19th ANNUAL MEETING

March 9-13, 1980

Sheraton Washington Hotel
Washington, DC

PROGRAM
Mixer and Reception
Sunday, March 9, 1980
6:00 - 7:30 P.M.
Washington Room
Sheraton Washington Hotel
Cash Bar
open to all attendees and guests

Conference Symposia

* * * * *

Hepatic Toxicity and Neoplasia in the Rodent
Monday Afternoon, March 10, 1980
1:30 P.M.
Sheraton Room

* * * * *

Perspectives in Risk Assessment
Tuesday Morning, March 11, 1980
8:30 A.M.
Sheraton Room

* * * * *

Toxicology in the Workplace
Responsibilities for Safe Workplace:
A Multidisciplinary Challenge
Wednesday Morning, March 12, 1980
8:15 A.M.
Sheraton Room

* * * * *

Unresolved Mechanisms
Wednesday Afternoon, March 12, 1980
1:30 P.M.
Sheraton Room
NINETEENTH ANNUAL MEETING
sponsored by
Society of Toxicology

Sheraton Washington Hotel - Washington, DC
March 9 - 13, 1980

REGISTRATION FEES*

<table>
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<th>Member or Post Doctoral In Training</th>
<th>Non-Member</th>
<th>Student, Full-time, Predoctoral</th>
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*Payable in U.S. funds only. Return form with payment to:
Executive Secretary, Society of Toxicology
475 Wolf Ledges Parkway
Akron, OH 44311 Tel.: 216/762-2289
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<th>Platform</th>
<th>Day</th>
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<td>Monday</td>
<td>Inhalation Toxicology I</td>
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<td>A.M.</td>
<td>Metabolism I</td>
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<td>Monday</td>
<td>General Toxicology I</td>
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<td>Nervous System I</td>
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<td>Tuesday</td>
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## Symposia

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<td>Toxicology in the Workplace Responsibilities for a Safe Workplace: A Multidisciplinary Challenge</td>
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## Poster

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GENERAL MEETING INFORMATION

Registration
Exhibit Hall Lobby — Sunday: 1 P.M. - 8 P.M.; Monday, Tuesday, and Wednesday: 8 A.M. - 6 P.M.

Abstracts of Papers
Distributed without charge to all members of the Society of Toxicology and to all preregistrants in advance of the meeting. Non-members registering at the meeting will be given the abstracts with their registration. Additional copies available at Conference Registration Desk (Exhibit Hall Lobby) at $5 each.

Hotel Accommodations
The Sheraton Washington Hotel is Conference headquarters. The following guaranteed guest room rates apply when reservations are made on the printed form accompanying the pre-conference mailing:

- Single       $45-$70
- Twin or Double $57-$85

The hotel accepts the following credit cards:
American Express, Bank Americard, VISA, Carte Blanche, Diners Club, Master Charge

The Sheraton Hotel, located nearby, will also be used after the Washington Sheraton fills, at comparable rates.

Sessions
All held on the Lobby Level of Sheraton Washington Hotel.

Hospitality
Nathan Hale (Towers Building)

Snack Bar
A snack bar will be open Monday, Tuesday, Wednesday in the Exhibit Hall 7:45 a.m. - 4:30 p.m.

Conference Office
Room 1, Exhibit Hall C
---SPECIAL EVENTS AND SERVICES---

Annual Banquet
Washington Room, 7:00 p.m., Tuesday, March 11, $19.25. Complimentary wine; Courtesy, Charles River Breeding Laboratories.

Annual Business Meeting
Sheraton Room, 3:00 P.M. Tuesday, March 11. Open only to Society of Toxicology members.

“Issues” Session
Sheraton Room, Wednesday, March 12, 12:00 - 1:15 P.M. The Officers and Councilors will be available for discussions of pertinent questions with the membership in an open forum. Bring your sandwich, etc., from the Snack Bar and participate in a stimulating discussion of SOT affairs.

Ladies Hospitality
Nathan Hale Room (Towers Building), 9 A.M. - 4 P.M., Monday, Tuesday, Wednesday; 9 A.M. - Noon, Thursday.

Mixer and Reception
Washington Room, 6:00 - 7:30 P.M. Sunday, Cash Bar.

Placement Service
Rooms 1087, 1091 (Mezzanine Level),
10 A.M. - Noon, Monday, Tuesday, Wednesday
2 P.M. - 4 P.M., Monday, Tuesday
Co-Chairmen: Mark Hite, W.E. Rinehart

Press Room
Room 1085 (Mezzanine Level),
8 A.M. - 6 P.M., Monday, Tuesday, Wednesday
8 A.M. - Noon, Thursday
COUNCIL (1979-1980)

(Composed of the Officers and four elected Councilors)

Officers (1979-1980)
Tom S. Miya, President
Perry J. Gehring, President-Elect
J. Wesley Clayton, Jr., Secretary
Harold N. MacFarland, Treasurer
Leon Golberg, Past President

Councilors
Mary O. Amdur (1978-1980)
Margaret Hitchcock (1979-1981)
Charles F. Reinhardt (1978-1980)

Executive Secretary
William E. McCormick
475 Wolf Ledges Parkway
Akron, OH 44311
(216) 762-2289

Office of the Secretary
Chemistry Building 320
University of Arizona
Tucson, AZ 85721
(602) 626-4558

1980 Conference
General Manager: J. Wesley Clayton
Assistant: William E. McCormick
Registrar: Joseph J. McPhillips
Arrangements Chairman: Fred W. Oehme

Program Committee
Perry J. Gehring, Chairman
J. Wesley Clayton, Jr., Secretary
James E. Gibson (1979-1982)
Richard J. Kociba (1979-1982)
Paul M. Newberne (1979-1981)
R. Craig Schnell (1979-1982)
COMMITTEES (1979-1980)

ELECTED COMMITTEES

Educational Committee
Yves Alarie (1978-1980), Chairman
Curtis D. Klaassen (1979-1981)
Elizabeth Weisburger (1979-1981)

Finance Committee
Harold N. MacFarland, Chairman
Ian C. Munro (1978-1980)

Membership Committee
Joseph F. Borzelieca (1977-1980), Chairman
Stata Norton (1979-1982)

APPOINTED COMMITTEES

Awards Committee
Leon Golberg, Chairman
William W. Carlton
Margaret Hitchcock

Nominating Committee
Harold M. Peck, Chairman
Herbert Blumenthal
Donald J. Ecobichon
Marjorie G. Horning
George Levinskas

Technical Committee
Richard S. Waritz, Chairman
A. Wallace Hayes, Co-Chairman
Bruce A. Fowler
Irwin A. Heyman
Ted A. Loomis
Daniel B. Menzel
Jane F. Robens
Raghbir P. Sharma
Thomas E. Sheilnberger
Donald A. Willigan
Committee on Regulatory Affairs
Frederick Coulston, Chairman
William F. Durham
Milton Eisler
John P. Frawley
Elliott S. Harris
Albert C. Kolbye, Jr.
Donald D. McCollister

Subcommittee: World Health Organization/Pesticides
Milton Eisler, Chairman
William F. Durham
Donald D. McCollister
Gaston Vettorazzi

Committee for Legislative Assistance
Robert J. Weir, Chairman
Victor A. Drill
John G. Keller
Ted A. Loomis
Verald K. Rowe

Committee on Professional Relations and Standards
Charles F. Reinhardt, Chairman
Herbert H. Cornish
Fred W. Oehme
Jerry M. Smith
Ralph C. Wands
Anne M. Wolven-Garrett

Board of Publications
William D'Aquanno (1977-1980), Chairman
Paul Hammond (1979-1982)
Gabriel L. Plaa
Tom S. Miya, President
Perry J. Gehring, Auditor

APPOINTMENTS

Historian
Harry W. Hays
Placement
Mark Hite, Director
William E. Rinehart, Co-Director

Representative to the Steering Committee of the International Congress of Toxicology
Seymour L. Friess

Liaison with European Society of Toxicology
Robert A. Scala
Bo Holmstedt

Liaison with American Society for Pharmacology and Experimental Therapeutics
Tom S. Miya, Chairman
Perry J. Gehring
Leon Golberg

Liaison with American Industrial Hygiene Association
J. Wesley Clayton, Jr.
Perry J. Gehring
Tom S. Miya

Liaison with Environmental Mutagen Society
Gordon W. Newell

FUTURE MEETINGS

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<td>March 1-5</td>
<td>Town and Country</td>
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<td>San Diego, CA</td>
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<td>21</td>
<td>1982</td>
<td>March 7-11</td>
<td>Sheraton Boston</td>
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<td>Boston, MA</td>
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<td>Caesar's Palace</td>
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<td>March 11-15</td>
<td>Atlanta Hilton</td>
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<td>March 17-21</td>
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<td>San Diego, CA</td>
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PAST PRESIDENTS

Harold C. Hodge .......................................................... 1961-1962
C. Boyd Shaffer ........................................................... 1962-1963
Paul S. Larson ............................................................ 1963-1964
Harry W. Hays ............................................................ 1964-1965
Frederick Coulston ....................................................... 1965-1966
Verald K. Rowe ............................................................ 1966-1967
John A. Zapp, Jr. .......................................................... 1967-1968
Carrol S. Weil ............................................................. 1968-1969
Ted A. Loomis .............................................................. 1969-1970
Robert L. Roudabush ..................................................... 1970-1971
Wayland J. Hayes, Jr. ..................................................... 1971-1972
Victor A. Drill .............................................................. 1972-1973
Joseph F. Borzelleca ....................................................... 1973-1974
Sheldon D. Murphy ....................................................... 1974-1975
Seymour L. Fries .......................................................... 1975-1976
Robert A. Scala ............................................................ 1976-1977
Harold M. Peck ............................................................. 1977-1978
Leon Golberg ............................................................... 1978-1979

AWARDS

Merit

1966 .............................................................. H.F. Smyth, Jr.
1967 .............................................................. A.J. Lehman
1968 .............................................................. R.T. Williams
1969 .............................................................. H.C. Hodge
1970 .............................................................. D.D. Irish
1971 .............................................................. K.P. DuBois
1972 .............................................................. O.G. Fitzhugh
1973 .............................................................. H.E. Stokinger
1974 .............................................................. W.B. Deichmann
1975 .............................................................. F. Coulston
1976 .............................................................. V.K. Rowe
1977 .............................................................. H.W. Hays
1978 .............................................................. J.M. Coon
1979 .............................................................. D.W. Fassett

Education

1975 .............................................................. H. C. Hodge
1976 .............................................................. T. A. Loomis
1977 .............................................................. R. B. Forney
1978 .............................................................. No Award
1979 .............................................................. S.D. Murphy
Achievement

1967.................................................. G.L. Plaa
1968.................................................. A.H. Conney
1969.................................................. S.S. Epstein
1970.................................................. S.D. Murphy
1971.................................................. Y. Alarie
1972.................................................. R.L. Dixon
1973.................................................. No Award
1974.................................................. M.F. Cranmer
1975.................................................. I.C. Munro
1976.................................................. C.D. Klaassen
1977.................................................. J.E. Gibson
1978.................................................. R.D. Harbison
1979.................................................. M.R. Boyd

Frank R. Blood

1974.................................................. Y. Alarie
1975.................................................. D.J. Ecobichon
               G.J. Johnstone
               O. Hutzinger
1976.................................................. R.D. Brown
1977.................................................. J. Dedinas
               G.D. DiVincenzo
               C.J. Kaplan
1978.................................................. P.J. Gehring
               E.O. Madrid
               G.R. McGowan
               P.G. Watanabe
1979.................................................. R. Fradkin
               E.J. Ritter
               W.J. Scott
               J.G. Wilson

Mixer and Reception
Sunday, March 9, 1980
6:00 - 7:30 P.M.
Washington Room
Sheraton Washington Hotel
Cash Bar
open to all attendees and guests
**PLATFORM SESSION 1: Inhalation Toxicology I**

**Monday Morning, March 10, 1980**

Sheraton Room

*Chairman: M. J. McKenna*

*Toxicology Research Laboratory, Dow Chemical Co., U.S.A., Midland, MI*

*Assistant: W. M. Snellings*

*Carnegie-Mellon Institute of Research, Pittsburgh, PA*

*Assistant: C. S. Barrow*

*Chemical Industry Institute of Toxicology, Research Triangle Park, NC*

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<thead>
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<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors and Affiliations</th>
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<tr>
<td>7</td>
<td>10:00</td>
<td>Experimental Sensitization by Repeated Inhalation of Aromatic Isocyanates</td>
<td>M.H. Karol, C. Dixon, M. Brady and Y. Alarie. Dept. of Ind. Environ. Hlth. Sci., Grad. Sch. of Pub. Hlth., Univ. of Pittsburgh, Pittsburgh, PA.</td>
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PLATFORM SESSION 2: Metabolism I

Monday Morning, March 10, 1980
Washington Room

Chairman: R. P. Smith
Dartmouth Medical School, Hanover, NH

Assistant: H.M. Mehendale
University of Mississippi Medical Center, Jackson, MS

Paper No.  Time (A.M.)

16  8:45  The Effect of Inducers on the Profile of Biphenyl Metabolites Formed in Vivo and in Vitro. K. Halpaap-Wood, E.C. Horning and M.G. Horning, Baylor Coll. of Med., Houston, TX.
<table>
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<tr>
<td>9:00</td>
<td>Effects of Phenobarbital, 3-Methylcholanthrene and SKF 525-A on Styrene-induced Acute Hepatotoxicity in Rats. S. Chakraborti and J. Brodeur, Département de médecine du travail et d'hygiène du milieu, Faculté de Médecine, Université de Montréal, Québec, Canada.</td>
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<td>9:15</td>
<td>Induction of Hepatic Drug-Metabolizing Enzyme Activity in Rats Due to Polychlorinated Biphenyl Aroclor 1260 or 2,3,6,2',3',6' Hexachlorobiphenyl. G. Reddy, R.H. Weltman and D.H. Norback, William S. Middleton Memorial V.A. Hospital and Univ. of Wisconsin, Madison, WI.</td>
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<td>11:00</td>
<td>Aspon and Malathion Inhibition of Rat Tissue Esterases and Toxicologic Interactions. S.D. Cohen, E.M. Ambelas and G.L. Ginsberg, Sect. of Pharmacol. and Toxicol., Sch. of Pharm., Univ. of Connecticut, Storrs, CT.</td>
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<td>11:30</td>
<td>Effect of Interaction on the Storage and Metabolism of Chlorobenzene and Lindane. R.W. Chadwick, T.M.</td>
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POSTER SESSION 1: Hepatic and Gastrointestinal

Monday Morning, March 10, 1980
Exhibition Hall B

Chairmen: J. J. Kocsis, Thomas Jefferson University,
Philadelphia, PA

R. C. Schnell, University of Nebraska Medical Center, Omaha, NE

<table>
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<th>Author(s)</th>
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<tr>
<td>35</td>
<td></td>
<td>The Influence of Bile Salts and SKF 525-A on the Transfer of Morphine in Rat Liver Slices.</td>
<td>T. Imamura.</td>
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Assessment of Collagenase Activity in Chronic Liver Injury. W.J. Lindblad and G.C. Fuller, Dept. of Pharmacol. and Toxicol., Univ. of Rhode Island, Kingston, RI.


Prolyl Hydroxylase Activity and Immunologically Related Cross-Reacting Protein in Patients with Alcoholic Liver Disease. S.W. Mann, G.C. Fuller, E.L. Vidins and J.V. Rodil, Dept. of Pharmacol. and Toxicol., Univ. of Rhode Island, Kingston, RI, and V.A. Hospital, Providence, RI.


Histochmocchemical Indicators of Subcellular Loci of Acute Injury by Model Cytotoxins. P. Chieco, M. Treinen Moslen and E.S. Reynolds, Dept. of Pathol., Univ. of Texas Med. Br., Galveston, TX.
46  Hexachlorobiphenyl- and Aroclor-Induced Structural and Subcellular Hepatic Alterations in the Liver of Rats. R.H. Weltman and D.H. Norback, William S. Middleton Memorial V.A. Hospital and Univ. of Wisconsin, Madison, WI.

47  Paper Cancelled


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**POSTER SESSION 2: Teratology and Reproduction I**

Monday Morning, March 10, 1980

Exhibition Hall B

*Chairmen: J. J. Kocsis, Thomas Jefferson University, Philadelphia, PA*

*R. C. Schnell, University of Nebraska Medical Center, Omaha, NE*

<table>
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<th>Authors</th>
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<td>See Platform Session 11, Wednesday Morning</td>
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<td>56</td>
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<td>Estrogen Action in the Neonatal Rat — Relation to Toxicity. D.M. Sheehan, W.S. Branham, K.L.</td>
<td></td>
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Herbicide-Induced Hydronephrosis and Respiratory Distress: Effects of in Utero Exposure to Nitrofen (2,4-Dichloro-4'-Nitrophenyl Ether). R.D. Costlow and J.M. Manson, Dept. of Environ. Hlth., Univ. of Cincinnati, Cincinnati, OH. Sponsor: P.B. Hammond.


Embryofetal Toxicity and Teratogenicity of Isomers of Xylene in the Mouse. P.S. Nawrot and R.E. Staples, NIEHS (NIH), Research Triangle Park, NC.

Teratogenicity of 3,3',4,4',5,5'-Hexachlorobiphenyl (HCB) in the Mouse. R.E. Staples, G.L. Kimmel and T.A. Marks, NIEHS (NIH) and Research Triangle Inst., Research Triangle Park, NC.

of Pharmacol.-Toxicol. and Ob.-Gyn., Univ. of Rochester, Rochester, NY; and Devel. Toxicol. Sect., Battelle, Pacific Northwest Labs., Richland, WA.

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Inhibition of Murine Palate Closure by Methylmercury. F.C. Olson, SUNY Sch. Med. and E.J. Massaro, Ctr. for Air Environ. Studies, Penn State Univ., University Park, PA.

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Inhibition of Esterase Activity in Fetal Brain Following in Utero Exposure to the Organophosphate Diazinon. D.L. Avery, A.M. Hoberman, M.F. Cranmer, and J.M. Spyker-Cranmer, Univ. of Arkansas for Med. Sci., Little Rock, AR.

SYMPOSIUM:

Hepatic Toxicity and Neoplasia in the Rodent

Monday Afternoon, March 10, 1980

Sheraton Room

1:30 P.M. - 8:00 P.M.

Co-Chairmen: R.J. Kociba, Dow Chemical Co., U.S.A., Midland, MI

P.M. Newberne, Massachusetts Institute of Technology, Cambridge, MA

Time (P.M.)

2:15 - 3:00  Biological Characterization of Hepatocellular Hypertrophic Nodules and Carcinomas. G. Williams, Naylor Dana Institute for Disease Prevention, Valhalla, NY

3:00 - 3:15  Break

3:15 - 3:45  Transplantation Studies with Proliferative Lesions of Rodent Liver. M. Reuber, Frederick Cancer Research Center, Frederick, MD

3:45 - 4:15  Role of Hepatic Toxicity in Proliferative Lesions of Rodent Liver. P. Grasso, British-Petroleum Research Center, Middlesex, England

4:15 - 4:30  Correlation of Genetic and Non-Genetic Events with Neoplasia. P.G. Watanabe, R.H. Reitz, A.M. Schumann, W.T. Stott and J.F. Quast, Toxicology Research Laboratory, Dow Chemical Co., Midland, MI

4:30 - 5:00  Dose Selection for Long-Term Toxicity Studies of Substances Causing Hepatic Enzyme Induction, P. M. Newberne, Massachusetts Institute of Technology, Cambridge, MA

5:00 - 5:30  Regulatory Interpretation of Proliferative Lesions of Rodent Liver. A.C. Kolbye, Jr., U.S Food and Drug Administration, Washington, D.C.

5:30 - 7:00  Break for Dinner

7:00 - 8:00  Panel Discussion, Questions and Comments from Floor:
             J.R. Mitchell, Department of Pharmacology
             Baylor University, Houston, TX

PLATFORM SESSION 3: General Toxicology I

Monday Afternoon, March 10, 1980

Exhibit Hall C

Chairman: D. Couri, Ohio State University, Columbus, OH

Assistant: M.S. Abdel-Rahman, Ohio State University,
               Columbus, OH

Assistant: P. Toy-Manning, Ohio State University,
               Columbus, OH

<table>
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<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
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<tbody>
<tr>
<td>75</td>
<td>1:45</td>
<td>Toxicity of Naphthalene Anti-Diepoxide, Syn-Diepoxide and Dihydriodiol Epoxide in Mice and</td>
</tr>
</tbody>
</table>
Rats. W.G. Stillwell and M.G. Horning, Baylor Coll. of Med., Houston, TX, and W.-S. Tsang and G.W. Griffin, Univ. of New Orleans, LA.

76 2:00


77 2:15


78 2:30


79 2:45


80 3:00


81 3:15


82 3:30

Toxicology of 2'-Deoxycoformycin (2'-dCF) Plus 9-Beta-D-Arabinofuranosyladenine 5'-Monophosphate (ARA-AMP) in Mice, Dogs, and Monkeys. S.D. Harrison, Jr., S. McAfee, J.C. Peckham and E.P. Denine, Southern Res. Inst., Birmingham, AL.

83 3:45


84 4:00


85 4:15

Species Differences of Rats and Mice in Studies of Comparative Subacute Toxicity of Retinoids. E.J. Hixson, E.P. Denine and S.D. Harrison, Jr., Southern Res. Inst., Birmingham, AL.

86 4:30

Toxicity of Chlorine Dioxide in Drinking Water. M.S. Abdel-Rahman and D. Couri, Ohio State Univ., Toxicol. Div., Columbus, OH.
PLATFORM SESSION 4: Nervous System I

Monday Afternoon, March 10, 1980
Maryland Suite

Chairman: R.P. Maickel, Department of Pharmacology and Toxicology, Purdue University, Lafayette, IN
Assistant: M. Holsapple, Purdue University, Lafayette, IN
Assistant: A. Malave, Purdue University, Lafayette, IN

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
<th>Authors</th>
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<tr>
<td>88</td>
<td>1:30</td>
<td>Development of Caudate Neuronal Morphology and Motor Behavior in the Hypothyroid Rat</td>
<td>C.P. Comer and S. Norton, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS.</td>
</tr>
<tr>
<td>94</td>
<td>3:00</td>
<td>The Use of Human Neuroblastoma Cells in Tissue Culture in the Study of Organophosphorus-Induced Delayed Neurotoxicity</td>
<td>D.G. Graham, J.S. Lee and M.B. Abou-Donia, Depts. of Pathol. and Pharmacol., Duke Univ. Med. Ctr., Durham, NC.</td>
</tr>
<tr>
<td>95</td>
<td>3:15</td>
<td>Studies of the Inhibition of Sterologenesis in Hexacarbon-Induced Distal Axonopathy in Sciatic Nerves of the Rat</td>
<td>P.J. Gillies, R.M. Norton, E.L. White</td>
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PLATFORM SESSION 5: Mutagenesis I

Monday Afternoon, March 10, 1980
Washington Room

Chairman: J.F. Borzelleca, Department of Pharmacology, Medical College of Virginia, Richmond, VA
Assistant: R. Carchman, Department of Pharmacology, Medical College of Virginia, Richmond, VA.
Assistance: E. Carmines, Department of Pharmacology, Medical College of Virginia, Richmond, VA

Paper No.     Time (P.M.)

102      1:45     Induction of Sister Chromatid Exchange in Alveolar Macrophages, Bone Marrow and Regenerating


104 2:15 Inhibition of Testicular DNA Synthesis in the Mouse by the Halomethanes. H.L. Skalsky and J.F. Borzelleca, Dept. of Pharmcol., Med. Coll. of Virginia, Richmond, VA.


107 3:00 Mutagenicity of Trinitrotoluene (TNT) and Other Explosive Compounds. G.S. Edwards, N.D. Speciner and W.Z. Whong, New England Inst. for Life Sci., Waltham, MA.


113 4:30 Influence of Lung and Liver Metabolism on the Mutagenicity of Diesel Soot Extracts. C.R. Clark,
POSTER SESSION 3: Inhalation Toxicology II

Monday Afternoon, March 10, 1980
Exhibition Hall B
Chairmen: J. J. Kocsis, Thomas Jefferson University
Philadelphia, PA
R.C. Schnell, University of Nebraska Medical Center, Omaha, NE

Paper No.  Time (P.M.)
115  1:30-3:30  Changes in Lung Lysyl Oxidase and Prolyl
Hydroxylase Following Cadmium Inhalation. C.O.
Chichester, K.C. Palmer, J.A. Hayes and H.M. Kagan,
Dept. of Biochem., Boston Univ. Sch. of Med. and
Malory Inst. of Pathol., Boston, MA. Sponsor: G.C.
Fuller.

116  Prolonged Red Cell Glycerol Hemolysis in Mice
Inhaling Benzene. B.D. Goldstein, M.G. Rozen and

117  Alteration of Respiratory Cell Cycle Time as an
Indicator of Injury After NO2 Inhalation. N.A.
Hackett, Lovelace Inhal. Toxicol. Res. Inst.,
Albuquerque, NM. Sponsor: R.O. McClellan.

118  Metabolism of Inhaled Organic Bromides: Corroboration
of Gas Uptake Results by Direct Measurement of
Inorganic Bromide Production. M.L. Gargas,
M.E. Andersen and L.J. Jenkins, Jr., NMRI/TD and
AMRL/THT, Wright-Patterson AFB, OH.

119  Mercury Vapor Exposures and Pharmacokinetics in
Mice. G.G. Berg, R.W. Kilpper and T.W. Clarkson,
Dept. of Rad. Biol. and Biophys. and Environ. Hlth.

120  A New Exposure Chamber for Long-Term Inhalation
Studies. I.F. Carney and E. Gowrie, Imperial Chem.
Ind. Ltd., Central Toxicol. Lab., Alderley Park,
Macclesfield, Cheshire, U.K., and E. Gowrie Ltd.,

121  Deposition of Acid Sulfates in the Respiratory
Tract of the Dog, Rat and Guinea Pig. A.R. Dahl,
M.B. Snipes and T.J. Briner, Lovelace Inhal. Toxicol.


Subacute Inhalation Toxicity of 1,3-Dichloro-Propene/1,2-Dichloropropane (D-D) in Mice and Rats. C.M. Parker, Shell Devol. Co., Houston, TX, and W.B. Coate and R.W. Voelker, Hazleton Lab. America, Inc., Vienna, VA. Sponsor: D.E. Stevenson.


POSTER SESSION 4: Disposition

Monday Afternoon, March 10, 1980

Exhibition Hall B

Chairmen: J.J. Kocsis, Thomas Jefferson University,
Philadelphia, PA

R.C. Schnell, University of Nebraska, Medical Center, Omaha, NE

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<th>Paper No.</th>
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<tr>
<td>131</td>
<td>1:30-3:30</td>
<td>Isolation and Identification of the Fecal Metabolites of 4,4'-Dichlorobiphenyl and 2,4,5,2',4',5'-'</td>
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</table>

132

Metabolic Fate and Toxicity of Senecionine in Primary Hepatocyte Cultures. C.E. Green, H.J. Segall and J.L. Byard, *Depts. of Environ. Toxicol. and Physiol. Sci., Univ. of California, Davis, CA.*

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139

Uptake and Metabolism of Chlorpromazine by the Isolated Perfused Rat Lung. Y. Ohmiya and H.M. Mehendale, *Dept. of Pharmacol. and Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS.*

140

Uptake and Metabolism of Imipramine by Isolated Perfused Rat and Rabbit Lung. Y. Ohmiya and H.M. Mehendale, *Dept. of Pharmacol. and Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS.*

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143

Percutaneous Penetration 14C-Parathion in the Mouse: Effect of Anatomical Region. C.S. Skinner, Battelle Northwest, Richland, WA, and W.W. Kilgore,
The Disposition and Metabolism of Benzyl 2,5-Diacetoxybenzoate (BDAB) After Oral Administration to Rats and Rabbits. B.E. Domeyer, G.M. Ridder and P.M. Quinlin, Miami Valley Labs., The Procter & Gamble Co., Cincinnati, OH. Sponsor: E.V. Buehler.


Conversion of 7-Substituted Carcinogenic Derivatives of Benz(a)anthracene to 7-Hydroxymethylbenz(a)anthracene. B.J. Tieejema and J.W. Flesher, Dept. of Pharmacol., Coll. of Med. and the
Grad. Ctr. for Toxicol., Univ. of Kentucky, Lexington, KY. Sponsor: M. Vore.


SYMPOSIUM: Perspectives in Risk Assessment

Tuesday Morning, March 11, 1980
8:30 A.M. - 9:30 A.M.
Sheraton Room

Chairman: R.I. Krieger, University of California, Davis, CA

Time (A.M.)

8:30 Definition of Human Carcinogenic Hazards, Present Constraints and Likely Future Directions. G. Gori, National Cancer Institute, Bethesda MD

8:45 Facts and Fears: Understanding Perceived Risk. P. Slovic, Decision Research, Eugene OR

9:00 The Quantitative Assessment of Low Risks of Cancer. F. Carlberg, Consultant, St. Charles, IL


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<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>158</td>
<td>8:30</td>
<td>Chronic Inhalation Exposure of Squirrel Monkeys to Pirbuterol Acetate Aerosol. H.V. Levinsky, C.</td>
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PLATFORM SESSION 7: Pharmacokinetics

Tuesday Morning, March 11, 1980

Maryland Suite

Chairman: I.G. Sipes
University of Arizona
Tuscon, AZ

Assistant: H.B. Matthews, NIEHS, Research Triangle Park, NC

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<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Presentation</th>
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1980 CONFERENCE EXHIBITORS

We sincerely appreciate the attendance of the following exhibitors at our 1980 Conference. We invite your visiting each of them in Exhibit Hall B.

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<th>Booth</th>
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<td>Allentown Caging Equipment Co., Inc.</td>
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<tr>
<td>Allentown, NJ</td>
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<tr>
<td>American Board of Toxicology, Inc.</td>
<td>D-5</td>
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<tr>
<td>Beckman Instruments, Inc.</td>
<td>B-1</td>
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<td>Fullerton, CA</td>
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<td>Belco Glass, Inc.</td>
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<td>Vineland, NJ</td>
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<td>Bio Serve, Inc.</td>
<td>K-8</td>
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<td>Frenchtown, NJ</td>
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<td>Blue Spruce Farms</td>
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<td>Altamont, NY</td>
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<td>Charles River Breeding Laboratories, Inc.</td>
<td>C-1,C-2</td>
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<td>Wilmington, MA</td>
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<td>Clinical Recruiting Associates</td>
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<td>Blauvelt, NY</td>
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<td>Columbus Instruments</td>
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<td>Coulbourn Instruments, Inc.</td>
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<td>Edstrom Industries, Inc.</td>
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<td>Erlars Bioresearch Laboratories, Inc.</td>
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<td>Fort Collins, CO</td>
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<td>Elsevier North Holland, Inc./Excerpta Medica</td>
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<td>New York, NY</td>
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<td>Experimental Pathology Laboratories, Inc. (EPL)</td>
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<td>Herndon, VA</td>
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<td>Gam Rad</td>
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<td>Fairfield, NJ</td>
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<td>Indianapolis, IN</td>
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<td>Hazleton Research Animals, Inc.</td>
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<td>Vienna, VA</td>
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<td>Aberdeen, MD</td>
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<td>Hotpack Corp.</td>
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<td>Philadelphia, PA</td>
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Kratos - Instem Ltd.
La Jolla, CA ........................................... G-5

Laboratory Data Control, Div. of Milton Roy Co.
Riviera Beach, FL ........................................ E-6

Lab Products, Inc.
Rochelle Park, NJ ...................................... L-1, L-2, L-3, L-4

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Silver Spring, MD ........................................ H-1

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Kensington, MD .......................................... I-2

MacMillan Publishing Co., Inc.
New York, NY ........................................... D-3

National Institute of Environmental Health Sciences
(Institutional Exhibitor)
Park, NC .................................................. C-8

Nuaire, Inc.
Minneapolis, MN ......................................... E-5

Ortho Instruments
Westwood, MA ........................................... C-6

Product Safety Labs.
East Brunswick, NJ .................................... I-5

Ralston Purina Company
St. Louis, MO ........................................... E-1, E-2

Ralttech Scientific Services
Madison, WI ............................................ D-8, E-8

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Houston, TX ............................................. C-3

Taconic Farms, Inc.
Germantown, NY ....................................... A-8

Technical Evaluation & Management Systems, Inc. (TEAMS)
Dallas, TX ............................................... B-8

Technicon Industrial Systems
Tarrytown, NY .......................................... B-3

Toxicity Research Labs., Ltd.
Muskegon, MI ........................................... F-3

Toxicology Laboratory Accreditation Board, Inc. .......... D-5

Toxigenics Inc., Subsidiary of Whittaker Corp.
(formerly microbiological Associates)
Decatur, IL ............................................. B-5

Tracor Jitco, Inc.
Rockville, MD ........................................... C-5

Unifab Corporation
Kalamazoo, MI .......................................... D-6

The Upjohn Company
Kalamazoo, MI .......................................... B-2
Wahmann Manufacturing Company
Timonium, MD .......................................................... E-3

White Eagle Laboratories, Inc.
Doylestown, PA ......................................................... H-8

Wil Research Laboratories, Inc.
Cincinnati, OH ......................................................... A-5,A-6

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REFRESHER COURSE

Principles of Toxicology — I
(Basic Kinetics)
A Society of Toxicology Continuing Education Course

Sunday, March 9, 1980
1:00 P.M. - 5:15 P.M.
Maryland Suite

Topics presented will include absorption, distribution and biotransformation, excretion and toxicokinetics. Detailed manuscripts of each presentation will be made available to participants. Recognized experts will discuss each of the topics and opportunity for questions from the floor will be provided.

$25.

Pre-registration necessary.
See Conference Pre-registration form enclosed in this packet.
175  9:15  Metabolism of Inhaled Benzene and Toluene: Correlation Between Kinetic Constants Obtained in Vivo and in Vitro. R.L. Hilderbrand, M.E. Andersen and L.J. Jenkins, Jr., NMRI/TD and AMRL/TH, Wright-Patterson AFB, OH.


177  9:45  Organ Perfusion as the Rate Limiting Step in the Metabolism of Some Inhaled Gases and Vapors: an Explanation of Deviations from Michaelis-Menten Curves. M.E. Andersen, AMRL/TH, Wright-Patterson AFB, OH.


180  10:30  Pharmacokinetics of 2,4-Dichlorophenoxyacetic Acid (2,4-D) in Fischer 344 Rats. F.A. Smith, R.J. Nolan, E.A. Hermann and W.H. Braun, Toxical Res. Lab., Hlth. and Environ. Sci., The Dow Chem. Co., U.S.A., Midland, MI.


185  11:45  Placental Transfer, Pharmacokinetics and Metabolism of Phosfolan (Cylolane) in the Mouse. N.M. Bakry and M.B. Abou-Donia, Dept. of Pharmacol., Duke Univ. Med. Ctr., Durham, NC.
<table>
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<tr>
<th>Paper No.</th>
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<th>Title</th>
<th>Authors</th>
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<tr>
<td>191</td>
<td></td>
<td>Verapamil and Clonidine as Antidotes in Amitriptyline Poisoning in Rabbits.</td>
<td>A. El-Hage, T. Balazs and W.L. West, Bur. of Drugs, Food and Drug Admin., and Dept. of Pharmacol., Howard Univ., Washington, DC.</td>
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<tr>
<td>194</td>
<td></td>
<td>Effects of Benzene on the Development of Erythropoietic Cells in the Fetal Mouse.</td>
<td>M. Mizens and H.H.</td>
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Cornish, Dept. of Environ. & Ind. Hlth., Univ. of Michigan, Ann Arbor, MI.

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POSTER SESSION 6: Biochemical Mechanisms

Tuesday Morning, March 11, 1980

Exhibition Hall B

Chairmen: J.J. Kocsis, Thomas Jefferson University,
Philadelphia, PA
R.C. Schnell, University of Nebraska Medical Center, Omaha, NE

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<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title and Authors</th>
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| 204       | 8:30-10:30  | Comparison of Lipid Peroxidation by Perfluoro-
|           |             | Octanoic Acid or CCl4. M.A. Rozner and D.R. Taves,
|           |             | Dept. of Pharmacol. and Toxicol., Univ. of Rochester,
|           |             | Rochester, NY. |
| 205       |             | Hydroxyl Radical-Dependent Lipid Peroxidation.
|           |             | Toxicol. Ctr., Dept. of Biochem., Michigan State Univ.,
|           |             | East Lansing, MI. |
| 206       |             | Similarities and Differences in Nadph/Cumene
|           |             | Hydroperoxide (CHP)-Supported Lipid Peroxidation
|           |             | (LP) in Mouse Hepatic Microsomes. A.P. Kulkarni
|           |             | and E. Hodgson, Toxicol. Prog., Dept. of Entomol.,
|           |             | North Carolina State Univ., Raleigh, NC. |
| 207       |             | Paraquat and Diquat Inhibit DNA Synthesis in Vitro.
|           |             | E.L. Carmines, R.A. Carchman and J.F. Borzelleca,
|           |             | Dept. of Pharmacol., Med. Coll. of Virginia, Richmond,
|           |             | VA. |
| 208       |             | Cyclic AMP-Mediated Induction of Macrophage
|           |             | Activation. F.H. Prosser, S.V. Nichols and W.K. Nichols,
|           |             | Dept. of Biochem., Pharmacol. and Toxicol., Univ. of
|           |             | Utah, Salt Lake City, UT. Sponsor: D.J. George. |
| 209       |             | Stimulation of Uterine DNA Synthesis by O,P'-DDT.
|           |             | G.M. Stancel, V. Mukku and J.S. Ireland, Dept.
|           |             | Pharmacol., Univ. Texas Med. Sch., Houston, TX.
|           |             | Sponsor: S.D. Murphy. |
| 210       |             | Enzyme Development in the Colon and Liver of the
|           |             | Rat after Prenatal Exposure to 1,2-Dimethyl-
|           |             | hydrazine (DMH). J.A. Alderman and C.M. Schiller,
|           |             | Lab. of Organ Function and Toxicol., Natl. Inst. of
|           |             | Environ. Hlth. Sci., Research Triangle Park, NC.
|           |             | Sponsor: G. Lucier. |
| 211       |             | Kepone Induced Changes in Ca $^{2+}$ ATPase and 46Ca
|           |             | Binding in Rat Brain and Muscle Tissues. D.
|           |             | Desaih, M. Koury and S.K. Mishra, Dept. of Neurol.,
|           |             | The Univ. of Mississippi Med. Ctr., Neurol. and Res.
|           |             | Serv., V.A. Med. Ctr., Jackson, MS. |
| 212       |             | Effects of Hydrazine and 1,2-Dimethylhydrazine on
|           |             | Intestinal Na,K-Stimulated Adenosine 5'-Tri-
|           |             | phosphatase (Na,K-ATPase). R. Walden and C.M.
|           |             | Schiller, Lab. of Organ Function and Toxicol., Natl.
|           |             | Inst. of Environ. Hlth. Sci., Research Triangle Park,
|           |             | NC. Sponsor: G. Lucier. |
In Vitro Inhibition of Mitochondrial Respiration by 3, 5-Dinitro-4-Chloro-a,a,a-Trifluorotoluene (DNCTT). C.M. Schiller, R. Walden, J.A. Alderman and H.L. Falk, Natl. Inst. of Environ. Hlth. Sci., Research Triangle Park, NC.


The Inhibitory Effect of N-(Phosphonomethyl)Glycine in Vivo on Energy-Dependent, Phosphate-Induced Swelling of Isolated Rat Liver Mitochondria. E.A. Babahunmi and O.O. Ololunsogo, Dept. of Biochem., Univ. of Ibadan, Ibadan, Nigeria.

PLATFORM SESSION 8: Cardiac

Tuesday Afternoon, March 11, 1980
Maryland Suite

Chairmen: Tibor Balazs, Food and Drug Administration,
Washington D.C.

Assistant: E. Herman, Food and Drug Administration,
Washington, D.C.

Assistant: L. Weiss, Food and Drug Administration,
Washington, D.C.

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<td>218</td>
<td>1:30</td>
<td>Effect of Kepone on Cardiac ATPases and ³H-Catecholamines Uptake in Rats. D. Desaih, Dept. of Neurol., Univ. of Mississippi Med. Ctr., Jackson, MS.</td>
</tr>
<tr>
<td>219</td>
<td>1:45</td>
<td>Electrocardiographic Evaluation of Cardiac Lesions Produced by Isoproterenol in Rats. W.C. Van Arsdale and T. Balazs, Bur. of Drugs, Food and Drug Admin., Washington, D.C.</td>
</tr>
</tbody>
</table>

Cardiototoxicity of Centrally Active Drugs in Man. L.R. Weiss, C. Brophy, S. Bartok and T. Belazs, Bur. of Drugs, Food and Drug Admin., Washington, DC.


PLATFORM SESSION 9: Oncogenesis I
Tuesday Afternoon, March 11, 1980
Sheraton Room
Chairman: H.A. Milman
National Cancer Institute, Bethesda, MD
Assistant: M. Dieter, National Cancer Institute, Bethesda, MD

Paper No.  Time (P.M.)  Title
228  2:30  The Effect of Sodium Saccharin on Several Urinary Parameters in the Rat. D.L. Arnold, B. Stavric, P.F. McGuire and I.C. Munro, Food Direct., Hlth. Protection Br., Ottawa, Canada.
PLATFOR M SESSIO N 10: Immunotoxicology

Tuesday Afternoon, March 11, 1980
Washington Room

Chairman: R.P. Sharma, Utah State University,
Logan, UT

Assistant: L.D. Koller, University of Idaho, Moscow, ID

Paper No.  Time (P.M.)  Title

230  1:30  The Depression of Cell-Mediated Immunity by Low
Concentrations of Asbestos in Drinking Water. K.L.
of Virginia, Richmond, VA. Sponsor: J.F. Borzelleca

231  1:45  Effects of Complex Chemicals on Ontogeny of Im-
munocompetence in Rats Exposed In Utero. T.M.
Graham, J.E. Morris and F.D. Andrews, Bio1. Dept.,
Pacific Northwest Lab., Richland, WA

232  2:00  Evaluation of Chemicals for Immunomodulatory
Effects Using an In Vitro Antibody-Producing Assay.
S.A. Kutz, R.D. Hinsdill and D.J. Weltman, Ctr. for
Environ. Toxicol., Univ. of Wisconsin, Madison, WI and
ICI Americas Inc., Wilmington, DE. Sponsor: L. Gongwet

233  2:15  Tumor Growth and Cell-Mediated Tumor Cytotoxicity
in Mice Exposed to Lead. N.E. Kerkvliet and L.D. Koller.
Sch. of Vet. Med., Oregon State Univ., Corvallis, OR and
Dept. of Vet. Med., Univ. of Idaho, Moscow, ID

234  2:30  Immunotoxicology of Trichloroethylene: V. Sanders,
B. Kauffman, P. Hallett, D. Stablein and A. Munson.
of Virginia, Richmond VA. Sponsor: M. Henry

235  2:45  Hydralazine-Induced Antinuclear Antibodies in Dogs.
T. Balazs, C. Robinson and N. Balter, Bur. of Drugs, Food
and Drug Admin., Washington, DC

POSTER SESSION 7: Metabolism II

Tuesday Afternoon, March 11, 1980
Exhibition Hall B

Chairman: J.J. Kocsis, Thomas Jefferson University,
Philadelphia, PA

R.C. Schnell, Univ. of Nebraska Medical Center, Omaha, NE

Paper No.  Time (P.M.)  Title

236  1:30 - 3:30  Refractoriness of Channel Catfish to Kepone Potenti-
ated CC14 Hepatotoxicity. L.R. Curtis and H.M.
Isopropanol and Acetone Potentiation of CC14 Hepatotoxicity: Single vs. Repetitive Pre-Treatments. S. Lock, W.R. Hewitt, P. du Souich and G.L. Plaa. Dept. de Pharmacologie, Universite de Montreal, Montreal, Quebec, Canada


The Effects of Carmustine on Hepatic Drug Metabolism in Mice. V.L. Wilson and R.E. Larson. Sch. of Pharm., Oregon State Univ., Corvallis, OR

Effect of Acute and Chronic Chloridinefom Treatment on Rat Hepatic Microsomal Drug Metabolizing Enzymes. D.R. Raupp, G.K.W. Yim, R.C. Schnell. Dept. of Pharmacol. & Toxicol., Sch. of Pharm., Purdue Univ., West Lafayette, IN


The Effect of Prolactin on the Distribution of 2,4,5,2', 4',5'-Hexachlorobiphenyl (6-CB) and on Hepatic Monoxygenase Activity in the Female Mouse. M.J.
Vodicnik and J.J. Lech, *Dept. of Pharmacol. & Toxicol., Med. Coll. of Wisconsin, Milwaukee, WI*

**Effect of Protein Deficiency on the Interaction of Components of the Mixed Function Oxidase System.**

**Effect of Ethylaminoethanol on Hepatic Microsomal Enzyme Activity.**
A.C. Stevens and R. Hartung, *Toxicol. Prog., Sch. of Pub. Hlth., Univ. of Michigan, Ann Arbor, MI*

**Effect of N-Acetylcysteine on the Hepatotoxicity and Pharmacokinetics of 14C-Acetaminophen in Male Swiss Webster Mice.**
**Sponsor:** H.W. Buttar

**Stimulation of p-Nitroanisole O-Demethylation in the Hemoglobin-Free Perfused Rat Liver by Epinephrine: Studies in Various Nutritional States.**
S.A. Belinsky, L.A. Reinke, M.A. Danis, F.C. Kauffman and R.G. Thurman, *Dept. of Pharmacol., Univ. of North Carolina, Chapel Hill, NC* and *Dept. of Pharmacol., Univ. of Maryland, Baltimore, MD*

**Kinetics of Activation and Inhibition of Rabbit Hepatic Aniline Hydroxylase and Benzphetamine Demethylase by Volatile Anesthetics.**

**Stable Isotope Effects on the Formation and Elimination of a Metabolite. A Study on the Kinetics of Acetaminophen Derived from Phenacetin and From Deuterated Phenacetin in the Perfused Rat Liver Preparation.**
K.S. Pang, *Dept. of Pharmaceutics, Sch. of Pharm., Univ. of Houston, Houston, TX.*
**Sponsor:** M.G. Horning

**The Effect of Pyrrolizidine Alkaloids from Senecio vulgaris on Specific Liver Mixed Function Oxidase Activities.**
D.F. Eastman and H.J. Segall, *Dept. of Physiol. Sci., Univ. of California Davis, Davis, CA*
**Sponsor:** S.N. Giri

**Induction of Benzopyrene Metabolism by 2,3,7,8-Tetrachlorodibenzo-p-Dioxin in Primary Cultures of Adult Rat Hepatocytes.**

**The Effect of Pretreatment with Phenobarbitone or Aroclor 1254 on Hexachloro 1:3 Butadiene Nephrotoxicity in the Rat.**
**Sponsor:** Dr. M.S. Rose

**Effect of Chlorinated Diphenyl Ether Isomers on Xenobiotic Metabolism in Rat Liver.**
G.P. Carlson, E.N. Smith and K.M. Johnson, *Dept. of Pharmacol. & Toxicol., Sch. of Pharm. & Pharmacal Sci., Purdue Univ., West Lafayette, IN*


Protection Against Acetate Toxicity by TOTP. C. Wang, H. Hand and S.D. Murphy, Div. of Toxicol., Dept. of Pharmacol., Univ. of Texas Med. Sch. at Houston, Houston, TX

ANNUAL BUSINESS MEETING
Tuesday Afternoon, March 11, 1980
3:00 P.M.
Sheraton Room
SOT MEMBERS ONLY
Tom S. Miya, Presiding

ANNUAL BANQUET
Tuesday Evening, March 11, 1980
7:00 P.M.
Washington Room
Open to all attendees and guests.
$19.25
Complimentary wine;
Courtesy, Charles River Breeding Laboratories, Inc.
SYMPOSIUM: Toxicology in the Workplace
Responsibilities for a Safe Workplace:
A Multidisciplinary Challenge

Wednesday Morning, March 12, 1980
8:15 A.M. - 12:30 P.M.
Sheraton Room

Chairman: V.K. Rowe

Time (A.M.)
8:15 - 8:30 Introduction, V.K. Rowe
8:30 - 9:00 What does the Industrial Hygienist want or need from the Toxicologist? P.E. Toth, Ford Motor Company, Dearborn, MI
9:00 - 9:30 What does the Physician want or need from the Toxicologist? R.E. Eckardt, Former Director, Medical Research & Environmental Health, Division of Exxon Corporation, Scottsdale, AZ
9:30 - 10:00 What does Government want or need from the Toxicologist? D.P. Rall, Director of the National Toxicology Program, Research Triangle Park, NC
10:00 - 10:15 Intermission
10:15 - 10:45 What does Management want or need from the Toxicologist? J.W. Hanley, President, Monsanto Company, St. Louis, MO
11:15 - 12:00 What does the Public want or need from the Toxicologist? J. Higginson, Director, International Agency for Research on Cancer, Lyon, France
12:00 - 12:30 Discussion

PLATFORM SESSION 11:
Teratology and Reproduction II

Wednesday Morning, March 12, 1980
Washington Room

Chairman: K.S. Khera, Bureau of Chemical Safety, Ottawa, Ontario, Canada
Assistant: H.S. Buttar, Health Protection Branch, Ottawa, Ontario, Canada
Assistant: S. Charbonneau, Health Protection Branch, Ottawa, Ontario, Canada

Paper No. Time (A.M.)
263 8:30 Developmental Malformations Induced by Metabolically-Liberated Cyanide. C.C. Willhite, V.H. Ferm, M.
Marin-Padilla and R.P. Smith. Depts. of Pharmacol. &
Sch., Hanover, NH

264 8:45 Effects of Inhaled Epichlorohydrin on Fertility and
Fetal Development in Rats and Rabbits. J.A. John, J.F.
Quast, F.J. Murray, J.W. Henck, L.G. Calhoun, T.S.
Lederer, M.K. Pilny and R.E. Staples. Toxical Res. Lab.,
Hlth. and Environ. Sci., Dow Chem. U.S.A.; Midland, Mi.
Sponsor: B.A. Schwetz

265 9:00 Mechanism of Cyclophosphamide-Induced Terato-
Environ. Hlth., Univ. Cincinnati, Cincinnati, OH.
Sponsor: P.B. Hammond

266 9:15 Toxicity of Nadph in a Coupled Microsomal Acti-
vating/Embryo Culture System. K.T. Kitchin, M.K.
Research Triangle Park, NC. Sponsor: G. Lucier

267 9:30 Teratologic Evaluation of Ortho-Toluene Diamine(o-
TDA) in Sprague-Dawley Rats and Dutch-Belted
Rabbits. M. Knickerbocker, T.A. Re, R.A. Parent and J.H.
Wedig, Food and Drug Res. Labs., Inc., Waverly, NY and
Olin Corp., New Haven, CT

268 9:45 Teratologic Evaluation of N-Cyclohexyl-2-Pyrroli-
done (NCP) in Sprague-Dawley Rats and Dutch-
Belted Rabbits. M.K. Knickerbocker, T.A. Re, R.A.
Parent and J.H. Wedig, Food and Drug Res. Labs., Inc.,
Waverly, NY and Olin Corp., New Haven, CT

269 10:00 Preclinical Reproductive Toxicology Evaluation of
Trazodone (Desyrel®), a New Class of Anti-Depres-
sant. J.L. Perhach, Jr., R.H. Cox, Jr., H.C. Hawkins and
J.H. Weikel, Jr., Dept. of Pathol. & Toxicol., Mead
Johnson Pharmaceutical Div., Evansville, IN

270 10:15 Evaluation of Triamcinolone Teratogenicity in 2
Different Stocks of New Zealand White Rabbit. M.E.
DiFebbo, Y.J. Kang and F.J. Guerriero, Smith Kline &

271 10:30 Three-Generation Reproduction and Dominant Lethal
Mutagenesis Studies on Ethylene Glycol. M.O.
Carnegie-Mellon Env., Pittsburgh, PA

272 10:45 Three Generation Study of 2-Methylbenzimidazole in
Kensington, MD

273 11:00 Potentitative Action of SKF-525A and N-Methyl 2-
Thioimidazole on Ethylenethiourea-Induced Terato-
genicity in Rats. K.S. Khera and F. Iverson, New
Research Centre, Tunney's Pasture, Ottawa, Canada

274 11:15 Inhibition of α-Aminoisobutyric Acid (AIB) Transport
Across Human Placental Membranes by Several
Membrane Active Compounds. D.R. Goodman and
R.D. Harbison, Dept. of Pharmacol., Vanderbilt Univ.,
Nashville, TN

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PLATFORM SESSION 12: Metals I

Wednesday Morning, March 12, 1980
Maryland Suite

*Chairman: G.M. Cherian, University of Western Ontario, London, Ontario, Canada*

*Assistant: B.J. Kelman, Battelle Northwest Laboratories, Richland, WA*

*Assistant: B.R. Nechay, University of Texas, Galveston, TX*

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<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>277</td>
<td>8:30</td>
<td>Selenium Toxicity: Effects on S-Adenosylmethionine (SAM) and S-Adenosylhomocysteine (SAH).</td>
<td>P.A. Toy-Manning and D. Couri, Div. of Toxicol., Ohio State Univ., Columbus, OH</td>
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<tr>
<td>278</td>
<td>8:45</td>
<td>Induction of Mitochondrial DNA Synthesis in Cell Types Prone to Neurodegeneration After Ingestion of Methylmercury in the Cat.</td>
<td>C.T. Miller, D. Krewski and L. Tryphonas, Food Toxicol. Div., Hlth. Protection Br., Ottawa, Canada</td>
</tr>
<tr>
<td>279</td>
<td>9:00</td>
<td>The Influence of Ca⁺⁺ and Mg⁺⁺ Upon the Permeability of the Rat Lung to Heavy Metal Ions.</td>
<td>S.J. Williams, M. Sabransky and D.B. Menzel, Depts. of Pharmacol. and Med., Duke Univ. Med. Ctr., Durham, NC</td>
</tr>
<tr>
<td>280</td>
<td>9:15</td>
<td>Characterization of the Potenuria Induced by Long-Term Administration of Cadmium in Rat.</td>
<td>A. Bernard, A. Goret, J.P. Buchet, H. Roels and R. Lauwerys, Unite de Toxicologie Industrielle et Medicale, Louvain Univ., Brussels, Belgium</td>
</tr>
</tbody>
</table>

Age Difference in the Susceptibility to Cadmium-Induced Testicular Damage in Rats. K.L. Wong and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS

Renal Reabsorption of δ-Aminolevulinic Acid in Control and Lead Exposed Rats. E.J. O'Flaherty and P.B. Hammond, Dept. of Environ. Hlth., Univ. of Cincinnati, Cincinnati, OH

A Neurobehavioral Profile of Chronic Lead Toxicity. L.S. Rafaels, H. Zenick, I.A. Michaelson, R. Greenland and V. Caruso, Dept. of Environ. Hlth., Univ. of Cincinnati, Cincinnati, OH. Sponsor: P.B Hammond


**POSTER SESSION 8: General Toxicology III**

Wednesday Morning, March 12, 1980

Exhibition Hall B

*Chairmen: J.J. Kocsis, Thomas Jefferson University, Philadelphia, PA
R.C. Schnall, University of Nebraska, Medical Center, Omaha, NE*

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<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
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<tr>
<td>291</td>
<td>8:30 - 10:30</td>
<td>The Subacute Toxicity of Methyl-[1-Butylcarmoyl]-2-Benzimidazole Carbamate (Benomyl®) in Rats. K.C. Baran, T.B. Barnes, R.N. Hunsinger and L.W. Masten,</td>
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</table>

Isopropylmyristate (IPM) as a Model, Species-Variable Skin Irritant: Direct Comparison of Rabbit and Human Primary Skin Irritation Responses to IPM. R.L. Campbell and L.L. Stone, The Procter & Gamble Co., Miami Valley Labs., Cincinnati, OH. Sponsor: E.V. Buehler


Comparison of Toxicity Induced by Oral Administration of Mirex and Kepone in the Male Mouse. K. Fujimori, T.P. Huang, I.K. Ho and H.M. Mehendale, Dept. of Pharmacol. and Toxicol., Univ. Mississippi Med. Ctr., Jackson, MS


The Effects of Sodium and Calcium Salts of Maleic Vinyl Ester Copolymer on Efficacy, Acute Toxicity and Serum Ions. T. Bradshaw, K. White and A. Munson, Dept. of Pharmacol., Med. Coll. of Virginia, Richmond, VA. Sponsor: J. Hayes


Ascorbic Acid Potentiated Pathologic and Toxicologic Effects of Paraquat (MV) and n-Propyl Viologen (PV) in Rats. G.E. McArin, S.J. Gee, R.I. Krieger, L.O. Lim, J.H.


1,1-Dichloroethylene Elicited Lung Injury. P.G. Forkert and E.S. Reynolds, Depts. of Pathol. & Internal Med., Univ. of Texas Med. Br., Galveston, TX
## POSTER SESSION 9: Mutagenesis II

Wednesday Morning, March 12, 1980
Exhibition Hall B

**Chairmen:** J.J. Kocsis, Thomas Jefferson University, Philadelphia, PA
R.C. Schnell, University of Nebraska Medical Center, Omaha, NE

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<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
<th>City, State</th>
<th>Sponsor(s)</th>
</tr>
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<tbody>
<tr>
<td>312</td>
<td></td>
<td>The Metabolism and Mutagenicity of Methylene Chloride</td>
<td>T. Green, Imperial Chem. Inds., Ltd., Central Toxicol. Lab., Alderley Park, Macclesfield, Cheshire U.K.</td>
<td>Dr. M.S. Rose</td>
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<td>314</td>
<td></td>
<td>Parallel Effects on Mutagenesis in Cultured V79 Chinese Hamster Cells of Phorbol and Fatty Acid Ester Tumor-Promoting Agents</td>
<td>H.E. Wey and C.S. Baxter, Dept. of Environ. Hlth., Univ. of Cincinnati, Cincinnati, OH</td>
<td>Carl C. Smith</td>
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<td>315</td>
<td></td>
<td>Inhibition of Aflatoxin B1 Mutagenesis by Conjugative Metabolism</td>
<td>J.J. Wong and D.P.H. Hsieh, Dept. of Environ. Toxicol., Univ. of California, Davis, CA</td>
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<tr>
<td>317</td>
<td></td>
<td>Mutagenic and Transforming Potential of Povidone-Iodine (PVP-I)</td>
<td>F. Kessler, D. Laskin, R. Carchman and J.F. Borzelleca, Dept. of Pharmacol., Med. Coll. of Virginia, Richmond, VA</td>
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<td>318</td>
<td></td>
<td>A Comparison of DNA Repair in Cultured Rat Hepatocytes with Bacterial Mutagenesis Using 200 Compounds</td>
<td>G.S. Probst and L.E. Hill, Lilly Res. Labs., Greenfield, IN</td>
<td>J.S. Wold</td>
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ISSUES SESSION

Wednesday, March 12, 1980
12 Noon - 1:15 P.M.
Sheraton Room

Bring a sandwich, etc. from the snack bar and participate in an open forum discussion of SOT affairs.
Chaired by President Tom Miya

SYMPOSIUM: Unresolved Mechanisms

Wednesday Afternoon, March 12, 1980
Sheraton Room
1:30 P.M. - 4:45 P.M.

Chairman: J.E. Gibson, Chemical Industrial Institute of Toxicology, Research Triangle Park, NC

Time (P.M.)

1:30  Introduction. J.E. Gibson
1:35  Immunotoxicology - New Parameters in Risk Assessment. L.D. Loose, Albany Medical College, Albany, NY
2:25  Discussion
2:35  The Monotypic Character of Atherosclerotic Lesions: Possible Initiation by Environmental Chemicals. M.R. Juchau and J.A. Bond, University of Washington School of Medicine, Seattle, WA
3:25  Discussion
3:35  Role of Lipid Metabolism in Hexacarbon Neuropathy. J.S. Bus and P.J. Gillies, Chemical Industry Institute of Toxicology, Research Triangle Park, NC
4:25  Discussion
4:45  Final Remarks. J.E. Gibson
<table>
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<tr>
<th>Paper No.</th>
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<tbody>
<tr>
<td>322</td>
<td>1:30</td>
<td>Metabolism of O-Toluidine (\textsuperscript{14}C) in the F-344 Rat.</td>
<td>D.W. Everett, O.S. Son and E.S. Fiala, Naylor Dana Inst. for Disease Prev., American Hlth. Found., Valhalla, NY. Sponsor: J.H. Weisburger</td>
</tr>
<tr>
<td>323</td>
<td>1:45</td>
<td>Metabolism of Trifluralin in Rats. F. Unlu, J.O. Nelson and R.E. Menzer, Dept. of Entomol., Univ. of Maryland, College Park, MD</td>
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<tr>
<td>324</td>
<td>2:00</td>
<td>Metabolism of O-4-Nitrophenyl O-Ethyl Phenolphosphonothioate (EPN) by the Chicken and Rat Liver, J. Lasker, K. Sivarajah, T.E. Eling and M.B. Abou-Donia, Dept. of Pharmacol., Duke Univ., Durham, NC and NEHS, Research Triangle Park, NC</td>
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<td>325</td>
<td>2:15</td>
<td>Metabolism of Rubratoxin B in Isolated Rat Parenchymal Cells. S. Watson and A.W. Hayes, Dept. of Pharmacol. &amp; Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS</td>
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<td>326</td>
<td>2:30</td>
<td>The Metabolism of Tris (1,3-Dichloro-2-Propyl) Phosphate in Rat. A.A. Nomeir and H.B. Matthews, Natl. Inst. of Environ. Hlth. Sci., Research Triangle Park, NC</td>
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<td>328</td>
<td>3:00</td>
<td>Comparison of Induction Patterns Among Phenobarbital, DDT, 3-Methyl Cholanthrene and TCDD in Rat Liver. B. Madhukar &amp; F. Matsumura, Pest. Res. Ctr., Michigan State Univ., East Lansing, MI. Sponsor: R.E. Peterson</td>
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<td>331</td>
<td>3:45</td>
<td>Hydrolysis of Phthalate Esters by Intestinal Mucosa of Rats and its Inhibition by a Carboxylesterase Inhibitor. J.D. Heck, C.S. Mehta and S.D. Murphy, Div. of Toxicol.</td>
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PLATFORM SESSION 14: Mycotoxins

Wednesday Afternoon, March 12, 1980
Maryland Suite

Chairman: P.M. Newberne, Massachusetts Institute of Technology, Cambridge, MA

Assistant: A. Rogers, Massachusetts Institute of Technology, Cambridge, MA

Paper No.  Time (P.M.)  Title and Authors


337  1:45  Effect of Rubratoxin B on Microsomal Enzymes in Mice Pretreated with Phenobarbital and 3-Methylcholanthrene. M.Y. Siraj and A.W. Hayes, Dept. of Pharmacol. and Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS

338  2:00  Citrinin Nephrotoxicity in Rats: A Light and Electron Microscopic Study. V.G. Lockard, R.D. Phillips, A.W. Hayes, W.O. Berndt and R.M. O’Neal, Depts. of Pathol., Pharmacol., & Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS

339  2:15  Irreversible Binding of 14C-Citrin in by Rat Renal Cortical Tissue. W.O. Berndt and A.W. Hayes, Dept. of
Pharmacol. & Toxicol., Univ. Mississippi Med. Ctr., Jackson, MS


341 2:45 The Effects of Penicillic Acid on Hepatic Function in the Male Mouse. P.K. Chan and A.W. Hayes, Dept. of Pharmacol. & Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS

342 3:00 Effect of Two Solvents on the Reproductive Toxicity of Secalonic Acid D in Mice. C.S. Reddy, R.V. Reddy and A.W. Hayes, Dept. of Pharmacol. & Toxicol., Univ. of Mississippi Med. Ctr., Jackson, MS


POSTER SESSION 10: Aquatic Toxicology

Wednesday Afternoon, March 12, 1980
Exhibition Hall B

Chairmen: J.J. Kocsis, Thomas Jefferson University, Philadelphia, PA
R.C. Schnell, University of Nebraska Medical Center, Omaha, NE

Paper No. Time (P.M.)

348 Enhanced Elimination of a Polychlorinated Biphenyl in Female Yellow Perch: The Effect of Egg Maturation
and Spawning. R.E. Peterson, Sch. of Pharm., Univ. of Wisconsin, Madison, WI

349 Disposition of Antipyrine in Six Marine Invertebrates: Metabolism and Distribution. S.J. Gee, R.I. Krieger and L.O. Lim, Dept. of Environ. Toxicol., Univ. of California, Davis, CA

350 Chemical Disposition in Marine Mussels Mytilus Californianus: Toxicity, Uptake and Elimination of Benzoic Acid and Four p-Substituted Homologues. L.O. Lim, S.J. Gee and R.I. Krieger, Dept. Environ. Toxicol., Univ. of California, Davis, CA

351 Permethrin Hydrolysis by Trout and Mice and its Relationship to the High Toxicity of Permethrin to Fish. A.H. Glickman and J.J. Lech, Dept. of Pharmacol. & Toxicol., Med. Coll. of Wisconsin, Milwaukee, WI


356 Comparison of Polychlorinated Biphenyl Distribution and Short Term Elimination in Yellow Perch and Rainbow Trout. P.D. Guiney and R.E. Peterson, Sch. of Pharm., Univ. of Wisconsin, Madison, WI

POSTER SESSION 11: Metals II

Wednesday Afternoon, March 12, 1980
Exhibition Hall B

Chairmen: J.J. Kociss, Thomas Jefferson University, Philadelphia, PA
R.C. Schnell, University of Nebraska Medical Center, Omaha, NE

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<th>Paper No.</th>
<th>Time (P.M.)</th>
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<tbody>
<tr>
<td>357</td>
<td>1:30 - 3:30</td>
<td>Effect of Methylmercury on Transplacental Tumors Induced by Sodium Nitrite and Ethylurea in Rats. L.D. Koller, Vet. Med., Univ. of Idaho, Moscow, ID</td>
</tr>
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</table>

Cadmium Uptake by Isolated Rat Hepatocytes. N.H. Stacey and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS


Chelation of Cadmium From Metallothionein in Chronic Exposures With BAL and DTPA. M.G. Cherian, Dept. of Pathol., Hlth. Sci. Centre, Univ. of Western Ontario, London, Canada


Effect of Cadmium on Hepatic Microsomal Enzyme Induction by Phenobarbital and 3-Methylcholanthrene in Male and Female Rats. G.G. Stebbins and R.C. Schnell, Dept. PCOL-TOX, Sch. of Pharm., Purdue Univ. West Lafayette, IN


The Effect of Ethylenediaminetetraacetic Acid (EDTA) and EDTA Plus Salicylate on Acute Cadmium Toxicity and Distribution. L.R. Cantilena, Jr. and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS


The Relationship of Histological Changes to Parameters of Collagen Synthesis in Dibutyltin-Induced Liver Injury. J.K. Yermakoff, J.V. Rodil and G.C. Fuller, Dept. of Pharmacol. & Toxicol., Univ. of Rhode Island, Kingston, RI & V.A. Hospital, Providence, RI


Establishment of Radioimmunoassay for Human Metallothionein. C. Tohyama and Z.A. Shaikh, Dept. of Pharmacol. & Toxicol., Univ. of Rochester Sch. of Med. & Dent., Rochester, NY


Metals Club Meeting

Wednesday Evening, March 12, 1980
Delaware Suite
7:00 P.M.

Chairman: Bruce J. Kelman

Open to all attendees and guests

Cash Bar

PLATFORM SESSION 15: Bioactivation

Thursday Morning, March 13, 1980
Washington Room

Chairman: J.R. Gillette, National Institute of Health,
Bethesda, MD

Assistant: J.A. Hinson, National Institute of Health,
Bethesda, MD

Assistant: L.R. Pohl, National Institute of Health, Bethesda, MD

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<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors and Affiliations</th>
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<tr>
<td>383</td>
<td>8:30</td>
<td>Direct Evidence that an Arene Oxide is a Metabolic Intermediate of 2,2',5,5'-Tetrachlorobiphenyl</td>
<td>S.T. Forgue, B.D. Preston, W.A. Hargraves, I.L. Reich¹ and J.R. Allen, Dept. of Pathol. and Wisconsin Regional Primate Res. Ctr., and Dept. of Chem.,¹ Univ. of Wisconsin, Madison, WI</td>
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<td>385</td>
<td>9:00</td>
<td>Covalent Binding of ¹⁴C-Benzene to Cellular Organelles and Bone Marrow DNA</td>
<td>D.P. Gill and A.E. Ahmed, Depts. of Pathol., Pharmacol. &amp; Toxicol., and Med., Univ. of Texas Med. Br., Galveston, TX. Sponsor: E.S. Reynolds</td>
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<tr>
<td>387</td>
<td>9:30</td>
<td>Studies on the Formation of GSH Conjugates with Reactive Metabolites of 4-Ipomeanol</td>
<td>A.R. Buckpitt</td>
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Metabolism of Carbon Tetrachloride (CC14) to Phosgene. M.W. Anders and V.L. Kubic. Dept. of Pharmacol., Univ. of Minnesota, Minneapolis, MN


Studies of the Possible Mechanisms of Triiodothyronine Enhancement of Halothane Induced Hepatic Necrosis. A. Smith, R. James, L. Berman and R. Harbison, Depts. of Pharmacol. and Anesthesiol., Vanderbilt Med. Ctr., Nashville, TN

PLATFORM SESSION 16: General Toxicology IV

Thursday Morning, March 13, 1980
Sheraton Room

Chairman: S.D. Aust, Ph.D., Michigan State University,
East Lansing, MI

Assistant: F. Guengerich, Vanderbilt University, Nashville, TN

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<th>Paper No.</th>
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<tr>
<td>397</td>
<td>8:30</td>
<td>Toxicological Guidelines for Automatic Evaluation of Fragrance Ingredients and Formulations. I. Contact</td>
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401  9:30  Functionality of Splenic Lymphocytes and Bone Marrow Cells From Mice Exposed to Polybrominated Biphenyls. W.R. Aldrich, P.J. Fraker and S. Aust, *Dept. of Biochem., Michigan State Univ., East Lansing, MI*

402  9:45  Reversibility of the Toxicological Changes Induced by Photomirex. D.C. Villeneuve, B.L. MacDonald, I. Chu, V.E. Secours and V.E. Valli, *Bur. of Chem. Hazards, Hlth. Protection Br., Ottawa, Canada and BioPath Analyses Ltd., Guelph, Ontario*

403  10:00 Health Implications of Aroclor 1016 on Nursing Rhesus Monkey Infants. D.A. Barsotti and J.R. Allen, *Dept. of Pathol., Univ. of Wisconsin, Madison, WI*


407  11:00 Effect of Concurrent Chlorphentermine and Oxygen Treatment on Newborn Lung Morphology and Biochemistry. S. Kacew and R. Narbaitz, *Dept. of Pharmacol. and Anat., Faculty of Hlth. Sci., Univ. of Ottawa, Ottawa, Ontario, Canada*

408  11:15 See Poster Session #8, "General Toxicology III", Wednesday Morning, March 12, 1980

409  11:30 Nephrotoxicity of Bis(p-Chlorophenyl)Acetic Acid (DDA) in the Rat. F.J. Koschier and S.K. Hong, *Med Sch., SUNY, Buffalo, NY; and Food & Drug Res. Labs., Inc., Waverly, NY*
POSTER SESSION 12: Oncogenesis II

Thursday Morning, March 13, 1980
Exhibition Hall B
Chairmen: J.J. Kocsis, Thomas Jefferson University, Philadelphia, PA
R.C. Schnell, University of Nebraska Medical Center, Omaha, NE

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<tr>
<td>410</td>
<td>11:45</td>
<td>Effect of 2,4,5-Trichlorophenoxyacetate (2,4,5-T) on Renal Function. F.J. Koschier and S.K. Hong, Med. Sch. SUNY, Buffalo, NY; and Food &amp; Drug Res. Labs., Inc., Waverly, NY</td>
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411 8:30 - 10:30 Comparative Chronic Toxicity of DDT in Rats and Hamsters. J.R.P. Cabral, R.K. Hall, L. Rossi, S. Bronczyk and P. Shubik, Eppley Inst. for Res. in Cancer, Univ. of Nebraska Med. Ctr., Omaha, NE


419 Mouse Skin Painting Initiation-Promotion Tests with Synthetic Crude Oils. J.W. McAlack, M. Sippel, D.F.
Krahn and R.W. Hartgrove, Jr., *E.I. Du Pont de Nemours & Co., Haskell Lab. for Toxicol. & Ind. Med.*, Newark, DE. Sponsor: J.R. Gibson

420

**Long-Term Feeding Study With 4,4'-Oxydianiline (ODA) in Rats**. A.M. Kaplan, L.W. Smith, J.R. Barnes and E.F. Stula, *E.I. Du Pont de Nemours and Co., Haskell Lab. for Toxicol. & Ind. Med.*, Newark, DE

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**POSTER SESSION 13: Nervous System II**

Thursday Morning, March 13, 1980

Exhibition Hall B

*Chairmen: J.J. Kocsis, Thomas Jefferson University, Philadelphia, PA*

*R.C. Schnell, University of Nebraska Medical Center, Omaha, NE*

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<tr>
<td>424</td>
<td>8:30 - 10:30</td>
<td><strong>Effects of Early Lead Exposure on Electroshock Seizure Thresholds in Developing Rats</strong></td>
<td>D.A. Fox and D.E. Woolley, <em>Dept. of Animal Physiol., Univ. of California, Davis, CA</em></td>
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<td>425</td>
<td></td>
<td><strong>Behavioral Toxicity Screening of Several Haloalkane Water Contaminants</strong></td>
<td>M.J. Kallman and R.L. Balster, <em>Dept. of Pharmacol., Med. Coll. of Virginia, Richmond, VA</em></td>
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<td>426</td>
<td></td>
<td><strong>Nicotine Potentiates Sodium Pentobarbital but not Ethanol Induced Sleep</strong></td>
<td>D. Saucedo, A.T. Modak and W.B. Stavinoha, <em>Div. of Toxicol., The Univ. of Texas Hlth Sci. Ctr., San Antonio, TX</em></td>
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Reduced 3-H Quinuclidinyl Benzilate (3H-QNB) Binding in the CNS but not Periphery After Induction of Anticholinesterase Tolerance. B.W. Schwab, H. Hand and S.D. Murphy, Div. of Toxicol., Dept. of Pharmacol., Univ. of Texas Med. Sch. at Houston, Houston, TX


Solubilization of Neurotoxic Esterase. C.S. Davis and R.J. Richardson, Toxcol. Res. Lab., Dept. of Environ. & Ind. Hlth., Sch. of Pub. Hlth., Univ. of Michigan, Ann Arbor, MI


Axonal Blocking, Myocardial Depressant, and Convulsant Actions of Disopyramide Phosphate. M.P. Holsapple, A. Malave and G.K.W. Yim, Dept. of Pharmacol. & Toxicol., Purdue Univ., West Lafayette, IN

Phencyclidine (PCP) - Induced Apneusis and Respiratory Arrest in Anesthetized Rats. G.K.W. Yim, M.P. Holsapple and D.J. Ritter, Dept. Pharmacol. & Toxicol., Sch. of Pharm. and Pharmacal Sci., West Lafayette, IN


Annual Business Meeting

Tuesday, March 11, 1980
3:00 P.M.
Sheraton Room
Open to all SOT members

ISSUES SESSION
Wednesday, March 12, 1980
Sheraton Room
12 Noon - 1:15 P.M.
Bring a sandwich from the snack bar and participate in an open forum discussion of SOT affairs.
Chair by President Tom S. Miya

ANNUAL BANQUET
Tuesday., March 11, 1980
7:00 P.M.
Washington Room
Open to all attendees and guests.
$19.25
Complimentary wine, courtesy Charles River Breeding Laboratories, Inc.