

SOCIETY
of
TOXICOLOGY
INCORPORATED



PROGRAM

FIFTH ANNUAL MEETING



Williamsburg, Virginia

MARCH 14-16, 1966



INFORMATION

REGISTRATION

Pre-registration forms obtainable from Secretary:

Mr. Carrol S. Weil
Mellon Institute
4400 Fifth Avenue
Pittsburgh, Pa. 15213

Registration Desk—Conference Center

Sunday, March 13—2:00 P.M.— 5:00 P.M.
7:30 P.M.—10:00 P.M.
Monday, March 14—8:30 A.M.— 5:00 P.M.
Tuesday, March 15—8:30 A.M.— 5:00 P.M.
Wednesday, March 16—8:30 A.M.—12:00 Noon

Fees—Society of Toxicology, Inc. members: \$10.00
Non-members: \$15.00 Pre-doctoral, full-time students: \$2.00

Abstracts—on sale at meeting \$1.00

One copy mailed to each Society of Toxicology member and other pre-registrants. Distributed without charge to non-members registering at Registration Desk.

MEETINGS

Scientific Sessions—Location:

North Ballroom—Conference Center
Tidewater Room—Conference Center

Annual Business Meeting:

Tidewater Room—Monday, March 14—4:00 P.M.

SOCIAL EVENTS

Sunday, March 13

Golf Tournament—Verald K. Rowe
Boating Event—William B. Deichmann

Monday, March 14

Social Hour—6:00 P.M.
Virginia Room

Tuesday, March 15

Banquet—7:00 P.M.
Tickets available at Registration Desk
Virginia Room

The cocktail party, wine for the banquet, registration envelopes and golf tournament prizes have been sponsored by the following laboratories:

Food and Drug Research Laboratories
Hazleton Laboratories
Industrial Bio-Test Laboratories
LaWall and Harrisson
Leberco Laboratories
Rosner-Hixson Laboratories
Woodard Research Corporation

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MONDAY, MARCH 14th

MONDAY MORNING

NORTH BALLROOM

Chairman: Dr. William B. Deichmann
University of Miami
Coral Gables 34, Florida

- 9:00 54. **Comparative Acute Toxicities of Isoproterenol and Metaproterenol.** W. J. Scott, J. W. Johnston, C. D. Johnston, and R. P. Beliles, Woodard Research Corporation, Herndon, Virginia. (Sponsor: R. L. Hollingsworth.)
- 9:20 81. **Aspergillus Flavus Toxicosis in Ducks.** H. G. Wiseman, W. T. Shalkop, and B. H. Armbrrecht, Agricultural Research Center, Food and Drug Administration, U. S. Department of Health, Education, and Welfare, Beltsville, Maryland.
- 9:40 38. **Rectal Absorption of Salicylates.** Werner Lowenthal and Joseph F. Borzelleca, Department of Pharmacology, Medical College of Virginia, Richmond, Virginia.
- 10:00 16. **Effects of Various Potassium Salts on the Gastrointestinal Tract of Monkeys.** A. E. Earl, R. M. Diener, and D. H. Shoffstall, Ciba Pharmaceutical Company, Summit, New Jersey.
- 10:20 62. **Cardiac and Ocular Toxicity Associated with a Thyromimetic Agent in Dogs.** R. L. Steelman and R. Sekella, Pathology and Toxicology Section, Smith, Kline and French Laboratories, Philadelphia, Pennsylvania.
- 10:40 3. **Ocular Drug Toxicities.** Howard N. Bernstein, Eye Research Foundation of Bethesda, Bethesda, Maryland.
- 11:00 51. **Preliminary Observations on the Toxicology of Metals in the Rabbit Eye.** Milton G. Ross, Robert M. Hehir, William R. Bryon, and E. William Ligon, Jr., Division of Toxicological Evaluation, Food and Drug Administration, U. S. Department of Health, Education, and Welfare, Washington, D. C.

MONDAY, MARCH 14th

MONDAY MORNING

TIDEWATER ROOM

Chairman: John H. Weisburger
National Cancer Institute
Bethesda, Maryland

- 9:00 34. **Studies in Chemical Carcinogenesis. III. a-Aminoanthraquinone.** S. Laham, H. C. Grice and J. W. Sinclair, Environmental Toxicology Programme, Occupational Health Division, Environmental Health Care, Department of National Health and Welfare, Ottawa, Ontario, Canada.
- 9:20 27. **Improved Tests for Chemical Carcinogens. Report on Aromatic Amines, Nitrosamines, Phenols, Nitroalkanes, Amides, Epoxides Aziridines and Purine Antimetabolites.** Z. Hadidian, T. N. Frederickson, E. K. Weisburger and J. H. Weisburger, Mason Research Institute, Worcester, Massachusetts and Carcinogenesis Studies Branch, National Cancer Institute, Bethesda, Maryland.
- 9:40 48. **Toxicity and Biologic Effects of Six Carcinogenic Polynuclear Aromatic Hydrocarbons in Chick Embryos and Mice.** F. Reno, H. Millar and D. A. Greenwood, Utah State University, Logan, Utah.
- 10:00 21. **Cytogenetic Studies of Rats Injected with Lindane.** Roberta D. Friberg and Vernon N. Dodson, Department of Industrial Health, School of Public Health, The University of Michigan, Ann Arbor, Michigan (Sponsor: Herbert H. Cornish.)
- 10:20 68. **Nickel Carcinogenesis. Inhibition of the Induction of Pulmonary Benzpyrene Hydroxylase by Nickel Carbonyl.** F. William Sunderman, Jr., Department of Pathology, University of Florida College of Medicine, Gainesville, Florida.
- 10:40 79. **Age and Latent Period in Carcinogenesis.** G. S. Wiberg, M. Dennery and H. C. Grice, Pathology and Toxicology Section, Research Laboratories, Food and Drug Directorate, Department of National Health and Welfare, Ottawa, Ontario, Canada. (Sponsor: W. A. Mannell.)
- 11:00 66. **Histologic Lesions Occurring Spontaneously in ChR-CD Rats on Two-Year Feeding Studies.** Edwin F. Stula, Gary M. Zwicker, William C. Krauss and Grover V. Foster, Haskell Laboratory for Toxicology and Industrial Medicine, E. I. duPont de Nemours and Company, Newark, Delaware.

MONDAY, MARCH 14th

MONDAY AFTERNOON

TIDEWATER ROOM

Chairman: H. P. Drobeck
Sterling-Winthrop Research Inst.
Rensselaer, New York

1:15 52. Application of Automatic Data Acquisition and Digital Computation to the Reduction of Data Generated during Animal Toxicity Studies. T. J. Russell, Jr., W. C. Waggoner and E. B. Gasser, Bio/dynamics, Inc., East Millstone and Colgate-Palmolive Research Center, Piscataway, New Jersey.

1:45 13. Data Analysis and Punched Cards. E. V. Dietrich, McNeil Laboratories, Inc., Fort Washington, Pennsylvania.

2:15 4. Process Control Computer in the Automated Clinical Chemistry Laboratory. Murray A. Blaivas and Andre' Mencz, Kings County Research Laboratories, Brooklyn, New York.

2:45 37. Automated Techniques in Clinical Pharmacology and Toxicology. Donald G. Levitt, Division of Medical Information, Bureau of Health, Education and Welfare, Washington, D. C.

3:15 44. Data-Processing Techniques in Toxicology. Gareth Owen and H. P. K. Agersborg, Jr., Wyeth Laboratories, Inc., Radnor, Pennsylvania. (Sponsor: Richard F. Tislow.)

4:00 Annual Business Meeting
Tidewater Room, Conference Center

6:00 Social Hour
Virginia Room, Conference Center

TUESDAY, MARCH 15th

TUESDAY MORNING

NORTH BALLROOM

Chairman: Francis X. Wazeter
International Research and Development Corporation
Mattawan, Michigan

- 9:00 49. **Urinary Bladder Irritation Subsequent to Short-Term Drug Treatment.** N. Rieser, T. M. Lees, G. W. Antognoli and C. S. Delahunt, Pharmacology Department, Chas. Pfizer and Co., Groton, Connecticut.
- 9:20 19. **Comparative Toxicity of Cytosine Arabinoside.** H. Feinman, E. R. Homan and T. Tusing, Hazleton Laboratories, Inc., Falls Church, Virginia.
- 9:40 24. **Enigma of Antibiotic-Induced Diarrhea in the Laboratory Rabbit.** J. E. Gray and C. Lewis, Research Laboratories, The Upjohn Company, Kalamazoo, Michigan.
- 10:00 59. **Toxicologic and Pharmacodynamic Studies with Tenuazonic Acid.** E. R. Smith, T. N. Frederickson and Z. Hadidian, Mason Research Institute, Worcester, Massachusetts.
- 10:20 43. **Some Toxicologic Effects of High Doses of the Nonaddicting Analgesic Agent, Methotrimprazine.** J. F. Noble and B. M. Sparano, Departments of Pharmacological Research and Experimental Pathology, Experimental Therapeutics Research, Lederle Laboratories Division, American Cyanamid Company, Pearl River, New York. (Sponsor: K.-F. Benitz.)
- 10:40 75. **Vasopressor Responses in Hepatotoxic Beagles.** E. E. Vogin, D. L. Bokelman and P. A. Mattis, Merck Institute for Therapeutic Research, West Point, Pennsylvania.
- 11:00 5. **Toxicologic Studies on the Narcotic Antagonist, Naloxone.** H. Blumberg, T. Wernick, H. B. Dayton, R. E. Hansen and D. N. Rapaport, Endo Laboratories, Garden City, New York.
- 11:20 71. **Behavioral Studies on Carphenazine During Chronic Toxicity Testing in Rats. The Value of Paratoxicologic Work.** Richard F. Tislow, Sue P. Wilson, Cornelius M. Knebel and Anne L. Gillen, Wyeth Laboratories, Inc., Philadelphia, Pennsylvania.

TUESDAY, MARCH 15th

TUESDAY MORNING

TIDEWATER ROOM

Chairman: Wayland J. Hayes
U. S. Public Health Service
Atlanta, Georgia

- 9:00 **11. Effect of Combinations of Pesticides on Reproduction of Mice.** W. B. Deichmann and M. L. Keplinger, Department of Pharmacology and Research and Teaching Center of Toxicology, University of Miami School of Medicine, Coral Gables, Florida.
- 9:20 **15. Urinary Excretion of Metabolites as Indicators of Exposure to Parathion and DDT.** W. F. Durham, H. F. Wolfe and J. F. Armstrong, Toxicology Section, Communicable Disease Center, U. S. Public Health Service, Wenatchee, Washington.
- 9:40 **80. An Acylamidase in Mammalian Liver Hydrolyzing the Herbicide, 3,4-Dichloropropion-anilide.** Clara H. Williams and Keith H. Jacobson, Division of Toxicological Evaluation, Food and Drug Administration, U. S. Department of Health, Education and Welfare, Washington, D. C.
- 10:00 **30. Tissue Storage in Mice Fed Combinations of Pesticides.** M. L. Keplinger, I. A. Dressler and W. B. Deichmann, Department of Pharmacology and Research and Teaching Center of Toxicology, University of Miami School of Medicine, Coral Gables, Florida.
- 10:20 **56. Comparative Toxicity of DDT, Dieldrin and Heptachlor to Japanese and Bobwhite Quail.** T. S. Shellenberger, Jean Lee, Blair Udale and G. W. Newell, Stanford Research Institute, Menlo Park, California.
- 10:40 **33. Effects of Subacute Administration of Some Pesticides on Microsomal Enzyme Systems.** F. K. Kinoshita, J. P. Frawley and K. P. DuBois, Toxicity Laboratory, University of Chicago, Chicago, Illinois and Hercules Powder Company, Wilmington, Delaware.
- 11:00 **63. Comparisons of Biochemical and Electron Microscopic Alterations in Rats and Monkeys Medicated Orally with TDE.** A. A. Stein D. M. Serrone and F. Coulston, The Institute of Experimental Pathology and Toxicology, Albany Medical College of Union University, Albany, New York.
- 11:20 **9. Chlorinated Insecticides in Human Serum.** William E. Dale, August Curley and Wayland J. Hayes, Jr., Toxicology Section, Communicable Disease Center, Public Health Service, U. S. Department of Health, Education and Welfare, Atlanta, Georgia.

TUESDAY, MARCH 15th

TUESDAY AFTERNOON

NORTH BALLROOM

Chairman: Bertram D. Dinman
University of Michigan Medical Center
Ann Arbor, Michigan

- 1:30 32. **Metabolism of Stearoyl Propylene Glycol Hydrogen Succinate.** W. R. King and R. H. Coots, Miami Valley Laboratories, The Procter and Gamble Company, Cincinnati, Ohio.
- 1:50 10. **Metabolism of Ethyltin and Diethyltin and Its Oxide in Rats.** D. S. Davies and R. T. Williams, Department of Biochemistry, St. Mary's Hospital Medical School, London, England.
- 2:10 53. **Alcohol Metabolism in Methanol- and Ethanol-Pretreated Rats.** Richard C. Ryan and Herbert H. Cornish, Department of Industrial Health, School of Public Health, The University of Michigan, Ann Arbor, Michigan.
- 2:30 41. **Metabolism of Linear Alkylate Sulfonate in Rats.** W. R. Michael, Miami Valley Laboratories, The Procter and Gamble Company, Cincinnati, Ohio.
- 2:50 69. **Ornithine Carbamyl Transferase as a Liver Function Test: Comparative Toxicity Studies in the Beagle Dog, Miniature Swine and Man.** A. S. Tegeris, H. E. Smalley, Jr., F. L. Earl and J. M. Curtis, Special Pharmacological Animal Laboratory, Division of Pharmacology, Food and Drug Administration, U. S. Department of Health, Education and Welfare, Washington, D. C.
- 3:10 14. **Effect of Cyanide Administration on Pulmonary Clearance Processes.** J. V. Dilley and W. J. Bair, Biology Department, Pacific Northwest Laboratories, Battelle Memorial Institute, Richland, Washington. (Sponsor: H. A. Kornberg.)
- 3:30 17. **Increased Susceptibility of Guinea Pigs to Histamine Poisoning Following Exposure to Ozone.** Richard Easton and Sheldon Murphy, Department of Physiology, Harvard School of Public Health, Boston, Massachusetts.
- 3:50 1. **Lysozymuria Induced in Rats by Nephrotoxic Agents.** T. Balazs and R. R. Roepke, Department of Pharmacological Research, Experimental Therapeutics Research, Lederle Laboratories Division, American Cyanamid Company, Pearl River, New York.
- 4:10 83. **The Codex Alimentarius — International Food Standards and What They Mean to the Toxicologist.** Howard C. Spencer, The Dow Chemical Company, Midland, Michigan.

7:00 **Society of Toxicology Banquet**
Virginia Room, Conference Center

TUESDAY, MARCH 15th

TUESDAY AFTERNOON

TIDEWATER ROOM

Chairman: Dr. Alfred E. Earl
Ciba Pharmaceutical Company
Summit, New Jersey

- 1:30 23. Toxicity and Biologic Effects of Malathion, Phosdrin, and Sevin in the Chick Embryo.** M. Ghadiri and D. A. Greenwood, Utah State University, Logan, Utah.
- 1:50 31. Toxic and Teratogenic Effects of Insecticides in Duck and Chick Embryo.** K. S. Khera, Research Laboratories, Food and Drug Directorate, Department of National Health and Welfare, Ottawa, Ontario, Canada.
- 2:10 12. Effects of Certain Aryloxisobutyrate on the Rat Fetus.** R. M. Diener and B. Hsu, CIBA Pharmaceutical Company, Summit, New Jersey. (Sponsor: Alfred E. Earl.)
- 2:30 2. Myopathy and Fetal Death Due to Hemicholinium Injection into Chicken Eggs.** Bernard A. Becker and Jean Linder, Department of Pharmacology, University of Iowa College of Medicine, Iowa City, Iowa.
- 2:50 36. Successive Generation Studies with Pesticides Comparing Mice and Rats.** G. J. Levinskas, I. J. Morici and W. E. Ribelin, Environmental Health Laboratory, Central Medical Department, American Cynamid Company, Princeton, New Jersey.
- 3:10 25. Blue VRS-Induced Rhabdomyosarcomas.** H. C. Grice, I. Dupuis, M. Dennery and W. A. Mannell, Pathology and Toxicology Section, Research Laboratories, Food and Drug Directorate, Department of National Health and Welfare, Ottawa, Ontario, Canada.
- 3:30 45. Plutonium Particle-Induced Neoplasia of the Canine Lung.** J. F. Park, W. J. Clarke and W. J. Bair, Biology Department, Pacific Northwest Laboratories, Battelle Memorial Institute, Richland, Washington. (Sponsor: H. A. Kornberg.)
- 3:50 58. Congenital Malformation of Calves Associated with Maternal Ingestion of Range Plants.** James L. Shupe, Lynn F. James, Wayne Binns, Lew Dell Balls and Richard Keeler, Animal Disease and Parasite Research Division, Agricultural Research Service, U. S. Department of Agriculture, Logan, Utah.
- 4:10 72. Effect of Thoracic X-Irradiation on the Composition of Lung Tissue.** E. G. Tombropoulos and K. E. McDonald, Biology Department, Pacific Northwest Laboratories, Battelle Memorial Institute, Richland, Washington. (Sponsor: H. A. Kornberg.)

7:00 Society of Toxicology Banquet
Virginia Room, Conference Center

WEDNESDAY, MARCH 16th

WEDNESDAY MORNING

NORTH BALLROOM

Chairman: John Ward

A. H. Robins Company, Incorporated
Richmond, Virginia

- 9:00 **7. Evaluation of Methods for the Treatment of Nitrogen Dioxide-Induced Pulmonary Edema.** D. Cavalli, J. Detling, J. Irish and C. H. Hine, The Hine Laboratories, Inc., San Francisco, California.
- 9:20 **78. Induction of Emesis by Detergent Ingredients and Formulations.** J. E. Weaver and J. F. Griffith, Miami Valley Laboratories, The Procter and Gamble Company, Cincinnati, Ohio. (Sponsor: F. H. Snyder.)
- 9:40 **73. Central Effects in Dogs or Intracisternally Administered Triamcinolone Acetonide-21-Phosphate.** C. E. Traitor and J. F. Noble, Department of Pharmacological Research, Experimental Therapeutics Research, Lederle Laboratories Division, American Cyanamid Company, Pearl River, New York. (Sponsor: D. W. Hallesy.)
- 10:00 **57. Method for the Study of Neurotoxicologic Effects Produced by the Chronic Perfusion of Drugs through the Cerebrospinal Fluid Space of Unanesthetized Monkeys.** Robert F. Shepard, Jr., Life Sciences Division, Arthur D. Little, Inc., Cambridge, Massachusetts. (Sponsor: C. J. Kensler.)
- 10:20 **18. Evidence against Humoral Mediation of Tolerance Induction by Edemagenic Agents.** E. J. Fairchild, G. A. Bobb and L. G. Anderson, Division of Occupational Health, Public Health Service, U. S. Department of Health, Education and Welfare, Cincinnati, Ohio.
- 10:40 **65. Effects of Alcohol, Drugs and Lowered Environmental Temperatures on Conditioned Avoidance Response in Rats.** G. S. Stone, K. C. Leung and C. H. Hine, The Hine Laboratories, Inc., San Francisco, California.
- 11:00 **82. Nature of Sensory Evoked Response in Relation to Consciousness.** C. Xintaras, M. F. Sobecki and C. E. Ulrich, Pharmacology and Toxicology Section, Laboratory of Medical and Biological Sciences, Division of Air Pollution, Public Health Service, U. S. Department of Health, Education and Welfare, Cincinnati, Ohio.
- 11:20 **70. Evaluation of Spontaneous Activity of Dogs by Time-Lapse Photography.** Anthony A. Thomas, Toxic Hazards Division, Biomedical Laboratory, 6570th Aerospace Medical Research Laboratory (MRMPT), Wright-Patterson Air Force Base, Ohio.

WEDNESDAY, MARCH 16th

WEDNESDAY MORNING

TIDEWATER ROOM

Chairman: William L. Downs
University of Rochester School of Medicine
Rochester, New York

- 9:00 **26. Inhibition of Experimental Silicosis by Beryllium in Ores.** David H. Groth, Gunther E. Kraus, L. McMillan and L. D. Scheel, Division of Occupational Health, Public Health Service, U. S. Department of Health, Education and Welfare, Cincinnati, Ohio.
- 9:20 **76. Comparative Chronic Inhalation Toxicity of Two Beryllium Ores, Beryl and Bertrandite.** William D. Wagner, David H. Groth and Herbert E. Stokinger, Division of Occupational Health, Public Health Service, U. S. Department of Health, Education and Welfare, Cincinnati, Ohio.
- 9:40 **40. Factors Modifying the Hepatotoxic Action of Neptunium-237 in the Rat.** D. D. Mahlum, Biology Department, Pacific Northwest Laboratories, Battelle Memorial Institute, Richland, Washington. (Sponsor: H. A. Kornberg.)
- 10:00 **60. Tissue Distribution of Inhaled Turpentine in Rats.** Frederick Sperling and William L. Marcus, Department of Pharmacology, College of Medicine, Howard University, Washington, D. C.
- 10:20 **64. Experimental Human Exposure to Trichloroethylene Vapor.** Richard D. Stewart, Harold H. Gay, Hugh C. Dodd, Duncan S. Eley and Arnold W. Schaffer, Biochemical Research Laboratory, Medical Department and Chemical Physics Research Laboratory, The Dow Chemical Company, Midland, Michigan.
- 10:40 **6. Uptake and Elimination of Carbon Monoxide from the Blood of Smokers and Non-Smokers.** Arthur W. Burke, Jr. and Martha J. Briggs, Department of Pharmacology, Medical College of Virginia, Richmond, Virginia. (Sponsor: P. S. Larson.)
- 11:00 **8. Interacting Responses following Inhalation of Ozone Streptococci.** David L. Coffin and Earl J. Blommer, Laboratory of Medical and Biological Sciences, Division of Air Pollution, Public Health Service, U. S. Department of Health, Education and Welfare, Cincinnati, Ohio.
- 11:20 **39. Effects of Respired Polyvinylpyrrolidone Aerosols in Rats.** H. B. Lowsma, R. A. Jones, J. Prendergast and L. J. Bodenlos, U. S. Navy Toxicology Unit, National Naval Medical Center, Bethesda, Maryland. (Sponsor: J. Siegel.)

WEDNESDAY, MARCH 16th

WEDNESDAY AFTERNOON

NORTH BALLROOM

Chairman: Amos E. Light
Food and Drug Administration
Washington, D. C.

- 1:30 29. **Acute Toxicity of Alkyl-Substituted 2-Aminoethanols.** Rolf Hartung and Herbert H. Cornish, Department of Industrial Health, School of Public Health, The University of Michigan, Ann Arbor, Michigan.
- 1:50 47. **Diet and Caffeine Toxicity in Rats.** J. M. Peters and E. M. Boyd, Department of Pharmacology, Queen's University, Kingston, Ontario, Canada.
- 2:10 84. **The Effect of Chronic Safrole Administration on Hepatic Enzymes and Functional Activity in Dogs.** M. S. Weinberg, Food and Drug Research Laboratories, Inc., Maspeth, New York and S. S. Sternberg, Sloan-Kettering Institute for Cancer Research, New York, New York.
- 2:30 20. **Hepatotoxicity of Coumarin.** G. Feuer, L. Golberg and K. I. Gibson, British Industrial Biological Research Association, Woodmansterne Road, Carshalton, Surrey, England.
- 2:50 46. **Toxicologic Evaluation of the n-Heptyl Ester of p-Hydroxybenzoic Acid.** O. E. Paynter, L. W. Hazleton and E. A. Garlock, Hazleton Laboratories, Inc., Falls Church, Virginia.
- 3:10 67. **Subacute Oral Toxicity of Sodium Diethyldithiocarbamate.** F. William Sunderman and Orville E. Paynter, Division of Metabolic Research, Jefferson Medical College, Philadelphia, Pennsylvania and Hazleton Laboratories, Inc., Falls Church, Virginia.

WEDNESDAY, MARCH 16th

WEDNESDAY AFTERNOON

TIDEWATER ROOM

Chairman: Thomas W. Tusing
Hazleton Laboratories, Incorporated
Falls Church, Virginia

- 1:30 42. Comparison of Malathion-Esterase and Acetylcholinesterase Activities in Animals Treated with Malathion.** Sheldon D. Murphy, Department of Physiology, Harvard School of Public Health, Boston, Massachusetts.
- 1:50 50. Comparative Subacute Oral Toxicity of Some Organic Phosphates in Rats and Dogs.** M. S. Root and J. Doull, Toxicity Laboratory, University of Chicago, Chicago, Illinois.
- 2:10 74. Protection by Aldrin against the Toxicity of Some Organophosphate Anticholinesterases.** A. J. Triolo and J. M. Coon, Department of Pharmacology, Jefferson Medical College, Philadelphia, Pennsylvania.
- 2:30 55. Biochemical and Electron Microscopic Changes Observed in Rats and Monkeys Medicated Orally with Carbaryl.** D. M. Serrone, A. A. Stein and F. Coulston, The Institute of Experimental Pathology and Toxicology, Albany Medical College of Union University, Albany, New York.
- 2:50 61. Cardiovascular Effects of 2-Pyridinealdoxime Methochloride.** W. B. Stavinoha, L. C. Ryan, J. A. Rieger, L. B. Hinshaw and P. W. Smith. Civil Aeromedical Research Institute, Federal Aviation Agency, Oklahoma City, Oklahoma.
- 3:10 77. Effects of Mirex and DDT on Reproduction in the BALB/c and CFW Strains of Mice.** George W. Ware and Ernest E. Good, Department of Zoology and Entomology, Ohio State University, Columbus, Ohio. (Sponsor: Roger A. Yeary.)

APPOINTED COMMITTEES

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