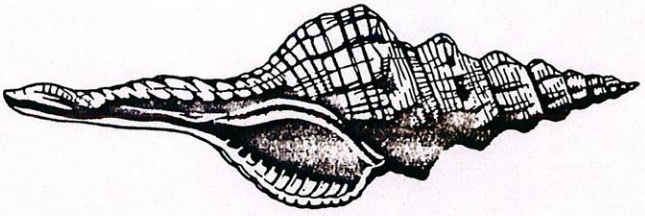
30th ANNUAL

PESTICIDE RESIDUE

WORKSHOP

JULY 18-21, 1993 ST. PETERSBURG, FLORIDA



TradeWinds

ON ST. PETERSBURG BEACH • FLORIDA

State of Florida
Department of Agriculture & Consumer Services
Tallahassee, Florida

BOB CRAWFORD
Commissioner of Agriculture

WELCOME TO THE 30TH ANNUAL PESTICIDE RESIDUE WORKSHOP! We have again planned a very informative meeting, providing an excellent opportunity for sharing knowledge, interests and problems.

Ever since the very first meeting in 1964, we have been enriched with the knowledge of pesticide residue analytical technology through sharing among colleagues. This successful tradition is due to your enthusiastic support.

While you are here, be sure to enjoy the beautiful beaches of Florida's west coast and the facilities of the TradeWinds. Please let me or the TradeWinds staff know if we can be of any assistance to you.

Sincerely,

BOB CRAWFORD
COMMISSIONER OF AGRICULTURE

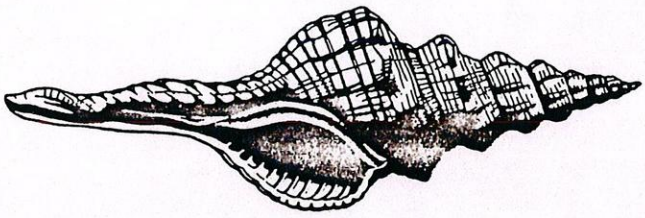
W. George Fong
Environmental Administrator

30th ANNUAL

PESTICIDE RESIDUE

WORKSHOP

JULY 18-21, 1993 ST. PETERSBURG, FLORIDA



TradeWinds

ON ST. PETERSBURG BEACH • FLORIDA

We appreciate the continuous interest and support by the exhibitors. Please be sure to visit the exhibitors and discuss your interests and needs with them.

EXHIBITORS

ABC Laboratories, Inc.....Dennis Schupp

All-World Scientific.....C. E. Mainard

Bio-Rad Laboratories, Inc.....Ralph Cowden

CEM Corporation.....Bob Revesz

Dionex.....Greg Cuzzort / Rabun Rampey

Enzytec.....Kathleen Howe

Finnigan Mat.....Randy Porch / Wayne Rimkus / Bob Farr

Hitachi Instruments, Inc.....R. Kalbracher / L. Oldeen

Haymes Scientific, Inc.....Mark Haymes

Hewlett-Packard.....Chip Townsend / Tom Stocks / Mike Thomas

Horizon Technology.....Martha Johnson

J. T. Baker.....Bill West

LEAP Technology.....Mark Alpee

Ohmicron Corporation*.....David Deardorff

O.I. Analytical.....Kirk Holladay

Perkin-Elmer Corp.....Michael Barbera / Bob Riggs / Ray Thompson
Jim Wagner and Dave Bodwell

Reeves Glass, Inc.....Arthur G. Reeves

Sci-Con.....James B. Westmoreland

Sci Optics Corp.....Dianna Jones / Jack Dixon

SGE, Incorporated.....Ken Mahler

Shimadzu Scientific Instruments.....Chris Gaylor / Jim Velinsky

Southeastern Technical Sales, Inc.....John Hickinbotham

SPEC Division of Analysis.....Rebecca Paschad

Suprex Corp.....Scott Elkins / Joe Levy

Tekmar Company.....Pete Vega

Varian Analytical Instruments.....Gary Cook

Varian Sample Preparation.....Andy Senedlbach

Whatman, Inc.....Elaine Heilweil

YMC, Inc.....Bob Bickler

Zymark Corp.....John Holdren

Our special thanks to *Environmental Testing & Analysis* for advertising our meeting in the magazine.

Sunday / July 18, 1993 / Afternoon

4:00 - 6:00 REGISTRATION

Meetings and Exhibits are to be held in the ISLAND BALLROOMS

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 door prize ticket and BE PRESENT AT THE DRAWING TO WIN.

Monday / July 19, 1993 / Morning

7:30 - 8:00 REGISTRATION

8:00 - 8:30 Welcome
Introduction and Announcement - W. George Fong

1. 8:30 - 10:00 Mass Spectrometry for Pesticides: Progress Update - **Dr. Thomas Cairns, Keynote Speaker**
Residue Analysis

10:00 - 10:30 BREAK - VISIT EXHIBITS
Refreshments - Courtesy of Dionex Corp and J. T. Baker

2. 10:30 - 10:50 Analysis of Organochlorine Pesticides Utilizing a Novel Injection Port - **Anne S. Williams**

3. 10:50 - 11:05 Effect of Injector Liner in GC Analysis for Triazolinone Herbicide and its Hydroxy Metabolite - **In-Young Kim**

4. 11:05 - 11:25 Performance of NPD in Residual Pesticide Analysis - **Rollen J. Anderson**

5. 11:25 - 11:40 Matrix-Enhanced Response for Selected Pesticides Analyzed by Gas Chromatography - **Pat Beckett**

6. 11:40 - 11:50 Update on the South Carolina Water Resources Commission **Betsy A. Copper**

11:50 - 12:00 DOOR PRIZE DRAWING (must be present to win)
12:00 - 1:30 LUNCH (on your own)

Monday / July 19, 1993 / Afternoon

7. 1:30 - 1:40 Maryland State Report - **Stanley Daniello**

8. 1:40 - 2:00 Comparison Study of Turbovap and KD Concentrations of Selected Chlorinated Hydrocarbons and PCB's in Fats - **Anna R. Sullivan**

9. 2:00 - 2:15 Termiticide Residue Study - **Reba Ingram**

10. 2:15 - 2:20 Mississippi Pesticide Residue Report - **Rubel Cowart**

11. 2:20 - 2:50 The New Chemical Analysis Laboratory in the Hawaii Department of Agriculture - Technical Methods and Summary of Duties - **Dr. David Klein**

12. 2:50 - 3:00 Florida Department of Agriculture - Chemical Residue Laboratory - Annual Report - **Gail Parker**

3:00 - 3:30 **BREAK - VISIT EXHIBITORS**
Refreshments - Courtesy of Ohmicron

13. 3:30 - 3:50 Comparison of Magnetic Particle-Based Enzyme-Linked-Immunosorbent Assay (ELISA) with GLC and HPLC for the Quantitation of Atrazine, Alachlor and Carbofuran in Water and Soils - **L. R. Marti** and **R. A. Leonard**

14. 3:50 - 4:00 New Developments in "Ab- or Ad- sorption" Matrix Materials for the Removal of Pesticides from Rinsates, Two Phase-Rinsate Filtration Systems and Biodegradable Compost- Systems of Pesticides - **Dr. R. W. Young**

15. 4:00 - 4:15 A Survey of Low PPB Pesticide Residues in Produce - **Herbert J. Schattenberg**

16. 4:15 - 4:35 Safety Issues and The Design of a New Laboratory Facility - **Mike Sutton**

4:35 - 4:45 DOOR PRIZE DRAWING (must be present to win)

6:00 - 7:00 **Get Acquainted Reception - Courtesy of TradeWinds Hotel**

Tuesday / July 20, 1993 / Morning

7:00 - 8:00 CHECK SAMPLE COMMITTEE MEETING (committee members only)
7:30 - 8:00 REGISTRATION

17. 8:00 - 8:15 Current EPA Approaches to Estimating Pesticide Residues in Food - **Dr. Richard D. Schmitt**

18. 8:15 - 8:35 1993 Update Pesticide Data Program - **Dr. Robert Epstein**

19. 8:35 - 8:55 What Happens to Data When It Leaves the Lab - Residue Data for Exposure Analyses and Risk Assessment - **Dr. J. R. Tomerlin**

20. 8:55 - 9:15 The Role of the NEIC in FIFRA Cooperative Enforcement Agreements - **Dr. Elizabeth A. Mishalanie**

21. 9:15 - 9:35 An HPLC Instrument Vendor's Response to GLP/GALP Requirements - **Dr. Michael Thomas**

22. 9:35 - 9:55 Important Case Law and Legal Discussion Regarding Pesticides - **Janis A. Morelli, Esq.**

9:55 - 10:30 BREAK - VISIT EXHIBITS
Refreshments Courtesy of Perkin Elmer and SGE, Incorporated

10:45

23. 10:30 - 11:00 The Stability of National Pesticide Survey Group One Pesticides on Empore Extraction Disks - **Dr. Anson Moye**

24. 11:00 - 11:20 Solid Phase Extraction of Environmental Samples for Pesticides , PAH's and PCB's - **Thomas D. Mathews**

25. 11:20 - 11:40 Solid Phase Extraction - A pollution Prevention Opportunity - **Susan Price**

26. 11:40 - 11:55 Highlights of the FDA Southeast Laboratory Pesticide Activities - **John A. Pardue**

11:55 - 12:05 DOOR PRIZE DRAWING (must be present to win)
12:00 - 1:30 LUNCH (on your own)

Tuesday / July 20, 1993 / Afternoon

27. 1:30 - 1:45 EPA Automated Mercury Analysis of Soils - **Dr. Linda Zuvich** and **James B. Wstmoreland**

28. 1:45 - 2:00 Methyl Mercury Analysis: Now You See It, Now You Don't. - **Mark French**

29. 2:00 - 2:20 Application of NMR Spectroscopy to the Identification of Pesticide Residue in Environmental and Biological Matrices - **Dr. M. E. Krolski**

30. 2:20 - 2:40 The Analysis of Picogram Levels of Some Environmentally Harmful Compounds by GC/Cryogenic Trapping FT-IR - **David J. Johnson** and **Wendy King**

31. 2:40 - 3:00 Automated Extraction and Extract Concentration for Fats and Pesticides - **Evelyn E. Conard**

3:00 - 3:30 **BREAK - VISIT EXHIBITS**
Refreshments - Courtesy of Shimadzu Scientific Instruments

32. 3:30 - 3:50 Coupling Off-Line Supercritical Fluid Extraction to Gas Chromatography - **Dr. Philip L. Wylie**

33. 3:50 - 4:10 New Development in the use of SFE for Sample Preparation for Pesticide Determinations - **Dr. Joseph M. Levy and Scott Elkins**

34. 4:10 - 4:30 Pesticides in Air - An Update - **Joanne Cook** and **Nancy MacEwen**

35. 4:30 - 4:50 Fast Turnaround Methods for PAH Analysis - **Gene A. Dalton**

4:50 - 5:00 **DOOR PRIZE DRAWING (must be present to win)**

Wednesday / July 21, 1993 / Morning

7:30 - 8:00 REGISTRATION

36. 8:00 - 8:15 EPA Method Validation Program - **Harvey K. Hundley**

37. 8:15 - 8:45 Automated Sample Pretreatment Methods for the HPLC Determination of N-Methylcarbamate and Phenylurea Herbicides in Water and Crop Samples - **Dr. Andre de Kok**

38. 8:45 - 9:05 HPLC Column Switching in Residue Analysis - **Dr. Robert E. M. Wurz**

39. 9:05 - 9:20 Coca-Cola Foods Pesticide Analysis Program - **Susan K. Martin**

40. 9:20 - 9:40 Environmental Analysis of Benomyl: A Discussion of Hydrolysis Kinetics and Methodology - **Michael J. Page**

41. 9:40 - 9:55 Determination of Benomyl, Thiabendazole, 2,4-D, Bromoxynil in Various Fruits and Vegetables - **Harry Richardson**

9:55 - 10:30 **BREAK - VISIT EXHIBITS**
Refreshments Courtesy of Southern Technical Sales, Inc. and Hewlett-Packard

42. 10:30 - 10:45 Determination of 2-Aminobenzimidazole and 5-Hydroxy-thiobedazole, Metabolites of Bezimidazole Fungicides, Benomyl and Thiabendazole by Ion-Pairing HPLC - **Dalia M. Gilvydia**

43. 10:45 - 11:00 Benzyl Esters of Phenoxyacetic Acids - **Dr. Alan P. Thio** and **Milton J. Kornet**

44. 11:00 - 11:20 Carbaryl, 1-Naphthyl-N-Methylcarbamate: Penetration into and Metabolism by Southern Pine Beetle and Spruce Beetle - **Harry Zhong**

45. 11:20 - 11:40 A Multiresidue Analytical Approach for Low PPB Screening of Pesticides in Produce - **Dr. Paul L. W. Geno**

46. 11:40 - 11:55 Analysis of Pesticides in Fruits and Vegetables by Bench-top GC/MSD with Selected Ion Monitoring - **Dr. Ping Liu**

11:55 - 12:05 **DOOR PRIZE DRAWING (must be present to win)**

General Meeting Adjourns

12:05 - 12:35 ANNUAL CHECK SAMPLE REPORT (open to all SSCS participants and interested parties)

Wednesday / July 21, 1993 / AFTERNOON

1:30 - 4:00 VENDORS SEMINARS
Details and Sign-up at the Registration Desk

SPONSORED BY: Dionex / Gilson / Ohmicron / Shimadzu

THANK YOU FOR ATTENDING THE
30TH ANNUAL PESTICIDE RESIDUE WORKSHOP
HOPE TO SEE YOU NEXT YEAR

******* 1994 Meetings *******

California Pesticide Residue Workshop
February 7-11, 1994

Florida Pesticide Residue Workshop
July 17-20, 1994

Program Speakers

Anderson, Rollen J.; Tremetrics; 2215 Grand Avenue Pkwy; Austin, TX 78728; **4**

Beckett, Pat; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; **5**

Cairns, Dr. Thomas; Food and Drug Administration, 1521 Pico Boulevard, Los Angeles, CA 90015 **1**

Conrad, Evelyn E.; ABC Laboratories, 7200 E. ABC Lane, P. O. Box 1097, Columbia, MO 65202 **31**

Cook, Joanne; Same as MacEwen, **34**

Cooper, Betsy A.; South Carolina Water Resource Commission, 1201 Main Street, Suite 1100, Columbia, SC 29201 **6**

Cowart, Rubel; Mississippi State Chemical Laboratory, Box CR, Mississippi State, MS **10**

Dalton, Gene T.; Perkin Elmer Corporation, 510 Guthridge Court, Norcross,GA 30092 **35**

Daniello, Stanley; Maryland Department of Agriculture, State Chemist Section, 50, Harry S. Truman Parkway, Annapolis, MD **7**

DeKok, Dr. A.; (Government) Food Inspection Service, Bugpdelwaad 6, 1824 DW Alkmaar, Netherlands **36**

Elkins, Scott; Same as Levy, Joseph M. **33**

Epstein, Dr. Robert; USDA Agricultural Marketing Service; Science Division; P. O. Box 96456; Washington, DC 20090; **18**

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

French, Mark; Florida Department of Agriculture and Consumer Services, Chemical Residue Laboratory, 3125 Conner Boulevard, Tallahassee, FL 32399-1650 **28**

Geno, Paul W.; Southwest Research Institute, P. O. Drawer 28510, San Antonio, TX 78228-0510 **45**

Gilvydis, Dalia M.; Food and Drug Administration, 1560 E. Jefferson Avenue, Detroit, MI 48207 **42**

Hundley, Harvey K.; EPA - Analytical Chemistry Laboratory, Building 306, BARC-East, Beltsville, MD 20705 **36**

Ingram, Reba L.; Mississippi State Chemical Laboratory; P.O. Drawer CR; Mississippi State, MS 39762; **9**

Johnson, David J.; Bio-Rad, 237 Putnam Avenue, Cambridge, MA 02139 **30**

Kim, In-Young, FMC Corp., Agricultural Chemical Group, P. O. Box 8, Princeton, NJ 08543 **3**

King, Wendy; Florida Department of Agriculture and Consumer Services, Pesticide Laboratory; 3125 Conner Blvd.; Tallahassee, FL 32399-1650; **30**

Klein, Dr. David; Department of Agriculture, Hawaii, c/o HSPA @ P.O. Box 1057, AIEA, HI 96701 **11**

Kornet, Milton J.; Same as Thio, Alan P. **43**

Krolski, Dr. M. E.; Miles, Inc., Agricultural Division, Miles Research Park, 17745 So. Metcalf Avenue, Stilwell, KS 66085 **29**

Lenard, R. A.; Same as Marti **13**

Levy, Dr. Joseph M.; Suprex Corporation, 125 William Pitt Way, Pittsburgh, PA 15238 **33**

Liu, Dr. Ping; Department of Agriculture and Consumer Services; Chemical Residue Laboratory; 3125 Conner Blvd.; Tallahassee, FL 32399-1650; **46**

MacEwen, Nancy; HRS Office of Laboratory Services, State of Florida, 1217 Pearl Street, Jacksonville, FL 32202 **34**

Marti, Luz R.; USDA-ARS Southeast Watershed, P. O. Box 946, Rainwater Road, Tifton, GA **13**

Martin, Susan K.; Coca-Cola Foods, 602 McKean Street, Auburndale, FL 33823 **39**

Mathews, Thomas D.; South Carolina Wildlife and Marine Resources Department, P. O. Box 12559, Charleston, SC 29422-2559 **24**

Mishalanie, Dr. Elizabeth A.; U.S. EPA National Enforcement Investigations Center, Building 53, Box 25227, Denver Federal Center, Denver, CO 80225 **20**

Morelli, Esq. Janis A.; Cohen, Shapiro et al, 626 Case Road, Neshanic Station, NJ 08853 **22**

Moye, Dr. Anson; Institute of Food and Agricultural Sciences; Pesticide Research Laboratory; University of Florida; Gainesville, FL 32611; **23**

Page, Michael J.; Florida Department of Agriculture and Consumer Services, Pesticide Laboratory, 3125 Conner Boulevard, Tallahassee, Fl 32399-1650 **40**

Pardue, John R.; Food and Drug Administration, Southeast Regional Laboratory, 60 8th Street, NE, Atlanta, GA 30309 **26**

Parker, Gail A.; Florida Department of Agriculture & Consumer Services; Chemical Residue Laboratory; 3125 Conner Boulevard; Tallahassee, FL 32399-1650; **12**

Price, Susan; 3M Company, 3M Center, Building 209-1C-30, St. Paul, MN 55144-1000 **25**

Richardson, Harry,; USDA, APHIS, BBEP, TSS, NMRAL 3505 25th Avenue, Building 9, P.O. Box 3209, Gulfport, MS 39505-3209 **41**

Schattenberg, Herbert J.; Southwest Research Institute, P. O. Drawer 28510, San Antonio, TX 78228-0510 **15**

Schmitt, Dr. Richard R.; U.S. EPA, 401 M Street, SW, Washington, D.C. 20460 **17**

Sullivan, Anna R.; Rhode Island Department of Health Laboratories, 50 Orms Street, Provvidence, RI 02904 **8**

Sutton, Mike; Tennessee Department of Agriculture, Division of Technical Services, P. O. Box 40627, Melrose Station, Nashville, TN 37204 **16**

Thio, Dr, Alan P.; University of Kentucky; Division of Regulatory Services; Regulatory Services Building; Lexington, KY 40546-0275; **43**

Thomas, Dr. Michael; Hewlett-Packard; 2805 Centerville, Road, Wilmington, DE 19808 **21**

Tomerlin, Dr. J. R.; TAS, Inc., 1000 Potomac Street, NW, Washington, D.C. 20007 **19**

Westmoreland, James B.; Same as Zuvich, Linda **27**

Williams, Anne S.; Tekmar Company, P.O. Box 429576, Cincinnati, OH 45242-9576 **2**

Wurz, Dr. Robert E.M.; Ciba Plant Protection, P. O. Box 18300, Greensboro, NC 27419 **38**

Wylie, Dr. Philip L.; Hewlett-Packard Co., 2850 Centerville Road, Wilmington, DE 19808-1610 **32**

Young, Dr. R. W.; Virginia Tech Pesticide Research Residue Lab., 352 Litton Reaves Hall, Biochemistry & Anaerobic Microbiology Dept., Blackburg, VA 24061-0309 **14**

Zhong, Harry; Harbur Branch Environmental Laboratory, 5600 U.S. 1 North. Ft. Pierce, FL 34946 **44**

Zuvich, Dr. Linda; Thermo Separation Products, 631, Executive Drive, Winter Park, FL 32789 **27**