective with all other risks encountered in life.

As responsible chemists, more than ever before, we need to provide the public with the best analytical data possible. I hope this workshop will provide the opportunity for you to share the analytical knowledge with each other.

Sincerely,

W. George Fong

WGF:jls

SPONSORED BY:

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

DOYLE CONNER, COMMISSIONER

DAYTONA BEACH MARRIOTT

DAYTONA BEACH, FLORIDA

We appreciate the continuous interest and support by the exhibitors. Please be sure to visit the exhibitors and discuss your interest(s) with them.

EXHIBITORS

Analytical Biochemistry Laboratories, Inc. .....Ralph Waltz
Analytichem International, Inc. .....Andy Sendelbach / Thomas Tait
Beckman Instruments, Inc. .....Bill Rupert / Dave Shell
Bio-Rad Laboratories, Inc. .....Randy Curles
Dionex-Lee Scientific..... Robert Joyce
Finnigan Corp. .....Gina Gonzales
Fisher Scientific.....Rodney Crosby
G. Massey and Associates.....Gervin Massey
Hewlett-Packard.....Tom Stocks

O.I. Analytical.....Kevin Duff
Perkin-Elmer Corp. .....Larry Myers / Lyle Rinker
Questron Corporation.....Michael Moses
Sci-Con/Spectra-Physics.....Jim Westmoreland
Scientific Glass Engineering, Inc. .....Ken Mahler
Sentex Sensing Technology, Inc. .....David Westerheidu
Shimadzu Scientific Instruments, Inc. .....Jim Velinsky
Southern Measurement Co. .....Terry Lane
Suprex Corporation.....Dave Dorward
Tekmar Company.....Jim Stainfield
Tracor Instruments.....Bud Boucher
U.S. Analytical Instruments.....Chris Darnell
Varian Instrument Group.....Chuck Runkle / Jose Puras
Vestec Corporation.....John Kearns
Waters, a Division of Millipore.....David Lee

Sunday / July 16, 1989 / Afternoon

4:00 - 6:00 **REGISTRATION**

Meetings and Exhibits are to be held in the GRAND BALLROOM

Monday / July 17, 1989 / Morning

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

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

1. 9:00 - 9:10 Summary of Florida Pesticide Residue Data - **George Fong**

2. 9:10 - 9:25 Pesticide Contamination of Soils at Pesticide Mixing and Loading Sites on Oahu, Hawaii - **Dr. Carl Miles**

3. 9:25 - 9:40 Mississippi Pesticide Residue Program - **Dr. Larry Lane**, Rubel Cowart

4. 9:40 - 9:55 Pesticide Residues in Georgia - **Mildred Wilcox**

5. 9:55 - 10:05 Louisiana Program - **Claire Harmon**

10:05 - 10:45 **BREAK**
Refreshments - Courtesy of Bio-Rad, Digilab Division

VISIT EXHIBITS

6. 10:45 - 11:05 Determination of Organochlorine Pesticides in Florida Sediments and Predictive Behavior Using Fugacity Modeling - **Dr. Joseph Delfino**

7. 11:05 - 11:15 AOAC Update - **Rita Bahner**

8. 11:15 - 11:25 North Carolina Pesticide Residue Activities for 1988-89 - **Ernie Booth**

9. 11:25 - 11:40 Indiana State Report - **Wayne Pask**

10. 11:40 - 12:00 Summary of Residue Findings in the Southeast - **Sander Bellman**

12:00 - 1:30 **LUNCH** (on your own)

Monday / July 17, 1989 / Afternoon

11.	1:30 -	1:45	Relationship of Pesticide Use and Pesticide Residue Detection in Florida: Preliminary Results - **Charles H. Matthews, Jr.**, Daniel Botts, George Fong
12.	1:45 -	2:00	Analysis of Chlorothalonil in Tropical Fruits - **Lisa Signorella**, Dr. Lori Lim
13.	2:00 -	2:15	A Perspective on Recent Developments in Daminozide Analysis - **Lesle Hellman**
14.	2:15 -	2:35	Analysis of Daminozide and UDMH in Apples - Mike Papathakis, Hsiao Feng, Dr. Mark Lee, **Kevin Sharp**
15.	2:35 -	2:45	EPA Report - **Elizabeth Haeberer**
16.	2:45 -	3:00	Cyromazine and Melamine Residues in Brassica sp. Vegetables - **Susan Scherer**, Dr. Lori Lim
	3:00 -	3:30	**BREAK** **Refreshments - Courtesy of Hewlett-Packard**

VISIT EXHIBITS

17.	3:30 -	3:50	QA/QC-Maintaining Your Program - **Dr. Barry Boerner**
18.	3:50 -	4:05	Implementation of Good Laboratory Practices at the IR-4 Residue Lab - **Bradley W. Smith**, Dr. Lori Lim
19.	4:05 -	4:25	Chemistry Aspects of the FIFRA Good Laboratory Practice (GLP) Standards Regulations - **Dr. John Gillis**
	6:00 -	7:00	**Get Acquainted Party - Compliments of Daytona Beach Marriott - Location to be Announced**

Tuesday / July 18, 1989 / Morning

	7:30 -	**8:30**	**REGISTRATION**
20. 21.	8:30 -	9:00	Gas Chromatography with Atomic Emission Detector I. Pesticide Residue Analysis II. Compound Independent Calibration: A Simplified Technique for the Quantitative Analysis of Pesticides - **Dr. Philip L. Wylie**

22. 9:00 - 9:20 The Role of of Supercritical Fluids in Pesticide Analysis - **Marion Andersen**

23. 9:20 - 9:35 Supercritical Fluid Extraction of Carbamate Pesticides - **Brett J. Murphy**

24. 9:35 - 9:55 Supercritical Fluid Technology: Residue Applications - **Dr. Julia Wheeler**

9:55 - 10:45 **BREAK AND GROUP PICTURE**
Refreshments - Courtesy of Perkin-Elmer

VISIT EXHIBITS

25. 10:45 - 11:00 Analysis of Sulfamethazine in Milk by HPLC/UV and Immunoassay - **Allan Mitch**

26. 11:00 - 11:20 Detection and Quantitative Determination of Pesticides in Vegetation Matrices with Laser/Microbe Bio-assay - **Dr. Cecil Felkner**

27. 11:20 - 11:35 Rapid "Soxhlet" Extraction with Soxtec - **Gary D. Johnson**

28. 11:35 - 11:55 Use of SPE Cartridges in Groundwater Field Studies - **Dr. Edward Zahnow**

29. 11:55 - 12:15 Environmental Analyses Utilizing Empore Solid Phase Extraction Disks - **Dennis D. Blevins**, James T. Reese, Don Hagen, Craig Markell, Steve St. Mary

12:15 - 2:00 **"Dragon Silk Chicken" LUNCHEON**
(Tickets purchased in advance)

Tuesday / July 18, 1989 / Afternoon

30. 2:00 - 2:20 Extension of U.S. EPA Method 531 to Various Classes of Nitrogen Pesticides by Post-Column Photolysis - **Dr. Anson Moye**

31. 2:20 - 2:40 Reversed-Phase Ion-Pair Chromatography of Benomyl and Related Compounds - **Dalia Gilvydis**, Stephen Walters

32. 2:40 - 3:00 New Forward Optics Design in Rapid Scanning HPLC Detector Overview of Forward Optics Versus Reverse Optics Design in HPLC Detectors - **Bob Kalbacher**, Jim Westmoreland

33. 3:00 - 3:20 Optimized HPLC Analysis of N-Methyl Carbamate Pesticides - **Art Sims**

34. 3:20 - 3:30 An Overview of Carbamate Determinations by Post-Column Reaction - **Frank Long**

3:30 - 4:30 Southern States Check Sample Program Meeting **(A closed meeting for Check Sample Program participants only).** Presentations by Committee Members:
Gail Parker - Chairperson
Dr. Larry Lane
John Pardue
Wayne Pask

Wednesday / July 19, 1989 / Morning

8:00 - 8:30 REGISTRATION

35. 8:30 - 8:50 FDA Plan for Methods Research Update on Implementation - **Bernadette McMahon**

36. 8:50 - 9:00 Analysis of Pesticides in Drinking Water with High-Performance Liquid Chromatography and Diode-Array Detection - **Dr. Ludwig Huber**, Dr. Rainer Schuster

37. 9:00 - 9:20 Optimization of HPLC Method Development Using Computer Software - **Larry Lagman**

38. 9:20 - 9:35 Converting from Packed Columns to "Megabore" Columns - **Casanova Jackson**

39. 9:35 - 9:50 Determination of Pesticide Residues in Foods Using Wide-Bore Capillary G.C. - **Dalia Gilvydis**, Norbert Fehringer, Stephen Walters

40. 9:50 - 10:05 Disposable Glassware for Purge and Trap Analysis - **Lamar Hendricks**

10:05 - 10:45 **BREAK**
Refreshments - Courtesy of Analytical Biochemistry Laboratories, Inc.

VISIT EXHIBITS

41. 10:45 - 11:05 Comparison of Three Evaporation Techniques for Solutions for Chlorinated Pesticides and Polychlorinated Biphenyls - **Margaret Korver**, P.C. McClure, S.L. Head and Virlyn W. Burse

42. 11:05 - 11:25 Extraction and Clean-Up of Chlorinated Acid Herbicides for Determination by GLC-ECD or GC/MS - **Gail Parker**, C. Henry Beauchamp

43. 11:25 - 11:45 Method Verification: Chlorophenoxy Herbicides by Solid Phase Extraction - **Greg Livingston**

44. 11:45 - 12:00 Benzyl Ethers of Pentachlorophenol - **Dr. Alan Thio**

12:00 - 1:15 **LUNCH** (on your own)

Wednesday / July 19, 1989 / Afternoon

45. 1:15 - 1:30 Optimization of Parameters for Capillary Split/Splitless Injection - **Allan Mitch**

46. 1:30 - 1:45 Power Problems, Instrument Problems: Cause and Prevention - **Gervin Massey**

47. 1:45 - 2:05 Solid Phase Extraction and HPLC Determination of Ametryn and Terbutryn in Soils - **Michael Page**

48. 2:05 - 2:25 Organic and Inorganic Mercury in Fish by Graphite Furnace - **Dr. Verne Simon**, Dr. Larry Blackwell

49. 2:25 - 2:40 Microwave Digestion for AA, ICP and Mercury Analysis - **Michael Moses**, Angelo Grillo, Daniel Mathe

50. 2:40 - 3:00 Routine Mercury Analysis of Agricultural and Tissue Samples at ppt Levels - **Michael Moses**, Angelo Grillo, Daniel Mathe

51. 3:00 - 3:15 Use of SFC as a Sample Preparation Technique in Agricultural Products - **Dr. Joe Levy**

3:30 - 4:30 FDACS Chemical Residue Laboratory Chemists Meeting

Program Speakers

Andersen, Marion; Dionex-Lee Scientific; 4426 S. Century Drive; Salt Lake City, UT 84123; **22**

Bahner, Rita; Association of Official Analytical Chemists; 2200 Wilson Boulevard; Suite 400; Arlington, VA 22201-3301; **7**

Bellman, Sander W.; Food & Drug Administration; 60 Eighth Street, NE; Atlanta, GA 30067; **10**

Blevins, Dennis D.; Analytichem International; 24201 Frampton Avenue; Harbor City, CA 90710; **29**

Boerner, Barry R., Ph.D.; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; **17**

Booth, Ernie; North Carolina Dept. of Agriculture; Food & Drug Division; P.O. Box 27647; Dept. FD; Raleigh, NC 27611; **8**

Delfino, Dr. Joseph J.; Dept. of Environ. Eng. Sciences; University of Florida, Gainesville, FL 32611; **6**

Felkner, Dr. I. Cecil; Technical Assessment Systems, Inc.; The Flour Mill; 1000 Potomac Street, NW; Washington, DC 20007; **26**

Fong, W. George; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; **1**

Gillis, John N.; Environmental Protection Agency; National Enforcement Environmental Center; Box 25227; Building 53; Denver, CO 80225; **19**

Gilvydis, Dalia M.; Food & Drug Administration; 1560 E. Jefferson Avenue; Detroit, MI 48207; **31, 39**

Haeberer, Elizabeth; U.S. Environmental Protection Agency; Hazard Evaluation Division; 1921 Jeff Davis Highway; Arlington, VA 22202; **15**

Harmon, Claire; Feed & Fertilizer Laboratory; Pesticide Residue Section; Louisiana State University; Baton Rouge, LA 70767; **5**

Hellman, Lesle; Hill Top Biolabs, Inc.; Division of Chemistry; P.O. Box 42501; Cincinnati, OH 45242; **13**

Hendricks, Lamar; Extension Poultry Science; Pesticide Residue Laboratory; 110 Riverbend Road; Athens, GA 30602; **40**

Huber, Dr. Ludwig; Hewlett-Packard GmbH; Waldbronn Analytical Div.; Hewlett-Packard Strasse; D-7517; Waldbronn 2; Germany; **36**

Jackson, Casanova P.; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; 38

Johnson, Gary D.; Decator, Inc.; 250 Saddle Creek Lane; Roswell, GA 30076; 27

Kalbacher, Robert; Sci-Con/Spectra-Physics; 631 Executive Drive; Winter Park, FL 32789; 32

Korver, Margaret P.; Centers for Disease Control; CEHIC, EHLS, Toxicology Branch; 1600 Clifton Road (C17-1814); Atlanta, GA 30333; 41

Lagman, Larry; South Carolina Water Resources Commission; 1201 Main Street; Suite 1100; Columbia, SC 29201; 37

Lane, Dr. Larry; Mississippi State Chemical Laboratory; Pesticide Residue Section; Box CR; Mississippi State, MS 39762; 3

Levy, Dr. Joe; Suprex Corporation; 125 William Pittway; Pittsburgh, PA 15238; 51

Livingston, Greg; Reedy Creek Improve. Dist.; Environmental Lab; P.O. Box 10170; Lake Buena Vista, FL 32830; 43

Long, Frank; North Carolina Dept. of Agriculture; Food & Drug Division; 4000 Reedy Creek Road; Raleigh, NC 27607; 34

Massey, Gervin; Gervin Massey & Associates; 26 Westwood Drive; Carrollton, GA 30117; 46

Matthews, Charles Jr.; Florida Fruit & Vegetable Association; Environmental & Pesticide Management Division; P.O. Box 140155; Orlando, FL 32814-0155; 11

McMahon, Bernadette; Food & Drug Administration; Contaminants Chemistry; 200 C Street, SW; Washington, DC 20204; 35

Miles, Dr. Carl J.; Dept. of Agricultural Biochemistry; University of Hawaii; 1800 E. West Road; Honolulu, HI 96822; 2

Mitch, Allan M.; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; 25, 45

Moses, Michael; Questron Corporation; P.O. Box 2387; Princeton, NJ 08543; 49, 50

Moye, Dr. Anson; Institute of Food & Agriculture Sciences; University of Florida; Gainesville, FL 32611; 30

Murphy, Brett J.; Lee Scientific, Inc.; 4426 S. Century Drive; Salt Lake City, UT 84123; 23

Page, Michael J.; Florida Department of Business Regulation; Parimutual Wagering; 725 S. Bronough; Tallahassee, FL 32399-1039; **47**

Parker, Gail A.; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; **42**

Pask, Wayne M.; Indiana State Chemists Office; Residue Section; BCHM Control; Purdue University; West Lafayette, IN 47907; **9**

Scherer, Susan J.; Pesticide Research Lab; University of Florida; Gainesville, FL 32611; **16**

Sharp, Kevin; California Dept. of Food & Agriculture; Div. of Inspection Services; 3292 Meadowview Road; Sacramento, CA 95832; **14**

Signorella, Lisa L.; Pesticide Residue Lab; University of Florida; Gainesville, FL 32611; **12**

Simon, Dr. Verne A.; Florida Department of Health & Rehabilitative Services; 1217 Pearl Street; Jacksonville, FL 32202; **48**

Sims, Art; Waters Chromatography; Division of Millipore; 34 Maple Street; Milford, MA 01757; **33**

Smith, Bradley W.; Pesticide Research Lab; University of Florida; Gainesville, FL 32611; **18**

Thio, Dr. Alan P.; University of Kentucky; Regulatory Services; Pesticide Residue Laboratories; 102 Scovell Hall; Washington & Lime Streets; Lexington, KY 40546; **44**

Wheeler, Dr. Julia R.; E.I. Du Pont de Nemours & Co.; Agricultural Products Dept.; P.O. Box 80402; Wilmington, DE 19880-0402; **24**

Wilcox, Mildred M.; Georgia Department of Agriculture; Room 610, Labs Division; 19 Martin Luther King, Jr. Drive; Atlanta, GA 30334; **4**

Wylie, Dr. Philip L.; Hewlett-Packard Co.; P.O. Box 900; Avondale, PA 19311; **20, 21**

Zahnow, Dr. Edward; Du Pont Agriculture Products Department; Experimental Station; Building 402, Room 3129; Wilmington, DE 19898; **28**