21st ANNUAL MEETING

February 22-26, 1982

Sheraton-Boston Hotel
Boston, Massachusetts

PROGRAM
MIXER AND RECEPTION  
Monday, February 22, 1982  
6:00 - 7:30 P.M.  
Grand Ballroom and Independence Room  
Cash Bar  
Open to all attendees and guests

ANNUAL BUSINESS MEETING  
Wednesday, February 24, 1982  
4:00 P.M.  
Grand Ballroom  
SOT Members Only  
President Robert B. Forney, Presiding

ISSUES SESSION  
Thursday, February 25, 1982  
12 Noon - 1:15 P.M.  
Grand Ballroom  
Bring a sandwich, etc. and participate in an open  
forum discussion of SOT affairs.  
Chaired by President Robert B. Forney

ANNUAL BANQUET  
Thursday, February 25, 1982  
7:00 P.M.  
Grand Ballroom  
Open to all attendees and guests  
Complimentary Wine  
Courtesy, Charles River Breeding Laboratories, Inc.
21ST ANNUAL MEETING

sponsored by

Society of Toxicology

1961

Sheraton-Boston Hotel — Boston, MA
February 22-26, 1982

**REGISTRATION FEES**

<table>
<thead>
<tr>
<th></th>
<th>Member or Post Doctoral In Training</th>
<th>Non-Member</th>
<th>Student, Full-time, Predoctoral</th>
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<td>Pre-registration</td>
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<td>At Conference</td>
<td>60.00</td>
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<td>Banquet</td>
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# SESSIONS SUMMARY

## Platform

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Tuesday 8:30 A.M.</td>
<td>Biochemical Toxicology I</td>
<td>Republic</td>
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<td>Tuesday 8:30 A.M.</td>
<td>Metals I</td>
<td>Independence</td>
<td>17</td>
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<td>Tuesday 8:30 A.M.</td>
<td>Renal-Cardiovascular</td>
<td>Room #200</td>
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<td>Tuesday 8:30 A.M.</td>
<td>Inhalation I</td>
<td>Constitution</td>
<td>19</td>
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<td>Tuesday 1:30 P.M.</td>
<td>Biotransformation/Disposition II</td>
<td>Republic</td>
<td>25</td>
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<tr>
<td>Tuesday 1:30 P.M.</td>
<td>General Toxicology I</td>
<td>Room #200</td>
<td>27</td>
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<tr>
<td>Tuesday 1:30 P.M.</td>
<td>Halogenated Hydrocarbons I</td>
<td>Independence</td>
<td>29</td>
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<tr>
<td>Tuesday 1:30 P.M.</td>
<td>Teratology/Reproduction I</td>
<td>Constitution</td>
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<td>Inhalation III</td>
<td>Republic</td>
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<td>Oncogenesis I</td>
<td>Constitution</td>
<td>39</td>
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<td>Biochemical Toxicology II</td>
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<td>Environment III</td>
<td>Republic</td>
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<td>General Toxicology II</td>
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<td>Agrochemicals II</td>
<td>Constitution</td>
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<td>General Toxicology III</td>
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<td>Neurotoxicology I</td>
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<td>Teratology/Reproduction III</td>
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<td>8:30 A.M.</td>
<td>General Toxicology IV</td>
<td>Grand Ballroom</td>
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<td>Biotransformation/Disposition IV</td>
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<td>Halogenated Hydrocarbons III</td>
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<td>Biotransformation/Disposition V</td>
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<td>Inhalation V</td>
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<td>Biotransformation/Disposition V</td>
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<td>Mutagenesis</td>
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**Symposia**

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<tr>
<td>Tuesday</td>
<td>Drugs-Noise: Auditory Insults</td>
<td>Grand Ballroom</td>
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<td>8:30 A.M.</td>
<td>Peer Review and Scientific Decision Making</td>
<td>Grand Ballroom</td>
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<td>Tuesday</td>
<td>The Role of Cellular Redox Balance in Toxicity</td>
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<td>1:30 P.M.</td>
<td>Combustion Toxicology</td>
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### Poster

(All in rear of John B. Hynes Exhibition Area; Enter from 3rd Floor of Hotel)

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GENERAL INFORMATION

REGISTRATION — SHERATON-BOSTON HOTEL
Constitution Room Foyer (2nd Floor, above Lobby) — Sunday, Feb. 21, 3:00 P.M. - 5:00 P.M.; Monday, Tuesday, Wednesday and Thursday, Feb. 22, 23, 24, 25, 7:30 A.M. - 4:00 P.M.

HOTEL ACCOMMODATIONS
The Sheraton-Boston is Conference headquarters. The following guaranteed guest room rates apply when reservations are made on the hotel form enclosed with the program packet.
The hotel accepts major credit cards.
The Sheraton-Boston will act as Housing Bureau and once capacity is reached, they will process overflow reservations in nearby hotels as needed. All reservation requests must come through the hotel.
All sessions will be held in the Sheraton-Boston Hotel and the Hynes Auditorium (Entered from 3rd floor of Hotel).

AIRPORT LIMOUSINE SERVICE
Direct limousine service is available from Boston's Logan Airport to the Sheraton-Boston hotel.

ABSTRACTS OF PAPERS (THE TOXICOLOGIST)
Distributed without charge to all members of the Society of Toxicology in advance of the meeting. Non-members will be give the abstracts with their registration at the meeting. Additional copies available at the Conference Registration Desk (2nd Floor Foyer) at $5 each.

SPOUSE HOSPITALITY
Gardner A and B (3rd Floor), 9:00 A.M. - 4:00 P.M., Tuesday, Wednesday and Thursday; 9:00 A.M. - Noon, Friday.
PLACEMENT SERVICE
Hampton A and B (3rd Floor, near escalator).
10:00 A.M. - Noon, Monday, Tuesday, Wednesday
2:00 P.M. - 4:00 P.M., Monday, Tuesday
Co-Chairmen: W.E. Rinehart, R.F. Johannsen

PRESS ROOM
Dalton A and B
8:00 A.M. - 5:00 P.M., Monday, Tuesday, Wednesday
8:00 A.M. - Noon, Thursday

CONFERENCE HEADQUARTERS
Exeter A and B (3rd Floor, near escalator).
7:30 A.M. - 5:00 P.M., Monday thru Thursday
7:30 A.M. - Noon, Friday
OFFICERS, COUNCILORS, EXECUTIVE SECRETARY

OFFICERS (1981-1982)
Robert B. Forney, President
Robert L. Dixon, Vice-President
Gabriel L. Plaa, Vice-President Elect
J. Wesley Clayton, Jr., Secretary
Richard S. Waritz, Treasurer

COUNCILORS
John Doull (1981-1983)
Ian C. Munro (1981-1983)
Perry J. Gehring, Past President

EXECUTIVE SECRETARY
William E. McCormick
475 Wolf Ledges Parkway
Akron, OH 44311-1087
(216) 762-2289

OFFICE OF THE SECRETARY
Chemistry Building 320
University of Arizona
Tucson, AZ 85721
(602) 626-4558

COMMITTEES 1981-1982

ELECTED COMMITTEES

Education Committee
Paul M. Newberne (1980-1982), Chairman
Anne P. Autor (1981-1983)
A. Wallace Hayes (1981-1983)
Roger P. Smith (1980-1982)

Finance Committee
Richard S. Waritz, Chairman
John F. Griffith (1981-1983)

Membership Committee
Evelyn G. Burtis, Ex-officio Chairman
Clifford I. Chappel (1980-1983)
Steven D. Cohen (1979-1982)
Curtis D. Klaassen (1981-1984)
APPOINTED COMMITTEES

Awards Committee
Perry J. Gehring, Chairman
Herbert Blumenthal
Michael A. Evans

Burroughs Wellcome Advisory Scholarship Committee
Tom S. Miya, Chairman
Robert L. Dixon
Harold J. Fallon
Ernest Hodgson

Nominating Committee
Tom S. Miya, Chairman
Herbert H. Cornish
Donald E. Gardner
Paul B. Hammond
John G. Keller

Program Committee
Gabriel L. Plaa, Chairman
J. Wesley Clayton, Jr., Secretary
Donald J. Ecobichon (1981-1984)
James E. Gibson (1979-1982)
Jerry B. Hook (1980-1983)
Richard J. Kociba (1979-1982)
Joseph E. Manno (1981-1984)
Roger O. McClellan (1980-1983)
R. Craig Schnell (1979-1982)
Mary Vore (1980-1983)

Technical Committee
Daniel Couri, Chairman
Thomas P. Bright
James S. Bus
William W. Carlton
Gio B. Gori
Joseph E. LeBeau
Daljit S. Sawhney
J. Jaroslav Vostal
Gary M. Williams

Committee on Regulatory Affairs and Legislative Assistance
Marshall Steinberg, Chairman
Kenneth C. Back
Paul E. Brubaker
John F. Griffith
John G. Keller

Committee on Professional Relations and Standards
Frederick W. Oehme, Chairman
Edward J. Gralla
Loren D. Koller
Roger O. McClellan
Tom S. Miya
Robert A. Scala
Robert G. Tardiff
Ralph C. Wands
Anne M. Wolven-Garrett

Board of Publications
Paul B. Hammond, Chairman (1981-1983)
Edward A. Smuckler (1980-1983)
Robert B. Forney, President
Robert L. Dixon, Auditor
A. Wallace Hayes, Auditor

Councilors for IUTOX
Evelyn G. Burtis
J. Wesley Clayton
Perry J. Gehring
Richard S. Waritz
APPOINTMENTS

Historian
Harry W. Hays

Placement
William E. Rinehart, Director
Frederick R. Johannsen, Co-Director

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

Liaison with American College of Veterinary Pathology
William W. Carlton

Liaison with American Society for
Pharmacology and Experimental Therapeutics
Frederick P. Guengerich, Chairman
Paul B. Hammond
Mary Vore

Liaison with European Society of Toxicology
Bo Holmstedt

Liaison with American Industrial Hygiene Association
J. Wesley Clayton, Jr.
Robert T. Drew
Perry J. Gehring

Liaison with Environmental Mutagen Society
David J. Brusick

Liaison with The Teratology Society
Raymond D. Harbison

Liaison with Society of Toxicologic Pathologists
John R. McCoy
FUTURE MEETINGS

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Year</th>
<th>Dates</th>
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<tr>
<td>22</td>
<td>1983</td>
<td>March 6-10</td>
<td>Caesar's Palace Las Vegas, NV</td>
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<td>23</td>
<td>1984</td>
<td>March 11-15</td>
<td>Atlanta Hilton Atlanta, GA</td>
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<td>24</td>
<td>1985</td>
<td>March 17-21</td>
<td>Town and Country Hotel San Diego, CA</td>
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<td>25</td>
<td>1986</td>
<td>Feb. 28-March 7</td>
<td>Shamrock Hilton Houston, TX</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
Verdell 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. Friess .................................... 1975-1976
Robert A. Scala ........................................ 1976-1977
Harold M. Peck ........................................ 1977-1978
Leon Goldberg .......................................... 1978-1979
Tom S. Miya ............................................ 1979-1980
Perry J. Gehring ...................................... 1980-1981
# AWARDS

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<tr>
<td>1967</td>
<td>G.L. Plaa</td>
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<td>1968</td>
<td>A.H. Conney</td>
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<td>S.S. Epstein</td>
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<td>S.D. Murphy</td>
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<td>Y. Alarie</td>
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<td>1972</td>
<td>R.L. Dixon</td>
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<td>M.F. Cranmer</td>
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<td>I.C. Munro</td>
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<td>1976</td>
<td>C.D. Klaassen</td>
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<td>M.R. Boyd</td>
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<td>P.G. Watanabe</td>
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<td>1981</td>
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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      |
| 1980                 | J.A. Last        |
|                      | P.F. Moore       |
|                      | O.G. Raabe       |
|                      | B.K. Tarkington  |
| 1981                 | Y. Alarie        |
|                      | M. Brady         |
|                      | C. Dixon         |
|                      | M. Karol         |

Arnold J. Lehman

| 1980                 | A.H. Conney      |
| 1981                 | G.L. Plaa        |

Merit

| 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     |
| 1980                 | B.L. Oser        |
| 1981                 | J.H. Weisburger  |

*Deceased
**Distinguished Fellow**

The following have been given the Distinguished Fellow Award:

- Joseph F. Borzelleca, Ph.D.
- Julius M. Coon, M.D., Ph.D.
- Frederick Coulston, Ph.D.
- William B. Deichmann, M.D., Ph.D.
- Victor A. Drill, M.D., Ph.D.
- David W. Fassett, M.D.
- O. Garth Fitzhugh, Ph.D.
- Seymour L. Friess, Ph.D.
- Leon Golberg, M.B., D.Sc., D. Phil.
- Wayland J. Hayes, Jr., M.D., Ph.D.
- Harry W. Hays, Ph.D.
- Harold C. Hodge, Ph.D.
- Don D. Irish, Ph.D.
- Paul S. Larson, Ph.D.
- Ted A. Loomis, M.D., Ph.D.
- Sheldon D. Murphy, Ph.D.
- Harold M. Peck, M.D.
- Robert L. Roudabush, Ph.D.
- Verald K. Rowe, Sc.D.
- Robert A. Scala, Ph.D.
- C. Boyd Shaffer, Ph.D.
- Henry F. Smyth, Jr., Ph.D.
- Herbert E. Stokinger, Ph.D.
- Carrol S. Weil
- John A. Zapp, Jr., Ph.D.
REFRESHER COURSES

Society of Toxicology Continuing Education Courses

(Pre-Registration necessary — See Conference
Pre-Registration form enclosed in conference packet)

1. Basic Concepts of Immunotoxicology
   Monday Morning, February 22, 1982
   Independence Room
   8:00 A.M. - Noon
   $25.00

This Course will present in a teaching form the very fundamental concepts of immunotoxicology. The intention is to start with an introduction to basic immunology followed by a description of host resistance and tumor susceptibility models, the application to humoral and cell-mediated immunity as well as macrophage activity and conclude with a "state of the art" and future approaches to immunotoxicology research. Speakers for this course will be: Drs. R.P. Sharma, J.H. Dean, L.D. Koller and A.E. Munson. All participants will receive a syllabus containing the manuscripts and graphics presented by the speakers.

2. Current Status of Scientific Considerations in Conducting Toxicological Research
   Monday Afternoon, February 22, 1982
   Independence Room
   1:00 P.M. - 5:00 P.M.
   $35.00 (including textbook)

This is the first of a series recommended by the SOT Committee on Professional Relations and Standards of Detailed Discussions of Textbooks. The text "Scientific Considerations in Monitoring and Evaluating Toxicological Research" edited by E.J. Gralla, will be used and will be provided to each attendee. Six of the authors of the text (Gralla, Jacoby, Loeb, Schwetz, Boorman and Salsburg) will lead discussions on individual chapters. The overall objective is to provide an intensely stimulating and instructive atmosphere wherein the experience and expertise of toxicologists can be exchanged, broadly disseminated and usefully applied.
Mixer and Reception
Monday, February 22, 1982
6:00 - 7:30 P.M.
Grand Ballroom and Independence Room
Cash Bar
Open to all attendees and guests
<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>9:00</td>
<td>Alteration of Calcium-Dependent GABA Release and the Enzyme Activities of Glutamic Acid Decarboxylase (GAD) and GABA-γ-Ketoglutarate Transaminase (GABA-T) in Response to the Acute and Chronic Administration of Phencyclidine (PCP).</td>
<td>J.C. Norris, T. Nabeshima, S.P. Sivam and I.K. Ho, Dept. Pharmacol. &amp; Tox., Univ. Mississippi Med. Ctr., Jackson, MS.</td>
</tr>
<tr>
<td>4</td>
<td>9:15</td>
<td>Drug Metabolizing Enzymes in C3H10T½ Cells Exposed to Polychlorinated Biphenyls (PCBs).</td>
<td>H.P. Chihla, G. Reddy and D.H. Norback, Depts. of Path., William S. Middleton Memorial Veterans' Hospital and the Univ. of Wisconsin, Madison, WI.</td>
</tr>
<tr>
<td>5</td>
<td>9:30</td>
<td>The Effect of Ascorbic Acid on Copper and Nitrite-Induced Oxidative Changes in Erythrocytes: Inter-species Differences.</td>
<td>E.J. Calabrese, G.S. Moore and M. McCarthy, Div. of Public Hlth., Univ. of Massachusetts, Amherst, MA.</td>
</tr>
<tr>
<td>6</td>
<td>9:45</td>
<td>Biochemical Toxicity in Mice of Substances Produced by Clostridium difficile.</td>
<td>M. Ehrich, Virginia-Maryland Regional College of Vet. Med., Blacksburg, VA.</td>
</tr>
</tbody>
</table>
SYMPOSIUM 1: Drugs-Noise:Auditory Insults

Tuesday Morning, February 23, 1982
Grand Ballroom
Chairman: R. Don Brown, Louisiana State University, Shreveport, LA

Time (A.M.)

8:30    Introduction. R. Don Brown, Louisiana State University, Shreveport, LA.

8:35    Auditory Insults Produced by Drugs. Robert E. Brummett, University of Oregon Health Sciences Center.

9:25    Questions and Discussion


10:10   Questions and Discussion.

10:20   Auditory Insults Produced by Interaction of Noise and Drugs. R. Don Brown, LSU School of Med. in Shreveport.

10:55   Questions and Discussion.


11:40   Questions and Discussion.

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>8:30</td>
<td>Prevention of Testicular Damage by Dietary Aluminum in Rats with Dietary Zn and Cu Deficiency</td>
<td>J. Liu and K.L. Stemmer, Univ. of Cincinnati Med. Center, Kettering Lab., Cincinnati, OH</td>
</tr>
<tr>
<td>14</td>
<td>8:45</td>
<td>Dispositional Differences of Cadmium and Mercury in Rat Hepatocyte Primary Cultures</td>
<td>R.J. Gerson and Z.A. Shaikh, Div. of Tox., Univ. of Rochester, Rochester, NY.</td>
</tr>
<tr>
<td>15</td>
<td>9:00</td>
<td>Flavor Aversions Induced by Cadmium: Importance of Route of Exposure</td>
<td>R.C. MacPhail, Neurotoxicology Div., U.S. Environmental Protection Agency, Research Triangle Park, NC. Sponsor: L.W. Reiter.</td>
</tr>
<tr>
<td>17</td>
<td>9:30</td>
<td>Cadmium Concentrations in Amniotic Fluids</td>
<td>F.W. Fochtman, C.F. Kritko and C.L. Winek, Dept. of Pharmacol.-Tox., Duquesne Univ. School of Pharm., Pittsburgh, PA.</td>
</tr>
<tr>
<td>18</td>
<td>9:45</td>
<td>The Effects of Methylmercury Binding to Microtubules</td>
<td>D.G. Vogel, R.L. Margolis and N.K. Mottet, Dept. of Pathology, Univ. of Wash. and Fred Hutchinson Cancer Research Center, Seattle, WA. Sponsor: M.R. Juchau.</td>
</tr>
<tr>
<td>23</td>
<td>11:00</td>
<td>Absorption and Transplacental Transfer of Tin Derived from Dimethyltin Dichloride and Stannous Chloride</td>
<td>E.A. Noland, P.T. Mc Cauley, R.J. Bull and K. Kelty, Health Effects Research Lab., U.S.E.P.A., Cincinnati, OH.</td>
</tr>
</tbody>
</table>
## PLATFORM SESSION 3: Renal-Cardiovascular

**Tuesday Morning, February 23, 1982**

*Room # 200 - John B. Hynes Auditorium*

**Co-Chairs: F.J. Koschier, American Cyanamid Co., Wayne, NJ**

**T. Balazs, U.S. Food & Drug Administration, Washington, DC**

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>8:45</td>
<td>Dose-Response Relationships in 2-Hexanone-Induced Potentiation of CHC13 Nephrotoxicity.</td>
<td>W.R. Hewitt and E.M. Brown, Dept. of Vet Anatomy-Physiology, Univ. of Missouri-Columbia, Columbia, MO.</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>10:00</td>
<td>Studies of the Interaction of Beta Blocking Drugs and Calcium Antagonists.</td>
<td>J.A. Vick, E.H. Herman and T. Balazs, Food &amp; Drug Administration, Washington, DC.</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>10:15</td>
<td>The Effect of Exercise on Cardiotoxic Potential of Adriamycin in Rhesus Monkeys.</td>
<td>C.R. Hassler, D.C. Thake and P. Feder, Battelle Columbus Laboratories, Columbus, OH; R.I. Hamlin, Ohio State Univ., College of Vet. Med., Columbus, OH.</td>
<td>G.L. Fisher</td>
</tr>
</tbody>
</table>
Isoproterenol-Induced Lethality in Male Mice Following Manganese, Selenium, and Cadmium Treatment. M.J. Deimling, J.B. Modrak and R.C. Schnell, Dept. of Pharmacodynamics and Tox., Univ. of Nebraska Med. Ctr., Omaha, NE.


PLATFORM SESSION 4: Inhalation I

Tuesday Morning, February 23, 1982
Constitution Room

Co-Chairs: E.J. Calabrese, Univ. of Massachusetts, Amherst, MA

Paper No.  Time (A.M.)                                                                                                                                   
37        8:30  Sensory Irritation Properties of Compounds Producing Nasal Tumors in the Rat. G.L. Kennedy, Jr., B.A. Burgess, R.J. Gardner, J.R. Gibson and H.J. Trochimowicz, E.I. du Pont de Nemours & Co., Inc., Haskell Laboratory for Toxicology and Industrial Medicine, Newark, DE.
38        8:45  Dose Comparison Between B6C3F1 Mice and F-344 Rats Following Formaldehyde Inhalation. J.C. Chang, E.A. Gross, J.A. Swenberg and C.S. Barrow, Chem. Ind. Inst. of Tox., Research Triangle Park, NC.
39        9:00  Subchronic Inhalation Toxicity Studies of n-Heptane (H) and Toluene (T) in the Rat. S.C. Lewis, Medicine and Environ. Hlth. Dept., Exxon Corporation, East Millstone, NJ; C.E. Holdsworth, American Petroleum Institute, Washington, DC.
42 9:45 Ethylene Oxide Vapor Two-Year Inhalation Study on Rats. W.M. Snellings, C.S. Weil and R.R. Maronpot, Bushy Run Research Center, Export, PA.

43 10:00 The Effect of Proposed Ozone Intermediates (in Vitro) on Normal and G-6-PD Deficient Erythrocytes in Humans and in Dorset Sheep, A Model with an Erythrocyte G-6-PD Deficiency. E.J. Calabrese, G.S. Moore and P. Williams, Div. of Pub. Hlth., Univ. of Massachusetts, Amherst, MA.

44 10:15 The Effect of Low-Level Ozone Exposure Upon the Course of p. berghei Infection in Female A/J Strain Mice. G.S. Moore, E.J. Calabrese and K.H. Mottet, Div. Public Hlth., Univ. of Massachusetts, Amherst, MA.


47 11:00 A Distributed Microprocessor Network for Control, Monitoring and Data Handling at an Inhalation Toxicology Facility. D.G. Dimmler and D.M. Bernstein, Brookhaven National Lab., Upton, NY. Sponsor: R.T. Drew.


POSTER SESSION 1A: Biotransformation-Disposition 1

Tuesday Morning, February 23, 1982
John B. Hynes Exhibition Area
Organizers: G.P. Carlson, Purdue Univ., West Lafayette, IN
J.G. Sipes, Univ. of Arizona, Tucson, AZ

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No.
Tissue Deposition of Acrylamide in Multiply-Dosed 5-week vs. 11-week Male Holtzman Rats. L.A. Rylander Yueh and D.E. Carter, Dept. of Pharmacol. and Tox., Univ. of Arizona, Tucson, AZ.

Biotransformation Enzymes (Cytochrome P-450 Dependent Mono-Oxygenases) in the Nasal Epithelial Membrane and Turbinates of Seven Species, A.R. Dahl, W.M. Hadley and J.M. Benson, Lovelace Inhalation Tox. Res. Inst., P.O. Box 5890, Albuquerque, NM.


Quantitative Precipitation of Formic Acid from Methanol. G.G. Berg, Dept. of Radiation Biol. and Biophysics, Univ. of Rochester Sch. of Med., Rochester, NY.


Metabolism of a Milkweed Cardenolide, Uscharadin, by Monarch Butterfly Larvae, Danaus Plexippus. M.A. Marty and R.I. Krieger, Dept. of Environ. Tox., Univ. of California, Davis, CA and Dept. of Vet. Science, Univ. of Idaho, Moscow, ID.

Disposition and Excretion of 1,3-Diphenylguanidine in Male Fischer Rat. Y.M. Ioannou and H.B. Matthews, Nat. Inst. Env. Hlth. Sci., Research Triangle Park, NC.


Sex Differences in the Metabolism of 2,6-Dinitrotoluene by Isolated Perfused Rat Livers. R.M. Long and D.E. Rickert, Chem. Ind. Inst. of Toxicology, Research Triangle Park, NC.


Dose Dependent Changes in Elimination and Tissue Distribution of \(^{14}\text{C}\) Dithiobiuret in the Rat. W.D. Atchinson, J. Dickins, W.R. Porter and R.E. Peterson, *School of Pharmacy, Univ. of Wisconsin, Madison, WI.*

Elimination, Tissue Distribution and Metabolism of \(^{14}\text{C}\) and \(^{35}\text{S}\) Dithiobiuret in the Rat: Evidence for Desulfuration. K.D. Williams, W.R. Porter and R.E. Peterson, *School of Pharmacy, Univ. of Wisconsin, Madison, WI.*

Synthesis, Stability in Solution, and Separation of \(^{35}\text{S}\)-Dithiobiuret from Decomposition Products and Potential Metabolites. W.R. Porter, K.D. Williams and R.E. Peterson, *School of Pharmacy, Univ. of Wisconsin, Madison, WI.*

Fate of \(^{14}\text{C}\)-Carbon Tetrachloride in Rats Following Inhalation During a Novel and Standard Workweek. D.J. Paustenbach, G.P. Carlson, G.S. Born and J.E. Christian, *Schools of Health Science and Pharmacy and Pharmacal Science, Purdue Univ., West Lafayette, IN.*


Effects of Induction and of Solubilization on *In Vitro* Alteration of Microsomal Cytochrome P-450 By Allylic Toxicants. J.M. Patel and K.C. Leibman, *Dept. of Pharmacol., Univ. of Florida, Gainesville, FL.*


Disposition of 1,2,3-Trichloropropane in Rats. R.F. Volp, D.E. Carter and I.G. Sipes. Toxicol. Program, Univ. of Arizona, Tucson, AZ.


Characterization of the Uptake of Estradiol-17β-D-Glucuronide and Taurocholic Acid in Isolated Rat Hepatocytes. W.J. Brock and M. Vore, Grad. Center for Toxicology and Dept. of Pharmacol., Univ. of Kentucky, Lexington, KY.


Comparative Rates of Benzene Metabolism in Primary Hepatocyte Cultures. S.A. Knadle, C.B. Salocks, J. Nakashima and J.L. Byard, Dept. of Environ. Tox., Univ. of California, Davis, CA.


The In Vitro Covalent Binding of Senecionine and Seneciphylline to Mouse Liver Microsomes and DNA. D.F. Eastman and H.J. Segall, Dept. of V.M. Physio. Sci., Univ. of California, Davis, CA.


Sodium Azide: Bioavailability and Metabolism in Rats. E.W. Lee, Biomedical Science Dept., General Motors Research Laboratories, Warren, MI.

In Vivo Metabolism of 3-Methylcholanthrene (MC) in Pregnant C57BL/6 and DBA/2 Mice. J.D. George, J.M. Manson, S. Vater and D. Warshawsy, Dept. Environ. Hlth., Univ. of Cincinnati, Cincinnati, OH. Sponsor: P.B. Hammond.


POSTER SESSION 1B: Environment I
Tuesday Morning, February 23, 1982
John B. Hynes Exhibition Area
Organizers: J.V. Bruckner, Univ. of Texas Med. School, Houston, TX
R.A. Roth, Michigan State Univ., East Lansing, MI

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No. 99
A Comparative Kinetics Study of Monochloramine and Chlorine in Rat. M.S. Abdel-Rehaman, D.M. Waldron and R.J. Bull, CMDNJ-New Jersey Medical School, Newark, NJ.

Paper No. 100

Paper No. 101

Paper No. 102
Microwave Induced Changes in Canalicual Membrane Function of the Rat. D.G. Lange, M.E. D'Antuono and J.M. Fujimoto, Research Services, VA Medical Center, Wood, MI and Dept. of Pharmacol. and Tox., Medical College of Wisconsin, Milwaukee, WI.

Paper No. 103

Paper No. 104

PLATFORM SESSION 5: Biotransformation/Disposition II
Tuesday Afternoon, February 23, 1982
Republic Ballroom
Co-Chairs: C.C. Smith, Univ. of Cincinnati, Cincinnati, OH
M.A. Evans, Univ. of Illinois Med. Center, Chicago, IL

Paper No. Time (P.M.)
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:45</td>
<td>The Disposition of 14C-Toxaphene in the Lactating Rat</td>
<td>G.A. Pollock and J.F. Rogauskas, Vet. and Comp. Anatomy, Pharmacology/Toxicology and Physiology, Univ. of Idaho, Moscow, ID.</td>
</tr>
<tr>
<td>4:00</td>
<td>Ring-Chain Tautomerism of the Anticoagulant Rodenticide Warfarin and its Aromatic Hydroxylated Metabolites</td>
<td>A.O. Obaseki and W.R. Porter, School of Pharmacy, Univ. of Wisconsin, Madison, WI. Sponsor: R.E. Peterson.</td>
</tr>
<tr>
<td>4:15</td>
<td>Chromatographic Translobular Migration of Xenobiotics in Rat Liver</td>
<td>S. Tsuda and T. Nakatsugawa, Dept. of Environ. and Forest Biology, State Univ. of New York, Syracuse, NY.</td>
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<tr>
<td>Paper No.</td>
<td>Time (P.M.)</td>
<td>Title</td>
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<tr>
<td>117</td>
<td>1:30</td>
<td>Response to Ethanol Containing Liquid Diets in the Fischer-344 (F-344) and Sprague-Dawley (SD) Rat.</td>
</tr>
</tbody>
</table>
SYMPOSIUM 2: Peer Review and Scientific Decision Making

Tuesday Afternoon, February 23, 1982
Grand Ballroom

Chairman: James E. Gibson, Chem. Industry Inst. of Toxicology,
Research Triangle Park, NC

Time (P.M.)
1:30 Introduction. James E. Gibson, Chemical Industry Institute of Toxicology.


2:00 The FIFRA Scientific Advisory Panel as a Model for Peer Review of Scientific Regulatory Decisions. Robert A. Neal, Chemical Industry Institute of Toxicology.

2:25 An Industrial Scientist’s Perspective on Scientific Peer Review. James F. Mathis, Exxon Corporation.

2:50 A Regulatory Scientist’s Perspective on Scientific Peer Review. Albert C. Kolbye, Jr., Food and Drug Administration.

3:15 A Labor Representative’s Perspective on Scientific Peer Review. David Parkinson, University of Pittsburgh and Consultant, United Steelworkers of America.


4:05 A Code of Ethics for Scientists Reporting and Reviewing Information on Chemicals which are Potentially Toxic to Man and/or His Environment. Leon Golberg, Duke University.

4:30 Panel Discussion — All Speakers and Audience. James E. Gibson, Moderator.
SPECIALTY SECTION MEETING
Mechanisms of Toxicity
Tuesday, February 23, 1982 — 5:15 P.M.
Republic Room

Chairman: Robert Snyder, Jefferson Med. College, Philadelphia, PA

Open to all current and prospective members of this specialty section.

PLATFORM SESSION 7: Halogenated Hydrocarbons I
Tuesday Afternoon, February 23, 1982
Independence Room

Co-Chairs: H.M. Mehendale, Univ. Mississippi Medical Center, Jackson, MS
P.G. Watanabe, Dow Chemical Co., Midland, MI

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title and Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>1:30</td>
<td>The Fate of Inhaled Methyl Chloroform (1,1,1-Trichloroethane) Following Single or Repeated Exposure in Rats and Mice. A.M. Schumann, T.R. Fox and P.G. Watanabe, Tox. Research Lab., Dow Chemical USA, Midland, MI.</td>
</tr>
<tr>
<td>130</td>
<td>1:45</td>
<td>The Pharmacokinetics and Macromolecular Interactions of Trichloroethylene in Mice and Rats as Related to Oncogenicity. W.T. Stott, J.F. Quast, and P.G. Watanabe, Tox. Res. Lab., Dow Chemical USA, Midland, MI.</td>
</tr>
<tr>
<td>131</td>
<td>2:00</td>
<td>Effect of Chlordecone on the Hepatotoxicity of 1,1,2-Trichloroethylene and Bromobenzene. H.M. Mehendale and V.G. Lockard, Depts. Pharmacol. &amp; Tox. and Pathol., Univ. Mississippi Med. Ctr., Jackson, MS.</td>
</tr>
<tr>
<td>Paper No.</td>
<td>Time (P.M.)</td>
<td>Title</td>
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<tr>
<td>134</td>
<td>2:45</td>
<td>Metabolism of Trichloroethylene by Isolated Rat Hepatocytes.</td>
</tr>
<tr>
<td>135</td>
<td>3:00</td>
<td>Relationship Between Trichloroethylene Metabolism and its Hepatotoxicity.</td>
</tr>
<tr>
<td>136</td>
<td>3:15</td>
<td>Stereochemistry of the Metabolism of 1,2-Dichloroethane to Ethylene.</td>
</tr>
<tr>
<td>137</td>
<td>3:30</td>
<td>Effect of Hypoxia on CCl, Hepatotoxicity.</td>
</tr>
<tr>
<td>139</td>
<td>4:00</td>
<td>Ethanol Potentiation of CCl, Hepatotoxicity: A Possible Role of Acetaldehyde Dehydrogenase (ALDH) Inhibition. M. Kenel and A. Kulkarni, Sch. of Pub. Hlth., Univ. of Michigan, Ann Arbor, MI.</td>
</tr>
</tbody>
</table>

**PLATFORM SESSION 8: Teratology/Reproduction I**

Tuesday Afternoon, February 23, 1982

Constitution Room

*Co-Chairs: K.S. Rao, Dow Chemical U.S.A., Midland, MI*

*R.J. Bull, U.S. Environmental Protection Agency, Cincinnati, OH*

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
<th>Authors and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>1:30</td>
<td>Assessment of the Embryotoxic and Teratogenic Potential of Nonoxynol-9 in Rats Upon Vaginal Administration.</td>
<td>H.S. Buttar, Bureau of Drug Research, Health Protection Branch, Ottawa, Canada.</td>
</tr>
</tbody>
</table>


Impact of Prenatal Lead Exposure on Biochemical Markers in Rat Liver and Heart. K.L. Blackburn, R.J. Bull and M.K. Smith, Health Effects Research Lab., USEPA, Cincinnati, OH.


POSTER SESSION 2A: Environment II
Tuesday Afternoon, February 23, 1982
John B. Hynes Exhibition Area
Organizers: J.J. Lech, Medical College of Wisconsin, Milwaukee, WI
R.A. Parent, Food & Drug Research Labs., Waverly, NY

Displayed: 1:30 P.M. — 5:00 P.M.
Attended: 1:30 P.M. — 3:00 P.M. (Even Paper Numbers)
3:00 P.M. — 4:30 P.M. (Odd Paper Numbers)

Paper No.
153

Aquatic Toxicity and Biodegradation of Caprolactam. G. Loewengart, Allied Corp., Morristown, NJ.

Tissue Distribution and Binding of Hexachlorocyclopentadiene to Proteins in Trout. P. Sinhaseni and R. Hartung, Dept. of Environ. & Ind. Hlth., Sch. of Pub. Hlth., Ann Arbor, MI; G.W. Jourdan, Rackham Arthritis Res. Unit, Univ. of Michigan, Ann Arbor, MI.


An Assay for Detecting Erythropoietic Damage in Rainbow Trout (Salmo Gairdneri) Using 59Fe Incorporation. K. Cooper and R. Snyder, Graduate Program in Tox., Rutgers Univ., Piscataway, NJ.

POSTER SESSION 2B: Inhalation II

Tuesday Afternoon, February 23, 1982

John B. Hynes Exhibition Area

Organizers: D.B. Menzel, Duke University, Durham, NC

Displayed: 1:30 P.M. — 5:00 P.M.
Attended: 1:30 P.M. — 3:00 P.M. (Even Paper Numbers)
            3:00 P.M. — 4:30 P.M. (Odd Paper Numbers)

Paper No. 161
Dosage Levels Associated with the Induction of Respiratory Tract Inflammation by Acute Exposures to Titanium Tetrachloride Smokes. B. Ballantyne, Union Carbide Corp., Charleston, WV.

Paper No. 162
LATE ANNOUNCEMENT

The Midwest Regional Chapter of the Society of Toxicology will be holding a meeting and cocktail hour at 5:30 p.m. in the Beacon Room of the Sheraton-Boston Hotel Wednesday, February 24, 1982. All members and perspective members are invited to attend.


Effects of In Vivo and In Vitro Metal Exposures on Pulmonary Macrophages. K.L. McNeill, C.J. Democko and G.L. Fisher, Battelle Columbus Labs., Columbus, OH.


POSTER SESSION 2C: Metals II

Tuesday Afternoon, February 23, 1982
John B. Hynes, Exhibition Area

Organizers: R.C. Schnell, Univ. of Nebraska, Med. Ctr., Omaha, NE
Z.A. Shaikh, Univ. of Rochester School Med., Rochester, NY

Displayed: 1:30 P.M. — 5:00 P.M.
Attended: 1:30 P.M. — 3:00 P.M. (Even Paper Numbers)
3:00 P.M. — 4:30 P.M. (Odd Paper Numbers)

Paper No.


Hepatotoxicity After Acute Exposure of Rats to Cadmium. R.E. Dudley and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS.

A Possible Difference in the Site of Metabolism of Arsenite and Arsenate in Rats. S.A. Lerman and T.W. Clarkson, Dept. of Rad. Biol. & Biophys., Univ. of Rochester, Rochester, NY.


Amelioration of Manganese-Induced Alterations of Drug Response and Metabolism by Pretreatment with Subthreshold Manganese. M.J. Deimling and R.C. Schnell, Dept. of Pharmacodynamics and Tox., Univ. of Nebraska Med. Ctr., Omaha, NE.


Effects of Dietary Protein Content on Locomotor Activity During Chronic Lead Exposure in Male and Female Rats. A.J. Verlangieri, J.J. Meyer, T.B. Barnes and J.C. Kapeghian, Dept. of Pharmacol., Univ. of Mississippi, University, MS. Sponsor: W.M. Davis.


The Effect of Lead on the Rabbit Retina. D.M. Talsma and K.L. Stemmer, Univ. of Cincinnati Medical Ctr., Kettering Lab., Cincinnati, OH.


Increased Neuron Specific Enolase (NSE) Levels in Rat Brainstem Following Perinatal Lead Treatment. E.T. Roginski, F.C. Beuthin, R.T. Louis-Ferdinand and P.J. Marangos, College of Pharmacy and Allied Health Professions, Wayne State Univ., Detroit, MI and Clinical Psychobiology Branch, NIMH, Bethesda, MD.

The Protective Role of Intranuclear Inclusion Bodies in Lead Toxicity in Rat Kidney Primary Cells. T.A. Twarog and M.G. Cherian, Dept. of Pathology, Univ. of Western Ontario, London, Ont., Canada.

Testosterone-Mediated Sexual Dimorphism in the Metabolism of Inorganic Mercury in Mice. Z.A. Shaikh, Div. of Tox., Univ. of Rochester, Rochester, NY.


Calmodulin Inhibitors Protect Rats Against Mercuric Chloride-Induced Nephrotoxicity. J.L. Cox and S.D. Harrison, Jr., Graduate Ctr. for Tox., Univ. of Kentucky, Lexington, KY; R.C. Giles, Animal Disease Diagnostic Ctr., Univ. of Kentucky, Lexington, KY.


Effects of Organotins on Maximal Electroshock Seizure(Mes) Responsiveness in Mice. S.V. Doctor and D.A. Fox, Div. of Tox., Univ. of Texas Med. Sch., Houston, TX.

SPECIALTY SECTION MEETING
Metals
Tuesday, February 23, 1982 — 5:00 P.M.
Independence Room
J. Bruce Kelman, Presiding

Time (P.M.)
5:00  Keynote Lecture "Analytical Advances in Metal Toxicology". F.W. Sunderman, Jr., Univ. of Connecticut School of Medicine, Farmington, CT.
5:45  Business Meeting
6:15  Mixer (Cash Bar)

SYMPOSIUM 3: The Role of Cellular Redox Balance in Toxicity

Wednesday Morning, February 24, 1982
Grand Ballroom
Chairwoman: Anne P. Autor, Tox. Center, University of Iowa, Iowa City, IA
Discussants: Steve D. Aust, Michigan State Univ., East Lansing, MI
Daniel B. Manzel, Duke Univ. Med. Center, Durham, NC
Donald J. Reed, Oregon State Univ., Corvallis, OR

Time (A.M.)
8:30  Introduction. Anne P. Autor, Univ. of Iowa.
8:40  Cellular Redox Changes and Response to Drugs and Toxic Agents. Helmut Sies, Institute for Physiological Chemistry, Univ. of Dusseldorf.
9:15  Discussion.
9:30  Oxygen and Redox-Active Drugs: Shared Toxicity Sites. Olen R. Brown, John M. Dalton Research Center, University of Missouri-Columbia.
10:05  Discussion.
10:20  The Effect of Selenium Deficiency on Toxicity. Raymond F. Burk, Dept. of Medicine, Univ. of Texas, San Antonio.
10:55  Discussion.
### PLATFORM SESSION 9: Inhalation III

**Wednesday Morning, February 24, 1982**  
Republic Ballroom  

**Co-Chairs: B.C. Levin, Nat'l. Bureau of Standards, Washington, DC**  
M. Costa, Univ. of Texas Med. School, Houston, TX

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>215</td>
<td>10:00</td>
<td>Phagocytosis and Dissolution of Carcinogenic aNIS Particles: Visualization by Video Intensification Microscopy</td>
<td>R.M. Evans, P.J.A. Davies and M. Costa, Div. of Tox., Dept. of Pharm., Univ. of Texas Med. School at Houston, Houston, TX.</td>
</tr>
</tbody>
</table>


PLATFORM SESSION 10: Oncogenesis I

Wednesday Morning, February 24, 1982
Constitution Room

Co-Chairs: D.H. Norback, Veterans Administration Hospital, Madison, WI
P.D. Unger, Allied Corp., Morristown, NJ

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Paper Cancelled</th>
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</thead>
<tbody>
<tr>
<td>222</td>
<td>8:30</td>
<td>Results of a Chronic Toxicity and Oncogenicity Study in Rats Following 24 Hours of Acrylonitrile Inhalation Exposure. J.F. Quast, T.S. Gushow, D.J. Schuetz, M.F. Balmer, C.N. Park and M.J. McKenna, Health &amp; Environ. Sciences, USA, Dow Chemical, USA, Midland, MI.</td>
</tr>
<tr>
<td>224</td>
<td>9:00</td>
<td>Dermal Carcinogenesis Bioassays of Diesel Particulates and Their Dichloromethane Extract, L.R. DePass, L.G. Peterson and C.S. Weil, Bushy Run Research Ctr., Export, PA; K.C. Chen, Biomedical Science Dept., General Motors Research Labs., Warren, MI.</td>
</tr>
<tr>
<td>226</td>
<td>9:30</td>
<td></td>
</tr>
<tr>
<td>Paper No.</td>
<td>Time (A.M.)</td>
<td>Title</td>
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<tr>
<td>227</td>
<td>9:45</td>
<td>Initiating and Promoting Effects of Methapyriline Assessed by the Enzyme-Altered Foci Bioassay.</td>
</tr>
<tr>
<td>229</td>
<td>10:15</td>
<td>Drug Metabolizing Enzymes in the Livers and Hepatic Tumors of Rats Treated with Polychlorinated Biphenyls.</td>
</tr>
<tr>
<td>231</td>
<td>10:45</td>
<td>Binding of 2,4-Toluenediamine to Rat Liver DNA, RNA, and Protein.</td>
</tr>
</tbody>
</table>

**PLATFORM SESSION 11: Biochemical Toxicology II**

Wednesday Morning, February 24, 1982
Room #200 - John B. Hynes Auditorium

**Co-Chairs:** M.D. Faiman, Univ. of Kansas School of Pharmacy, Lawrence, KS
D. Acosta, Univ. of Texas College of Pharmacy, Austin, TX

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>236</td>
<td>9:00</td>
<td>Altered Hepatic α Aminolevulinic Acid Dehydratase (ALAD) and Sulhydryl (SH) Content Due to Presumed Benzene Metabolites.</td>
<td>B.S. Lalili, G.S. Rao, G. Witz and B.D. Goldstein, Dept. of Environ. and Community Med., CMDNJ-Rutgers Med. School/Rutgers Univ. Joint Graduate Program in Tox., Piscataway, NJ.</td>
</tr>
</tbody>
</table>

Free Radical Formation, Lipid Peroxidation, Energy Metabolism and Intracellular Ca²⁺, Na⁺ and K⁺ in Rat Cerebral Cortex Slices Exposed to Oxygen at High Pressure. R.C. Dirks and M.D. Faiman, *Dept. of Pharmacol. and Tox., Univ. of Kansas, Lawrence, KS.*


In Vitro Hepatotoxicity of the Glutathione Depleters Diethylmaleate, Iodoacetamide, and Acetaminophen. D.B. Mitchell and D. Acosta, *College of Pharmacy, Univ. of Texas, Austin, TX.*


D-Galactosamine Cytotoxicity in Primary Cultures of Postnatal Rat Hepatocytes. K.S. Santone and D. Acosta, *College of Pharmacy, Univ. of Texas, Austin, TX.*


**POSTER SESSION 3A: Teratology/Reproduction II**

Wednesday Morning, February 24, 1982

John B. Hynes Exhibition Area


G.R. Thompson, Int’l. Flavors and Fragrances, Union Beach, NJ

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No.


Failure of Phthalate Acid Esters (PAE) to Stimulate Lipid Peroxidation in Rat Reproductive Organs. W.C. Brogan III, K.A. Curto and J.A. Thomas, Dept. Pharmacol. and Tox., West Virginia Univ. Med. Ctr., Morgantown, WV.


Transplacental Toxicity Associated with Genetic Differences at the Murine AH Locus. R.G. York and J.M. Manson, Kettering Lab., Univ. of Cincinnati, Cincinnati, OH. Sponsor: P.B. Hammond.


Reproductive Toxicology of Omadine MDS. D.E. Johnson and F.X. Wazeter, International Research and Development Corp., Mattawan, MI; J.H. Wedig, Olin Corp., New Haven, CT.


Reproductive Toxicity of Methyl-(1-Butylcarbamoyl)-2-Benzimidazole Carbamate (Benomyl) in Male Rats. T.B. Barnes, K.M. Hayward, A.J. Verlangieri and M.C. Wilson, Dept. of Pharmacol., Univ. of Mississippi, University, MS. Sponsor: W.M. Davis.


The Role of Gut Microflora in Nitrobenzene-Induced Testicular Necrosis. A.A. Levin, J.A. Popp and J.G. Dent, Chemical Ind. Inst. of Tox., Research Triangle Park, NC.


POSTER SESSION 3B: Metals III

Wednesday Morning, February 24, 1982
John B. Hynes Exhibition Area

Organizers: C.D. Klaassen, Univ. Kansas Med. Ctr., Kansas City, KS
D.A. Fox, Univ. of Texas Med. School, Houston, TX

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No. 279
Studies on the Mechanism of Tolerance to Cadmium Toxicity. P.L. Goering and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS.

Effects of Cadmium and Zinc in Vitro on Testicular and Hepatic Microsomal Benzo(A)Pyrene and Steroid Metabolism. L.T. Wetzel and H.D. Colby, West Virginia Univ. Med. Ctr., Morgantown, WV.


The Influence of Chronic Manganese Administration and EDTA Treatment on the Tissue Levels and Urinary Excretion of Mn, Zn, Fe, and Cu in Rats. A.M. Scheuhammer and M.G. Cherien, Dept. of Pathology, Univ. of Western Ontario, London, Ont., Canada.


Altered Lead Distribution in Thiamine—Treated Rodents. R.T. Louis-Ferdinand, L. Glass, R. Sharp and F.C. Beuthin, College of Pharmacy and Allied Health Professions, Wayne State Univ., Detroit, MI.


Effects of Inorganic Lead on Carbonic Anhydrase Activity and Regional Brain Lead and Zinc Levels. D.A. Fox and R. Ku, Div. of Tox., Dept. of Pharm., Univ. of Texas Med. Sch., Houston, TX.
Demethylation of Methylmercury by Mouse Gut Flora 
In Vitro — Effect of Age and Diet. I.R. Rowland, BIBRA, 
Woodmansterne Rd., Carshalton, Surrey, U.K.; R.D. 
Robinson and R.A. Doherty, Environ. Hlth. Sciences Ctr., 
Univ. of Rochester, Rochester, NY.

Distribution and Demethylation of Methylmercury in 
Neonatal Rats. D.J. Thomas, Sch. Hyg., Johns Hopkins 
Univ., Baltimore, MD; H.L. Fisher and L.L. Hall, USEPA/ 
HERL, Research Triangle Park, NC; P. Mushak, UNC Sch. 
Med., Chapel Hill, NC; M. Sumler, NSI, Research 
Triangle Park, NC.

Sex Differences in Mercury Distribution and Excretion 
by Methylmercury Treated Rats. H.L. Fisher and L.L. 
Hall, USEPA/HERL, Research Triangle Park, NC; D.J. 
Thomas, Sch. Hyg., Johns Hopkins Univ., Baltimore, MD; 
P. Mushak, UNC Sch. Med., Chapel Hill, NC; M. Sumler, 
NSI, Research Triangle Park, NC.

Role of Gut Flora in Mercury Excretion After Methyl- 
mercury Administration in the Mouse. I.R. Rowland, 
BIBRA, Woodmansterne Rd., Carshalton, Surrey, U.K.; 
Univ. of Rochester, Rochester, NY. Sponsor: T.W. 
Clarkson.

Effects of Disodium Tetrachloropalladate on Isolated 
Rat Liver Mitochondria. R.E. Biagini and W.J. Moorman, 
National Inst. for Occupational Safety and Health, Div. 
of Biomedical and Behavioral Science, Cincinnati, OH; 
G.W. Winston, Mt. Sinai School of Medicine, Dept. of 

Factors Affecting Nickel Subsulfide Toxicity. D.A. 
McNeill, C.L. Chrisp and G.L. Fisher, Battelle Columbus 
Labs., Columbus, OH.

Effect of Inadequate Vitamin E and/or Selenium 
Nutrition on Arachidonic Acid Metabolism in Rat 
Tissues. T.L. Grasso, T.J. Labosh, C.E. Thomas, C.C. 
Reddy, R.W. Scholz and E.J. Massaro, Pennsylvania 
State Univ., University Park, PA.

Metal Ion Toxicity in Drosophila. N.T. Christie and K.B. 
Jacobson, Univ. of Tennessee - Oak Ridge Grad. Sch. of 
H.P. Witschi.

Neuropharmacological Analysis of the Anticonvulsant 
Effects of Triethyltin (TET) in Adult Mice. D.A. Fox, 
Dept. of Pharm., Univ. of Texas Med. Sch., Houston, TX.

Effects of Triethyltin on the Postnatal Development of 
the Cerebral Pentose Phosphate Pathway. R.M. Rocco, 
J.B. Blumber and D.R. Brown, Program in Tox., North- 
eastern Univ., Boston, MA.

Studies on the Neurotoxicity of Trimethyltin (TMT). 
S.V. Doctor, L.G. Costa, D. Kendall, S.J. Enna and S.D. 
Murphy, Div. of Tox. and Dept. of Neurobiology and 
Anatomy, Univ. of Texas Med. Sch., Houston, TX.
### PLATFORM SESSION 12: Environment III

**Wednesday Afternoon, February 24, 1982**  
**Republic Ballroom**  
**Co-Chairs: L.S. Kaminsky, N.Y. State Health Dept., Albany, NY**  
**G.V. Lovewengart, Allied Chemical Co., Morristown, NJ**

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
<th>Authors/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>309</td>
<td>2:00</td>
<td>Binding of Carboxylic Acid to Macromolecules in Rat Tissues.</td>
<td>J.T. Stevens, Ciba-Geigy Corp., Greensboro, NC; J.D. Farmer, U.S.E.P.A., Research Triangle Park, NC.</td>
</tr>
</tbody>
</table>


PLATFORM SESSION 13: General Toxicology II

Wednesday Afternoon, February 24, 1982
Room #200 - John B. Hynes Auditorium

M.A. Gallo, Rutgers Univ. Med. Sch., Piscataway, NJ

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>314</td>
<td>1:00</td>
<td>Comparative Hazards of Methanol, Ethanol, Isopropanol and Gasoline Alone and in Mixture as Fuels for Vehicles.</td>
<td>H.S. Posner, NIEHS, Research Triangle Park, NC. Sponsor: J.A. Moore.</td>
</tr>
<tr>
<td>318</td>
<td>2:00</td>
<td>Assessing the Reversibility of Thyroid Lesions that Result from Feeding ETU.</td>
<td>D.L. Arnold, M.G. Bickis, E.A. Nera, P.F. McGuire and I.C. Munro, Food Directorate, Health Protection Branch, Ottawa, Ont. Canada.</td>
</tr>
</tbody>
</table>
**POSTER SESSION 4A: Immunotoxicology**

Wednesday Afternoon, February 24, 1982

John B. Hynes Exhibition Area

Organizers: S. Cohen, Univ. of Connecticut, Storrs, CT
L.D. Koller, Univ. of Idaho, Moscow, ID

Displayed: 1:00 P.M. — 5:00 P.M.
Attended: 1:00 P.M. — 2:30 P.M. (Even Paper Numbers)
2:30 P.M. — 4:00 P.M. (Odd Paper Numbers)

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Title</th>
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<tbody>
<tr>
<td>325</td>
<td>Methods for Inducing and Eliciting Delayed Contact Hypersensitivity by Vaginal or Skin Exposures in Female Guinea Pigs. E.A. Newmann and E.V. Buehler, Procter &amp; Gamble Co., Miami Valley Labs., Cincinnati, OH.</td>
</tr>
<tr>
<td>329</td>
<td>A Proinflammatory Effect of TCDD on Carageenan-Induced Inflammation in the Rat Paw. H.M. Theobald, R.W. Moore and R.E. Peterson, School of Pharmacy, Univ. of Wisconsin, Madison, WI.</td>
</tr>
</tbody>
</table>
The Effect of 12-O-Tetradecanoyl Phorbol-13-Acetate (TPA) on the Antibody Producing Capabilities of In Vitro Sensitized Spleen Cells. G. Shopp, K. White and A. Munson, Dept. of Pharmacol., Med. College of Virginia, Richmond, VA.

Fat Quality and Quantity, Dimethylhydrazine (DMH) and Immune Function. M. Locniškar, K.M. Nauss and P.M. Newberne, Dept. of Nutr. and Fd. Sci., M.I.T., Cambridge, MA.


Organophosphate (OP) Poisoning and Suppression of the Primary IgM Response to Sheep Red Cells (SRC) in C57B1/6 Mice. G.P. Casale, S.D. Cohen and R.A. DiCapua, Sch. Pharmacy, Univ. Connecticut, Storrs, CT.

Effects of Parathion on the IgM and IgG Responses to Sheep Red Cells (SRC) in Two Mouse Strains. G.P. Casale, R.A. DiCapua and S.D. Cohen, Sch. of Pharmacy, Univ. Connecticut, Storrs, CT.


POSTER SESSION 4B: Agrochemicals I

Wednesday Afternoon, February 24, 1982
John B. Hynes Exhibition Area
Organizers: M.B. Abou-Donia, Duke Univ. Med. Ctr., Durham, NC
R.L. Krieger, Univ. of Idaho, Moscow, ID

Displayed: 1:00 P.M. — 5:00 P.M.
Attended: 1:00 P.M. — 2:30 P.M. (Even Paper Numbers)
2:30 P.M. — 4:00 P.M. (Odd Paper Numbers)

Paper No.


Allergic Hypersensitivity to the Insecticide Malathion in Mice J.R. Cushman and J.C. Street, Tox. Program, Utah State Univ., Logan, UT.


Subchronic Toxicity of Ethylenethiourea in Mice and Rats. P. Kurtz, A. Peters, D. Donofrio and R. Chhabra, Battelle Columbus Labs., Columbus, OH and National Inst. of Environ. Hlth. Sciences, Research Triangle Park, NC.


POSTER SESSION 4C: Oncogenesis II

Wednesday Afternoon, February 24, 1982
John B. Hynes Exhibition Area

Organizers: J.P. Gibson, Merrill Dow Pharmaceuticals, Cincinnati, OH
N.P. Page, NIOSH, Rockville, MD

Displayed: 1:00 P.M. — 5:00 P.M.
Attended: 1:00 P.M. — 2:30 P.M. (Even Paper Numbers)
2:30 P.M. — 4:00 P.M. (Odd Paper Numbers)

Paper No.

344 Transplantation Studies with Spontaneous and Induced Mouse Hepatic Nodules. E.M. Essigmann and P.M. Newberne, Toxicol-Sisa, Inc., Cambridge, MA.

345 The Gamma-Glutamyl Transpeptidase (GGT) Activity of Liver Lesions in Rats Exposed to Aroclor 1260. H.P. Cihla, R.H. Weltman and D.H. Norback, Wm. S. Middleton Mem. VA Hospital, Madison, WI; H.C. Pitot, McArthur Lab. for Cancer Res. and the Univ. of Wisconsin, Madison, WI.


An Evaluation of Dimethylnitrosamine (DMN) - Induced Hepatocellular Alterations in the Newborn Mouse Model Using Histochemical and Histoenzymatic Markers. K.C. Carter, A.J. Gandolfi and I.G. Sipes, Tox. Program, Univ. of Arizona, Tucson, AZ.


The Significance of Cholangiofibrosis as a "Preneoplastic Lesion". J.G. Evans, D.M. Conning and E.C. Appleby, The British Industrial Biological Research Association, Woodmansterne Road, Carshalton, Surrey, SM5 4DS. U.K.


361 The Use of Mouse and Hamster Cells in the Hepatocyte Primary Culture (HPC)/DNA Repair Test. C.A. McQueen, D.M. Kreiser and G.M. Williams, American Health Foundation, Valhalla, NY.

362 Inhibition of Aflatoxin B1 Carcinogenesis in Rainbow Trout by Dietary β-Naphthoflavone (β-NF), and Indole-3-Carbinol (I-3-C). J.D. Hendricks, J.E. Nixon, G.S. Bailey and R.O. Sinnhuber, Dept. of Food Sci. & Tech., Oregon State Univ., Corvallis, OR.

363 Damage to Rat Liver DNA From In Vivo Exposure to Monocrotaline, A Pyrrolizidine Alkaloid. T.W. Petry, G.T. Bowden, R.J. Huxtable and I.G. Sipes, Depts. of Pharmacol. and Radiation Oncology, Univ. of Arizona College of Med., Tucson, AZ.


365 Acrylamide as a Tumor Initiator in the Mouse Skin. R.J. Bull, M. Robinson and D. Cmehil, Health Effects Research Lab., USEPA, Cincinnati, OH.

Initiation-Promotion Studies with Coal Liquefaction Materials. D.D. Mahlum, Pacific Northwest Lab., Richland, WA.


ANNUAL BUSINESS MEETING
Wednesday, February 24, 1982
4:00 P.M.
Grand Ballroom
SOT (Active and Retired) Members Only
President Robert B. Forney, Presiding
American Board of Toxicology
Open Forum
Wednesday, February 24, 1982 — 5:00 P.M.
Grand Ballroom
*Seymour L. Friess, Presiding*

The officers of ABT will be available to discuss certification procedures and objectives.

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**SPECIALTY SECTION MEETING**

Reproduction Toxicology
Wednesday, February 24, 1982 — 5:30 P.M.
Republic Room
*E. Marshall Johnson, Presiding*

Cash Bar

Open to all present and prospective members of this specialty section.

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**Mid Atlantic Regional Section**

Wednesday, February 24, 1982 — 5:30 P.M.
Constitution Room
*Chairman: Gary L. Lage*

Open to all members and prospective members of the section.

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**SPECIALTY SECTION MEETING**

Neurotoxicology
Wednesday, February 24, 1982 — 5:30 P.M.
Independence Room
*Mohamed Abou-Donia, Presiding*

Cash Bar

Open to all present and prospective members of this specialty section.
PLATFORM SESSION 14: Agrochemicals II

Thursday Morning, February 25, 1982
Constitution Room

Co-Chairs: R.W. Chadwick, U.S. Environ. Protection Agency,
Research Triangle Park, NC
M.R. Montgomery, Veterans Admin., Tampa, FL

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
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<tbody>
<tr>
<td>376</td>
<td>8:30</td>
<td>The Toxicity of Methyl Carbamate in Fischer 344 Rats and B6C3F1 Mice: W.C. Hall, K.K. Hwang and M. Dinowitz, Microbiological Associates, Bethesda, MD; R.M. Kovatch, Tracor Jetco, Inc., Rockville, MD. Sponsor: R.E. Kouri.</td>
</tr>
<tr>
<td>379</td>
<td>9:15</td>
<td>Kinetic Analysis of Species Difference in Acetylcholinesterase Sensitivity to Organophosphate Insecticides: C. Wang and S.D. Murphy, Div. of Tox., Univ. of Texas Med. Sch., Houston, TX.</td>
</tr>
<tr>
<td>381</td>
<td>9:45</td>
<td>Ascorbic Acid and Paraquat: Oxygen Depletion with Concurrent Oxygen Activation: M.R. Montgomery, J. Furry, S.J. Gee and R.I. Krieger, VA Hospital and Depts. of Pharm. and Comprehensive Med., Univ. of S. Florida, Tampa, FL and Dept. of Veterinary Med., Univ. of Idaho, Moscow, ID.</td>
</tr>
<tr>
<td>383</td>
<td>10:15</td>
<td>Differential Toxic Responses of Rats and Gerbils to the Insecticide Carbaryl: I.S. Silver and H.W. Dorough, Graduate Center for Tox., Univ. of Kentucky, Lexington, KY.</td>
</tr>
<tr>
<td>384</td>
<td>10:30</td>
<td>The Influence of Dietary Fiber on the Absorption and Disposition of Mirex: J.D. deBethizy and J.C. Street, Tox. Graduate Program, Utah State Univ., Logan, UT.</td>
</tr>
</tbody>
</table>
The Effect of Phenotypic Differences and Subchronic Pretreatment on the Metabolism of Lindane by Inbred Mice. R.W. Chadwick, M.F. Copeland, R. Froehlich, J.D. Perry and G.L. Wolff, HERL, USEPA, Research Triangle Park, NC.


Organophosphorus - Induced Neurite Degeneration in Human Neuroblastoma Cells. D.G. Graham and M.B. Abou-Donia, Depts. of Path. and PharmacoL, Duke Univ. Med. Center, Durham, NC.

PLATFORM SESSION 15: General Toxicology III

Thursday Morning, February 25, 1982
Room #200 - John B. Hynes Auditorium

Co-Chairs: F.R. Alleva, U.S. Food & Drug Admin., Washington, DC
S. Kacew, Univ. of Ottawa, Ottawa, Ontario, Canada

Paper No. Time (A.M.)
386 10:45 The Effect of Phenotypic Differences and Subchronic Pretreatment on the Metabolism of Lindane by Inbred Mice. R.W. Chadwick, M.F. Copeland, R. Froehlich, J.D. Perry and G.L. Wolff, HERL, USEPA, Research Triangle Park, NC.

388 8:30 The Subacute Oral Toxicity of a 5:1 Combination of Sulfadimethoxine and Ormethoprim in the Dog. T.J. Hayes, R.M. McClain and H. Western, Dept. of Tox. and Path., Hoffmann-La Roche, Inc., Nutley, NJ.


Species Differences in Anemia Caused by Phthalazine Derivative Antihypertensive Drugs. S. Takayama, Y. Akiyama, T. Onodera and T. Akimoto, Res. Inst. of Daiichi Seiyaku, Tokyo, Japan.


The Effect of Adriamycin Cardiotoxicity on Essential Trace Metal Metabolism in the Rat Heart. B.C. Lee and K.L. Stemmer, Univ. Cincinnati Med. Ctr., Kettering Lab., Cincinnati, OH.

Pulmonary Responsiveness to Chlorcyclizine: Comparison Between Newborn and Adult Rats. S. Kacew, M.R. Parulekar and R. Narbaitz, Depts. of Pharmacol. and Anatomy, Univ. of Ottawa, Ottawa, Ont.


PLATFORM SESSION 16: Neurotoxicology I

Thursday Morning, February 25, 1982

Republic Room

Co-Chairs: J.S. Bus, Chemical Industry Institute of Toxicology, Research Triangle Park, NC
L.R. Weiss, U.S. Food and Drug Administration, Washington, DC

Paper No.  Time (A.M.)

400  8:30  Inhibition of Retrograde Axoplasmic Transport by Acrylamide. M.S. Miller, T.F. Burks and I.G. Sipes, Program in Pharmacol. and Tox., Arizona Hlth. Sciences Ctr., Tucson, AZ.


403  9:15  Comparative Effects of Phenylpropanolamine with Ephedrine and Dextroamphetamine on Spontaneous Motor Activity in Hamsters. L.R. Weiss and S. Joynes, Div. of Drug Biology, Food and Drug Admin., Washington, DC.
SYMPOSIUM 4: Combustion Toxicology

Thursday Morning, February 25, 1982
Grand Ballroom
Chairman: Charles F. Reinhardt, Haskell Laboratories,
E.I. du Pont de Nemours and Co., Newark, DE

<table>
<thead>
<tr>
<th>Time (A.M.)</th>
<th>Presentation</th>
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<tr>
<td>8:30</td>
<td>Introduction. C.F. Reinhardt, Haskell Labs.</td>
</tr>
<tr>
<td>8:45</td>
<td>Generation of Combustion Atmospheres in the Laboratory for Purposes of Toxicological Assessment. G.E. Hartzell, Southwest Research Institute, San Antonio.</td>
</tr>
<tr>
<td>9:45</td>
<td>Break.</td>
</tr>
<tr>
<td>10:00</td>
<td>Assessment of the Acute Toxicity of Thermal Decomposition Products of Polymeric Materials. Yves Alarie, Univ. of Pittsburgh.</td>
</tr>
<tr>
<td>11:30</td>
<td>Discussion.</td>
</tr>
</tbody>
</table>


408  10:30  Modification of Central Nervous System Endogenous Phosphorylation in Organophosphorus Delayed Neuropathy. D.J. Huggins and R.J. Richardson, Sch. of Pub. Hlth., The Univ. of Michigan, Ann Arbor, Mi.


PLATFORM SESSION 17: Teratology/Reproduction III

Thursday Morning, February 25, 1982

Independence Room

Co-Chairs: J.S. Cranmer, Univ. of Arkansas for Med. Science, Little Rock, AR
S.B. Harris, Science Applications, Inc., La Jolla, CA

Paper No.  Time (A.M.)  Title


Adrenal Function and Hepatic Metabolism in Adult Mice Exposed in Utero to Carbofuran or Diazinon: A Longitudinal Evaluation. J.S. Cranmer, D.L. Avery and M.F. Cranmer, Div. of Interdisciplinary Toxicology, Univ. of Arkansas for Medical Sciences and Jefferson Professional Services, Little Rock, AR.


POSTER SESSION 5A:  
Biotransformation/Disposition III  

Thursday Morning, February 25, 1982  
John B. Hynes Exhibition Area  
Organizers: D.R. Brown, Northeastern Univ., Boston, MA  
M.A. Evans, Univ. of Illinois Med. Ctr., Chicago, IL  

Displayed: 8:30 A.M. — Noon  
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)  
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)  

Paper No.  
424  

425  

426  

427  

428  

429  

430  

431  
Toxicology of Retinoids: Metabolism of Arachidonic Acid by Platelets After 14-day Retinoic Acid Treatment in Rats. S.D. Harrison, Jr. and C.J. Viau, Graduate Center for Tox., Univ. of Kentucky, Lexington, KY.
Evaluation of Exposure Levels to Phthalate Acid Esters During Blood Transfusion. R. Kardish and M. Tocchi, Canadian Red Cross, B.T.S., Ottawa; G. Posen, Renal Dialysis Unit, Ottawa Civic Hospital; R.K. Smiley, Dept. of Medicine, Ottawa General Hospital; J.M. Bowman and G. Rock, Canadian Red Cross, B.T.S., Winnipeg, Manitoba. Sponsor: J.S. Woods.


The Disposition and Metabolism of Diphenylhydantoin in Maternal, Fetal and Neonatal Tissues After Perinatal Exposure of Rat Dams. A.E. Chin, P.J. Kurtz, B.D. Carlton, A.C. Peters and R.S. Chhabra, Battelle Memorial Inst., Columbus, OH and National Inst. of Environ. Health Sciences, Research Triangle Park, NC.


The Effect of Pregnancy and Estradiol-17β Treatment on the Biliary Transport Maximum of Organic Anions in the Isolated Perfused Rat Liver. A.C. Auaksakul and M. Vore, Grad. Center for Tox. and Dept. of Pharmacol., Univ. of Kentucky, Lexington, KY.


The Nephrotoxicity of 1,2-Dichloroethane and 1,1-Dichloroethylene in Male Sprague-Dawley Rats. N.M. Jackson, W.J. Al-Hassan and R.B. Conolly, Tox. Program, Sch. of Pub. Hlth., The Univ. of Michigan, Ann Arbor, MI. Sponsor: H.H. Cornish.

The Effect of Ubiquinone-10 Antagonism Upon the Acute Toxicity of Doxorubicin. A.B. Combs and E. Lewandowski, Dept. of Pharmacol. of the College of Pharmacy; K. Folkers, Inst. for Biomedical Research, Univ. of Texas, Austin, TX.

Effect of a Low-Protein Diet on Contraceptive Steroid-Induced Cholestasis in Female Rats. A. Idris, U.A. Boelsterli, H. Kotik and T. Balazs, Div. of Drug Biology, Food and Drug Administration, Washington, DC.


In Vivo Genotoxic Effect of 1,2-Dichloroethane in Male B6C3F1 Mice. R.D. Storer, P.A. Bank and R.B. Conolly, Tox. Program, Sch. of Pub. Hlth., The Univ. of Michigan, Ann Arbor, MI. Sponsor: H.H. Cornish.
POSTER SESSION 5B: Halogenated Hydrocarbons II

Thursday Morning, February 25, 1982
John B. Hynes Exhibition Area

J.A. Moore, Nat’l. Inst. Environ. Hlth. Sciences, Research
Triangle Park, NC

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No.
457

458
Depletion of Glutathione by Methyl Chloride and Relationship to Lipid Peroxidation. D.J. Kornbrust and J.S. Bus, Chemical Industry Inst. of Tox., Research Triangle Park, NC.

459

460
Effect of TCDD on the Response of Rat Liver to Partial Hepatectomy. B.J. Christian and R.E. Peterson, Univ. of Wisconsin, Madison, Wi.

461
Comparison of Body Weight Loss and Oxygen Consumption in Rats Treated with 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Pair-Fed Control Rats. M.D. Seefeld, S.W. Corbett, R.E. Keesey and R.E. Peterson, Univ. of Wisconsin, Madison, Wi.

462
Effect of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) on Food Intake, Body Weight and Energy Expenditure in the Rat. M.D. Seefeld, S.W. Corbett, R.E. Keesey and R.E. Peterson, Univ. of Wisconsin, Madison, Wi.


Relationship of Tissue Non-Protein Sulphydryl Groups (NPS) to the Toxic Effects of 1,2-Dibromo-3-Chloropropane (DBCP). W.M. Kluwe, A. Greenwell and F. Harrington, National Tox. Program, Research Triangle Park, NC. Sponsor: J.A. Moore.


The Effect of CCl₄ Exposure on Mitochondrial Membrane Phospholipids. A. Wisner-Gebhart, R.A. Head and M.J. Brabec, Tox. Program, Sch. of Pub. Hlth., The Univ. of Michigan, Ann Arbor, MI.

The Effect of 1,3-Butanediol on the Hepatotoxic Action of CCl₄ in Rats. L.A. Hewitt, W.R. Hewitt and G.L. Plaa, Dept. de Pharmacologie, Université de Montreal, Montreal, Quebec, Canada.

Effect of Calcium Antagonists on Carbon Tetrachloride-Induced Liver Necrosis. L.D. Schuman and M.A. Evans, Interdisciplinary Tox. Program, Environmental and Occupational Hlth. Sciences, School of Pub. Hlth. and Dept. of Pharmacol., College of Medicine, Univ. of Illinois Med. Ctr., Chicago, IL.


Effects of Structure on the Activity of Polybrominated Biphenyls (PBBs) as Microsomal Enzyme Inducers. L.W. Robertson, A. Parkinson and S. Safe, College of Vet. Medicine, Texas A&M Univ., College Station, TX and Dept. of Chemistry, Univ. of Guelph, Guelph, Ont., Canada.

2,3,4,4',5'-Pentachlorobiphenyl: Segregation of Activity with the Ah Locus. A. Parkinson, L.W. Robertson, M.A. Campbell, L. Uhlig, S. Bandiera and S. Safe, Guelph-Waterloo Centre for Graduate Work in Chemistry, Univ. of Guelph, Guelph, Ontario and College of Vet. Med., Texas A&M Univ., College Station, TX.

Hepta- and Octachloronaphthalene Congeners are Potent Inducers of Rat Hepatic Microsomal Benzo[a]Pyrene Hydroxylase. M.A. Campbell, L. Safe, S. Bandiera, L.W. Robertson and S. Safe, Dept. of Chemistry, Univ. of Guelph, Guelph, Ont., Canada and College of Vet. Med., Texas A&M Univ., College Station, TX.


Elevation of Hepatic Conjugated Dienes in the Absence of Cellular Injury in 1 Day-Old Rats After Carbon Tetrachloride (CC14) Treatment. A.T. Shehata and M. Hitchcock, Yale Univ. and John B. Pierce Foundation, New Haven, CT.

The Transfer of 3,4,5,3',4',5'-Hexachlorobiphenyl (6-CB) from Mothers to Fetuses and Nursing Offspring. M.J. Vodicnik and J.J. Lech, Dept. of Pharm. & Tox., Med. College of Wisconsin, Milwaukee, WI.


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ISSUES SESSION
Thursday, February 25, 1982
12 Noon - 1:15 P.M.
Grand Ballroom

Bring a sandwich, etc. and participate in an open forum discussion of SOT affairs.

Chaired by President Robert B. Forney
<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>484</td>
<td>2:00</td>
<td>Ocular Manifestation Produced by 6-Aminonicotinamide. J.A. Render and W.W. Carlton, Dept. of Vet. Microbiol. and Pathol., Purdue Univ., West Lafayette, IN.</td>
<td></td>
</tr>
<tr>
<td>486</td>
<td>2:30</td>
<td>Concentration-Dependent Induction of the Pulmonary Hypersensitivity Response to Toluene Diisocyanate. M.H. Karol, Grad. Sch. of Pub. Hlth., Univ. of Pittsburgh, Pittsburgh, PA.</td>
<td></td>
</tr>
<tr>
<td>488</td>
<td>3:00</td>
<td>Dermal Sensitization by Toluene Diisocyanate (TDI). F.J. Koschier, E.J. Burden, C.S. Brunkhorst and M.A. Friedman, American Cyanamid, Wayne, NJ.</td>
<td></td>
</tr>
</tbody>
</table>
PLATEFORM SESSION 19:  
Biotransformation/Disposition IV

Thursday Afternoon, February 25, 1982
Room #200 - John B. Hynes Auditorium

Co-Chairs: M-T.S. Hsia, Univ. of Wisconsin, Madison, WI
R.E. Talcott, San Francisco General Hospital, San Francisco, CA

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (P.M.)</th>
<th>Title</th>
<th>Authors/Institutions</th>
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</thead>
<tbody>
<tr>
<td>495</td>
<td>1:45</td>
<td>Kinetic Analyses of Chlorpyrifos and Parathion Metabolism by Mouse Hepatic Microsomes</td>
<td>L.G. Sultatos and S.D. Murphy, Div. of Tox., Univ. of Texas Med. Sch. at Houston, Houston, TX.</td>
</tr>
<tr>
<td>498</td>
<td>2:30</td>
<td>Pharmacokinetic Studies of 3,3',4,4'-Tetrachloroazobenzene and 3,3',4,4'-Tetrachloroazoxybenzene in Rat</td>
<td>M-T.S. Hsia and C.F. Burant, Environ. Tox. Ctr. and Dept. of Entomology, Univ. of Wisconsin, Madison, WI.</td>
</tr>
<tr>
<td>499</td>
<td>2:45</td>
<td>Species Differences in the Metabolism and Disposition of Morpholine</td>
<td>O.S. Sohn, E.S. Fiala and J.H. Weisburger, Naylor Dane Inst. for Disease Prevention, American Hlth. Foundation, Valhalla, NY; C.C. Conaway, Texaco Inc., Beacon, NY.</td>
</tr>
</tbody>
</table>

Comparison of the Acute Toxicity of Tetramethylsuccinonitrile (TMSN) and Succinonitrile (SN). P.A. Doherty, R.P. Smith and V.H. Ferm, Dept. of Pharmacol. / Toxicol. and Dept. of Anat. / Cytol., Dartmouth Med. Sch., Hanover, NH.

Chemical Alteration of Rat Liver UDP-Glucuronic Acid (UDPGA) Content. J.B. Watkins and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS.

Presystemic Elimination of Diethylstilbestrol by Rat Liver. T.N. Thompson and C.D. Klaassen, Dept. of Pharmacol., Univ. of Kansas Med. Ctr., Kansas City, KS.

PLATFORM SESSION 20: Halogenated Hydrocarbons III

Thursday Afternoon, February 25, 1982
Independence Room

Co-Chairs: D.J. Ecobichon, McGill Univ., Montreal, P.Q., Canada
W.F. Durham, U.S. Environmental Protection Agency, Research Triangle Park, NC

506 1:30 Hepatic Effects of 1,2,4,5-Tetrachlorobenzene in the Pregnant Rat. K.T. Kitchin, ETD, USEPA, Research Triangle Park, NC. Sponsor: W.F. Durham.

507 1:45 Free Radical Activity Increase in Subcellular Fractions From PCB Induced Rat Liver. D. Havkin—Frenkel, J.D. Rosen and M.A. Gallo, Dept. of Food Science, Cook College, Rutgers Univ., Dept. of Environ. and Community Med. CMDNJ—Rutgers Med. School, Rutgers Univ./Rutgers Med. School Joint Tox. Graduate Program, Piscataway, NJ.

508 2:00 The Effects of Prenatal Exposure of Hexachlorobenzene on Mixed Function Oxidases and Renal Function in the Mink. G.F. Rush, V. Adler, M. Blevins, R. Aulerich and J.B. Hook, Dept. of Pharmacol. and Toxicology, Ctr. for Environmental Tox. and Dept. of Animal Science, Michigan State Univ., East Lansing, MI.


Effect of Zinc on Bromobenzene-Induced Acute Hepatotoxicity in Rats. S. Chakrabarti and J. Brodeur, Dép. Méd. du Travail et Hyg. du Milieu, Fac. Méd., Univ. de Montréal, Montréal, Qué.


Hexachlorocyclopentadiene (Hex) Disposition and Metabolism in Rats. C.C. Yu and Y.H. Atallah, Res. and Development Dept., Velsicol Chemical Corp., Chicago, IL.

Effects of Chronic Treatments with Mercury or Selenium on Bromobenzene-Induced Acute Hepatotoxicity in Rats. S. Chakrabarti and J. Brodeur, Dép. Méd. du Travail et Hyg. du Milieu, Fac. Méd., Univ. de Montréal, Montréal, Qué., Canada.

Effects of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin on RNA Polymerase I Induction in Rat Liver. C.L. Potter, I.G. Sipes and D.H. Russell, Toxicol. Prog. and Depts. of Pharmacol. and Anesthesiol., Univ. of Arizona, Tucson, AZ.


The Toxicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin and Perfluorodecanoic Acid in L5178Y Mouse Lymphoma Cells. A.M. Rogers, M.E. Andersen and K.C. Back, AFAMRL/THT, Wright-Patterson AFB, OH.

POSTER SESSION 6A: Neurotoxicology II

Thursday Afternoon, February 25, 1982
John B. Hynes Exhibition Area
Organizers: D. Desaiah, Univ. of Mississippi, Med. Ctr., Jackson, MS
H.E. Lowndes, New Jersey Medical School, Newark, NJ

Displayed: 1:30 P.M. — 5:00 P.M.
Attended: 1:30 P.M. — 3:00 P.M. (Even Paper Numbers)
3:00 P.M. — 4:30 P.M. (Odd Paper Numbers)

Paper No.


520 A Mathematical Model to Study the Time Course and Dose-Dependent *In Vivo* Effect of TOCP on Chicken Brain Neurotoxic Esterase Activity. S.A. Soliman, D. Svendsgaard and L.W. Reiter, *Health Effects Research Lab., U.S.E.P.A., Research Triangle Park, NC.*


524 Distribution of Neurotoxic Esterase Activity in Rat and Hen Nervous System. P.J. Hollingsworth, B.R. Dudek, C.B. Smith and R.J. Richardson, *Dept. of Environ. & Ind. Hlth. and Dept. of Pharmacol., Univ. of Michigan, Ann Arbor, MI.*

525 Acute and Chronic Tolerance to Organophosphorus Insecticides. L.G. Costa, B.W. Schwab and S.D. Murphy, *Univ. of Texas Med. School, Houston, TX.*


527 Alteration of Tissue Coenzyme-A Levels During Acrylamide Intoxication. M.J. Miller, M.S. Miller, I.G. Sipes and D.E. Carter, *Tox. Program and Dept. of Pharmacol., Univ. of Arizona, Tucson, AZ.*


Chlordecone (Kepone®) Exposure Altered Rat Brain Peptides. S.F. Ali and J.S. Hong, Lab. of Behavioral and Neurological Tox., NIEHS, Research Triangle Park, NC.


Interaction Between Subchronic (90 days) Dermal Application of o-Ethyl g-4-Nitrophenyl Phenylphosphonothioate (EPN) and Continuous Inhalation of Technical Grade Methyl Butyl Ketone (MBK) in Producing Neurotoxicity in Rats. M.B. Abou-Donia, D.G. Graham, P.R. Timmons and K.M. Abd0, Dept. of Pharmacol. and Path., Duke Univ. Med. Ctr., Durham, NC.


The Effect of Trace Halothane on 2',3' Cyclic Nucleotide 3'-Phosphodiesterase (CNPASE) in the Developing Rat Brain. J.J. Nagelhout, F.C. Beuthin, R.T. Louis-Ferdinand, College Pharmacy & All. Hlth. Prof., Wayne State Univ., Detroit, MI.


POSTER SESSION 6B: Inhalation IV

Thursday Afternoon, February 25, 1982
John B. Hynes Exhibition Area

Organizers: E.V. Buehler, Procter and Gamble Co., Cincinnati, OH
R.D. Short, Monsanto Co., St. Louis, MO

Displayed: 1:30 P.M. — 5:00 P.M.
Attended: 1:30 P.M. — 3:00 P.M. (Even Paper Numbers)
3:00 P.M. — 4:30 P.M. (Odd Paper Numbers)

Paper No.  


554 A Six Month Multi-Species Inhalation Study with Maleic Anhydride. R.D. Short and F.R. Johannsen, Monsanto Co., St. Louis, MO; C.E. Ulrich, I.R.D.C., Mattawan, MI.


556 Pathological Effects of Chronic Formaldehyde Inhalation in Rats and Mice. W.D. Kerns, K.L. Pavkov and D.J. Donofrio, Battelle Columbus Labs., Columbus, OH; E.J. Gralla, CLIT, Research Triangle Park, NC.

557 Nasal Mucosal Response Induced by a Respiratory Irritant (Methyl Chloroacetate). D.G. Keyes, R.J. Kociba, J.W. Henck, Research Lab., Dow Chemical U.S.A., Midland, MI.


559 Guinea Pig Respiratory Responses to Isocyanatoethyl Methacrylate- and Isocyanatoethyl Propionate-Protein Conjugates. L.S. Mullin, C.K. Wood and N.D. Krivanek, E.I. du Pont de Nemours and Co., Inc., Haskell Lab., Newark, DE.


561 Nitroethane: A 13-week Inhalation Toxicity Study in Rats and Mice. T.S. Gushow, T.J. Bell, J.D. Burek, W.J. Potts and J.J. McKenna, Tox. Res. Lab., Dow Chemical USA, Midland, MI.

Disposition of Methyl Ethyl Ketone in F-344 Rats After Inhalation Exposure. J.S. Bus, D. Deyo, M. Cox and E.L. White, Chem. Ind. Inst. of Tox., Research Triangle Park, NC.


Major Findings in a Twenty-Four Month Inhalation Toxicity Study of Methyl Chloride in Mice and Rats. K.L. Pavkov, W.D. Kerns, C.E. Chrisp, D.C. Thake, R.L. Persing and H.H. Harroff, Battelle Columbus Labs., Columbus, OH; E.J. Graio, CII, Research Triangle Park, NC.


The Effect of Benzene Inhalation on Murine Hematopoietic Precursor Cells (CFU-e, BFU-e, CFU-gm). R.L. Hilderbrand and L.L. Pitts, NMRI/TD, Wright-Patterson AFB, OH; M. Kohsaki and M.J. Murphy, Jr., The Bob Hope Lab. for Cancer Research, Dayton, OH. Sponsor: V.L. Carter, Jr.


ANNUAL BANQUET
Thursday, February 25, 1982
7:00 P.M.
Grand Ballroom
Open to all attendees and guests
Complimentary Wine
Courtesy, Charles River Breeding Laboratories, Inc.

PLATFORM SESSION 21:
Biotransformation/Disposition V
Friday Morning, February 26, 1982
Grand Ballroom
Co-Chairs: W.M. Haschek, Oak Ridge Nat'l. Labs., Oak Ridge, TN
R.S.H. Yang, Bushy Run Research Center, Export, PA

<table>
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<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
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<tbody>
<tr>
<td>578</td>
<td>8:30</td>
<td>Cell Specific Activation and Detoxification of Benzo(α)pyrene by Two Cloned Murine Testicular Cell Lines. R. Filler and L.S. Woods, Biology Div., Oak Ridge Nat'l. Lab., Oak Ridge, TN.</td>
</tr>
</tbody>
</table>
579 8:45 In Vivo Metabolism of the Anti-Juvenile Hormone Precocene II and the Generation of Dihydrodiol Metabolites. M.T.S. Hsia and S.J. Grossman, Environ. Tox. Ctr. and Dept. of Entomology, Univ. of Wisconsin, Madison, WI.

580 9:00 N-Vinyl-2-Pyrrolidinone: Disposition and Metabolism Studies. G.A. Digenis and J.S. McClanahan, College of Pharmacy, Univ. of Kentucky, Lexington, KY.


583 9:45 Metabolism of 2-Methynaphthalene In Vitro: Methyl Group Oxidation. M.J. Melancon and J.J. Lech, Dept. of Pharm. & Tox., Med. Coll. of Wisconsin, Milwaukee, WI.

584 10:00 Disposition of Diisodecyl Phthalate Following Oral Exposure in Rats. D.G. Pegg, Biomedical Science Dept., General Motors Research Labs., Warren, MI. Sponsor: J.J. Vostal.


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<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>590</td>
<td>8:30</td>
<td>Lung Toxicity Due to Simple Heterocyclic Compounds in Mice</td>
<td>R. Wiley, L. Gammal, G. Traiger, H. Choo and S. Baraban, Depts. of Med. Chem. and Pharmacol., The Univ. of Kansas, Lawrence, KS.</td>
</tr>
<tr>
<td>591</td>
<td>8:45</td>
<td>Effect of Ammonia on Hepatic Microsomal Enzyme Activity in the Mouse</td>
<td>J.C. Kapeghian, A.B. Jones and I.W. Waters, Depts. of Pharmacol. and Pharmaceutics, Univ. of Mississippi, University, MS. Sponsor: W.M. Davis.</td>
</tr>
<tr>
<td>592</td>
<td>9:00</td>
<td>Disposition of Carbaryl-14C Residues Following Inhalation and Oral Exposure</td>
<td>B.L. Roberts and H.W. Dorough, Graduate Ctr. for Tox., Univ. of Kentucky, Lexington, KY.</td>
</tr>
<tr>
<td>593</td>
<td>9:15</td>
<td>Comparative Hydrolysis and Disposition of Inhaled and Orally Administered Carbofuran-Carbonyl-14C in Rats</td>
<td>M. Trono and H.W. Dorough, Graduate Ctr. for Tox., Univ. of Kentucky, Lexington, KY.</td>
</tr>
<tr>
<td>594</td>
<td>9:30</td>
<td>Retention and Fate of Inhaled Aldicarb in Rats</td>
<td>H.H. Lysy and H.W. Dorough, Grad. Ctr. for Tox., Univ. of Kentucky, Lexington, KY.</td>
</tr>
<tr>
<td>598</td>
<td>10:30</td>
<td>Repeated Inhalation Challenge of Guinea Pigs Displaying Delayed Respiratory Sensitivity</td>
<td>J. Stadler and M.H. Karol, Grad. Sch. of Pub. Hlth., Univ. of Pittsburgh, Pittsburgh, PA.</td>
</tr>
</tbody>
</table>
The Behavior of Inhaled Carbon Disulfide \( \text{(CS}_2 \text{)} \) in Rat Blood. C.W. Lam and V. DiStefano, Univ. of Rochester, School of Medicine, Rochester, NY. Sponsor: D. Taves.


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PLATFORM SESSION 23: Mutagenesis

Friday Morning, February 26, 1982

Independence Room


M.A. Friedman, American Cyanamid Corp., Wayne, NJ

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Time (A.M.)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>602</td>
<td>8:30</td>
<td>Mutagenicity Testing of Melamine</td>
<td>R.W. Mast, M.A. Friedman and R.A. Finch, American Cyanamid, Wayne, NJ and Raltech Scientific Services, Madison, WI.</td>
</tr>
</tbody>
</table>
Poster Session 7a: General Toxicology V
Friday Morning, February 26, 1982
John B. Hynes Exhibition Area

Organizers: J.E. Manno, Louisiana State Univ. Med. Sch., Schreveport, LA
R.C. Shank, Univ. of California, Irvine, CA

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No.
614  

615  
Skin Absorption of Methanol. R. Lindenschmidt, M. Elbeera and R.B. Forney, Dept. of Pharmacol. and Tox., Indiana Univ., Sch. of Med., Indianapolis, IN.

616  
The Effect of Diisopropylfluorophosphate (DFP) on Serum Calcium and Magnesium. W.E. Ridder and R.B. Forney, Dept. of Pharmacol. and Tox., Indiana Univ. Sch. of Med., Indianapolis, IN.

617  

618  
Factors Contributing to the Difference in Acute Toxicity of Chlorpyrifos and Methyl Chlorpyrifos. L.G. Sultatos, L.G. Costa, C. Wang and S.D. Murphy, Div. of Tox., Univ. of Texas Med. Sch. at Houston, Houston, TX.


Age-Related Susceptibility of Rat Endocrine Pancreas to Cyproheptadine. S.A. Chow and L.J. Fischer, Dept. of Pharmacol., Tox. Ctr., Univ. of Iowa, Iowa City, IA.


An Investigation of S-Sulphate Incorporation into Rat Bone Marrow Cell Suspensions as a Means of Quantitating Cells Within the Myeloid Series. A.F. Wright, ICI, Central Tox. Lab., Alderley Park, Nr. Macclesfield, Cheshire, UK; N.M. Blackett, Inst. of Cancer Research, Cheshire, UK; M.S. Rose, ICI Corp. Biosciences Group, Runcorn Heath, Cheshire, UK.


Depletion of Mouse Hepatic Glutathione by Selected Endogenous Compounds. R.C. James, S.M. Roberts and R.D. Harbison, Div. of Interdisciplinary Tox., Univ. of Arkansas for Med. Sciences, Little Rock, AR.


Hypoglycemic Effect of the Venom from the Snake Piscivorus piscivorus. S.A. Taha, Dept. of Pharmacol., College of Pharmacy, Univ. of Riyadh, Riyadh, Saudi Arabia.

POSTER SESSION 7B: General Toxicology VI

Friday Morning, February 26, 1982

John B. Hynes Exhibition Area

Organizers: J.L. Emmerson, Eli Lilly Research Labs., Greenfield, IN
D.C. Villeneuve, Environ. Hlth. Directorate, Ottawa, Ont., Canada

Displayed: 8:30 A.M. — Noon
Attended: 8:30 A.M. — 10:00 A.M. (Even Paper Numbers)
10:00 A.M. — 11:30 A.M. (Odd Paper Numbers)

Paper No.


648 Nephrotoxicity and Kidney Concentration of Selected Furan Derivatives in Mice. L. Gammal, R. Wiley, G. Traiger and S. Baraban, Dept. of Pharmacol. & Tox. and Med. Chem., The Univ. of Kansas, Lawrence, KS.

649 Cardiotoxicity of Beta-Adrenergic Agonists in Mice of Various Age Groups. X. Joseph, V. Whitehurst and T. Balazs, Food and Drug Admin., Washington, DC.


Cardiovascular and Respiratory Effects of Methyl Methacrylate Infusion in the Anesthetized Dog. K.C. Baran, K.L. Marquis, H.H. Mincer and I.W. Waters, **Dept. of Pharmacol., Sch. of Pharmacy, Univ. of Mississippi, University, MS.** Sponsor: W.M. Davis.

653

In Vitro Rates of Collagen Synthesis in Mouse Lung Tissue Following the Administration of Butylated Hydroxytoluene. J.P. Kehrer, **Dept. of Pharmacol., Coll. of Pharmacy, The Univ. of Texas at Austin, Austin, TX.** Sponsor: D. Acosta.

654


655

Acrylamide Effects on Activity of Glyceraldehyde-3-Phosphate Dehydrogenase in Rat Brain Homogenate. I.L. Vyas, R.D. Howland and H.E. Lowndes, **CMDNJ, New Jersey Med. Sch., Newark, NJ.**

656

Effect of Phthalate Esters on Succinate Oxidation and Energy Coupling in Rat Liver Mitochondria. R.L. Melnick and C.M. Schiller, **National Tox. Program and Lab. of Pharmacol., NIEHS, Research Triangle Park, NC.**

657


658


659

Ten Year Chronic Toxicology of Norlestrin in Female Monkeys. J.E. Fitzgerald and F.A. de la Iglesia, **Dept. of Tox., Warner-Lambert/Parke-Davis Pharmaceutical Res., Ann Arbor, MI.**

660


661

Toxicokinetics of Hydrazine and H70 Via Limited Percutaneous Exposure in the Rabbit. W.C. Keller, J.P. Murphy, M.E. Andersen, R.H. Bruner and K.C. Back, **AFAMRL/TH, Wright-Patterson AFB, OH.**

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Comparison of Selected Biochemical and Hematological Parameters and Histopathology in Rats Anesthetized Prior to Necropsy with Ether, Pentobarbital and T-61.® T.E. Davis, J.E. Calkins and J.W. Thackara, **Biosphere Research Center, Inc., New City, NY.** Sponsor: W.D. Gray.


JOINT SYMPOSIUM
with
Environmental Mutagen Society
Is There a Role Today for Mutagenicity Testing
in the Safety Evaluation of Chemicals?
A Debate
Friday Afternoon, February 26, 1982
Grand Ballroom
2:00 P.M. — 5:00 P.M.

Moderator:
W. Gary Flamm, Bureau of Foods, Food and Drug Administration,
Washington, DC

For the Proposition:
David J. Brusick, Dept. of Molecular Toxicology, Litton Bionetics, Inc.,
Kensington, MD
Verne A. Ray, Medical Research Labs., Pfizer Pharmaceuticals,
Groton, CT

Against the Proposition:
Albert C. Kolybe, Jr., Bureau of Foods, Food and Drug Administration,
Washington, DC
Robert B. Cumming, Biology Division, Oak Ridge National Lab.,
Oak Ridge, TN

Rapporteur:
Mortimer L. Mendelsohn, Biomedical Sciences Division, Lawrence
Livermore Lab., Livermore, CA

All SOT registrants will be admitted without payment of
additional fees. You must show your registration badge.
SPECIALTY SECTION MEETINGS

Metals
Tuesday, February 23, 1982 — 5:00 P.M.
Independence Room

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Mechanisms
Tuesday, February 23, 1982 — 5:15 P.M.
Republic Room

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Neurotoxicology
Wednesday, February 24, 1982 — 5:30 P.M.
Independence Room

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Reproductive Toxicology
Wednesday, February 24, 1982 — 5:30 P.M.
Republic Room

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Mid-Atlantic Regional Section
Wednesday, February 24, 1982 — 5:30 P.M.
Constitution Room