

# TOX TALK

#### PUBLICATION OF THE SOCIETY OF FORENSIC TOXICOLOGISTS

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TOXTALK is mailed quarterly to members of the Society of Forensic Toxicologists, Inc. For membership information contact Secretary C. Nicholas Hodnett at the address above. All members and others are invited to contribute to TOXTALK. Submit all materials (original plus 3 copies if possible) for publication consideration to: TOXTALK, 1013 Three Mile Drive, Grosse Pointe Park, MI 48230-1412. Deadlines to send items are February 15, May 15, August 15, and November 15. For further information, contact Patricia Mohn-Monforte at (313) 884-4718.

## PRESIDENT'S MESSAGE

#### H. Horton McCurdy Ph.D., SOFT President

By action of the Board of Directors, the president of SOFT has now become a liaison director with the American Drug Use Testing Association (ADUTA). This fledgling trade organization is currently composed of and primarily directed by members of the drug testing industry. Its primary objectives are to encourage its members to adhere to certain standards of practice in drug testing and to provide them with quality assurance procedures that will ensure scientifically supportable results. Whether we are involved in the drug analysis of employees, DUI cases, medical examiner cases, or what-have-you, quality drug testing is always



of paramount concern to the forensic toxicologist. Erroneous or legally indefensible results can ultimately reflect on us all as a profession if left either unchecked or unchallenged. I think industry has apparently reached this same conclusion and has put its vested interests aside in its decision to form ADUTA. Obviously, industry has a strong desire to foster reliable and responsible drug testing, and SOFT, in my opinion, has a duty to support such efforts wherever and whenever it can.

By serving on ADUTA's advisory Board of Directors, SOFT has a direct input into a trade organization that seeks to represent anyone who either provides, sells, or uses products or services used for the detection of drugs. It is almost certain that every member of SOFT uses one or more of the goods and services provided by membes of ADUTA. Insofar as I am able to determine, ADUTA's and SOFT's positions on quality drug testing are one and the same. It should be pointed out that ADUTA's Board of Directors will eventually be composed of its membership which may or may not be those involved in industry. Hopefully, this fact might help to appease anyone feeling somewhat uneasy about SOFT "cozying up" to industry. My opinion is that SOFT is only helping to advise industry in its admirable attempts, thus far, to improve the current state of drug testing.

In closing, I should also add that ADUTA is, at the moment, in dire financial straits, and, unfortunately, due to lack of proper support might not survive the year. One wonders if this does not indicate a general malaise towards quality drug testing. I sincerely hope not. That's my opinion. I welcome yours. •

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President's Message • Elmer Gordon Open Forum • Announcements • Members on the Move • Career Opportunities • Professional Calendar • New SOFT Members

#### SPECIAL INTERST

- Nominating Committee Report
- Abstracts of SOFT Board Meeting
- AAFS Meeting Highlights
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#### TECHNICAL HIGHLIGHTS

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#### INSERTS

1987 SOFT Annual Meeting registration form • Preliminary information sheet • Call for papers • Hotel information

# **NOMINATING** COMMITTEE **PRESENTS 1988 SLATE**

Nominating Committee Chairperson, Rosemary Kincaid, Ph.D., and committee members Ronald Backer, Ph.D., and Jane Speaker, Ph.D., submit the following 1988 slate of officers for your consideration. Elections will be held at the SOFT Annual Business Meeting on October 1 in Key Biscayne, FL.

#### PRESIDENT:

Michael P. McGee, B.S. A 1970 graduate of Wheeling College (WV), Mr. McGee was certified by the ABFT in 1980 and recertified in 1985. Mr. McGee is currently an associate chemist II with the Office of the Chief Medical Examiner in New York City, and his previous professional positions include Associate Director at the Galveston County Forensic Laboratory (1981-84) and Laboratory Supervisor for a private Illinois laboratory (1984-86). Mr. McGee's SOFT activities since becoming a member in 1979 include co-chair for the 1979 meeting, treasurer (1981-86), and current vice president. Other professional affiliations include AAFS, MAAFS, TIAFT, SWAFS, and SAT.

# VICE PRESIDENT:

C. Nicholas Hodnet, Ph.D.
Dr. Hodnett received his Ph.D. in Pharmacology from the University of Vermont in 1974 and has been an ABFT Diplomate since 1977. He has served as Director of Toxicological and Forensic Science Services for Westchester County Dept. of Laboratories and Research (NY) since 1978 and, additionally, holds academic and advisory committee positions. Currently secretary of SOFT, Dr. Hodnett has served as a member of the Board of Directors (1981-83) and on various committees, including chairman of the membership (1986-87) and educational funding (1981-83) committees. Dr. Hodnett is also a member of AAFS, TIAFT, AAAS, NY Academy of Sciences and NY Society of Forensic Sciences.

#### SECRETARY: Richard D. Pinder, Ph.D.

A 1978 Ph.D. graduate of Thomas Jefferson Medical College in Philadelphia (Pharmacology/Toxicology), Dr. Pinder is an ABFT Diplomate and Chief of the Toxicology Laboratory at the Connecticut State Medical Examiner's Office (since 1979). A charter member of SOFT, Dr. Pinder is also a member of AAFS, NEAFS, Assoc. of Official Analytical Chemists, and Philadelphia Analytical Toxicology Forum (former chairperson).

#### **BOARD OF DIRECTORS:** Jeanne M. Beno, Ph.D.

Dr. Beno received her doctorate in pharmacology from the University of Rochester School of Medicine in 1981 and has held the position of Forensic Toxicologist at the Monroe County Medical Examiners Office in Rochester, NY since 1980. Dr. Beno has served on the 1986 Nominating Committee and is currently on the Publications Committee. She is also a member of the American Association for the Advancement of Science.

Anyone wishing further information, should contact Dr. Kincaid at 298 North Burritt, Buffalo, WY 82834. •

# HIGHLIGHTS OF THE B.O.D.'S MEETING

February 17, 1987, San Diego, CA

C. Nicholas Hodnett, Ph.D., Secretary

President McCurdy, on behalf of SOFT, supported NIDA's proposed criteria for drug testing laboratories and offered to be involved in the laboratory accreditation process. Dr. McCurdy will also represent SOFT on the Board of Directors of a new organization, the American Drug Use Testing Association (ADUTA).

An agreement has been made with CSFS to have joint SOFT-CSFS meetings every five years starting in 1991. CAT has agreed to have another joint SOFT-CAT meeting. It probably will be in San Francisco in 1992.

New committees have been created: Quality Assurance Survey Committee, Safety and Health Committee replacing the Right-To-Know Committee, Budget, Finance and Audit Committee combining the Budget & Finance and Audit Committees.

Committees no longer active are: Evaluated Methods, Toxicology Reporting, Environmental Toxicology. Due to the efforts of the ToxTalk writer/contributors and the probability of new regular column articles, ToxTalk may have to go to an eight page layout.

Policies and guidelines will be established for meeting site hosts to follow when determining legitimate meeting expenses and adequate registration fees. This is in response to SOFT having a net loss for the Reno Meeting.

Parrin Tarevl Barton, a Mercer University student, was awarded a \$500 ERA. She is conducting a DUID study in association with the Georgia Crime Laboratory. The size of this award may increase in the near future.

Dr. A. Poklis has been elected the SOFT Board member to serve on the Executive Committee. SOFT's Executive Coordinator, P. Mohn-Monforte will have her expenses for attending the annual meeting considered a part of the annual meeting expenses and be compensated by SOFT for those expenses.

# PREPARATIONS FOR ANNUAL MEETING UNDERWAY

Meeting host, Dr. Leonard Bednarczyk, reports some exciting plans for the 1987 SOFT Annual Meeting in Key Biscayne, FL., from September 29 to October 2. This promises to be a rewarding event set in luxurious surroundings. If you have access to a AAA tour book, look up in the Sonesta Beach Hotel — for \$80 (single or double) we're getting accommodations that would usually cost \$120-\$170. Dress code is "casual" — you may leave the "button-downs" at home.

Dr. Robert Simon and Lt. Col. Jon Jewell are coordinating the "Quality Assurance Workshop for Forensic Toxicology Drug Testing" and expect a popular response to the timely subject.

The scientific session is chaired by Dr. Joseph Balkon. A second call for papers is inserted in this issue of ToxTalk. Do not forget the August 1st deadline for abstracts to guarantee publication in the program.

There will be opportunities for informal gathering also, including a real luau on Thursday, 10/01. So dig out those Hawaiian-print shirts and muu-muus — a king and queen of the luau will be chosen based on costume. The hotel requires a minimum participation so please do not wait to sign up for this tropical experience. Should be fun!

If you are staying over an extra day, consider a morning of scuba diving or snorkeling at John Pennycamp's Underwater State Park off Key Largo. A very reasonable \$20 includes instruction and boat, but not transportation to Key Largo. We can work on carpools.

Be sure to take advantage of the special air far offer described elsewhere in TOXTALK.

Remember, you must be a current SOFT member (dues paid to date) to qualify for the member registration fee discounts. You're getting lot for \$45 — especially considering that each participant will consume approximately \$35 worth of banquet lunch and break and hospitality beverages. Don't miss the early registration deadline, September 8th.

Looking forward to seeing YOU in Key Biscayne! •

## 1987 S.O.F.T. ANNUAL MEETING

SEPTEMBER 29 — OCTOBER 2 SONESTA BEACH HOTEL

#### **TENTATIVE PROGRAM SCHEDULE**

#### TUESDAY — SEPTEMBER 29

Workshop -"Quality Assurance Workshop for Forensic Toxicology Drug Testing" Exhibitor Set Up (10 am - 6 pm) Welcome Reception (8-9 pm)

#### WEDNESDAY - SEPTEMBER 30

Opening Remarks (9:15 am) Scientific Program (9:30-noon; 1:00-3:30 pm) SOFT Board of Directors' Meeting (3:30-5 pm)

#### THURSDAY - OCTOBER 1

Scientific Program (9-10:30 am) SOFT Business Meeting (10:30 am-noon) Scientific Program (1-5 pm) LUAU (opt., 35 minimum necessary, evening)

KEY BISCAYNE, FL

#### FRIDAY — OCTOBER 2

Scientific Program (9 am-noon) Awards Banquet (luncheon, noon-2) Scientific Program (2-4 pm)

#### SATURDAY -- OCTOBER 3

Underwater Expedition (optional)

#### **MEETING HOST:** Leonard R. Bednarczyk, Ph.D.

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# ANALYSIS OF BIOLOGICAL SPECIMENS FOR FLUOROACETATE BY GC-MD

By Nancy B. Wu Chen, Ph.D. and Michael I. Schaffer, Ph.D., Office of the Medical Examiner, County of Cook, Chicago, IL

Sodium fluoroacetate (Compound 1080) is a very potent rodenticide. Recently, there was a need for us to rule out the presence of fluoroacetate in one of our post-mortem cases. We modified and combined two methods from the literature (1, 2) for our analysis. The fluoroacetate was extracted from the biological specimens, derivatized with pentafluorobenzyl bromide (PFBBr). The derivative was injected into a capillary GC column and analyzed by MSD at EI scan mode.

One hundred microliters of 10% triethanolamine in acetone, and 2 mL specimen (blood, urine or 50% tissue homogenate) were vortexed for 15 sec. in a glass culture tube. The pH of the mixture should be greater than or equal to 8 with the pH paper. Eight milliliters of acetone : water (4 : 1) were added, vortexed for 60 sec., and allowed to mix for at least 15 min. in an ultrasonic bath. After centrifugation for 5 min., the supernatant was transferred to a clean glass tube, and its volumne was reduced to less than or equal to 2 mL by evaporation at 55°C under vacuum. The residue was washed with 5 mL hexane for 5 min. After centrifugation, the upper hexane layer was aspirated. The lower aqueous layer was transferred to another tube, and acidified with 0.5 mL of 1 N hydrochloric acid. The pH should be less than or equal to 2 mith pH paper. The acidic layer was extracted ith 5 mL ethyl acetate for 15 min. After centrifugation, the upper ethyl acetate layer was transferred to another tube. One hundred microliters of 10% triethanolamine in acetone was added to the tube, and vortexed for 60 sec. The resultant mixture was evaporated to dryness at 55°C under vacuum. After the tube was cooled down to room temperature, 3 mL of 0.5% pentafluorobenzyl bromide (PFBBr) in acetone was added to the tube. The tube was capped and heated at 55°C with vortexing for 60 min. After the tube was cooled down to room temperature, 3 mL of water and 1 mL of toluene were added to the tube and extracted for 15 min. After centrifugation, the upper toluene layer was transferred to a reacti-vial. One hundred microliters of 100 µg/mL 1,2dibromobenzene in toluene was added to the reacti-vial and vortexed for 30 sec., to serve as an internal time reference peak for GC-MSD. After keeping the reacti-vial for 1 to 2 nights at room temperature, 2 µL of the toluene were injected into GC-MSD.

# — WANTED — EXHIBITORS

Dr. Leonard Bednarczyk — 1987 SOFT Meeting Host Forensic Toxicology Services Division Dade-Miami Criminal Justice Council 864 N.W. 23rd Street — Room 203 Miami, FL 33127 (305) 638-5765

Reward: Booth at SOFT Annual Meeting

Hewlett-Packard 5890 GC-5970 MSD equipped with a 12 m. x 0.20 mm HP-1 capillary column was used for all analyses. The MSD was calibrated daily with perfluorotributylamine with autotune program. After autotune, GC-MSD system performance was evaluated daily with the injection of 0.5  $\mu$ L of 25 ng/ $\mu$ L of phencyclidine system check standard. The GC portion was operated at splitless mode with 6 min. of solvent delay. The temperature programs were as follows: initial GC oven temperature 60°C, with 1 min. hold time, temperature program rate 10°C/min. to second temperature 90°C, with 2 min. hold time, temperature program rate 20°C/min to final temperature 130°C. Helium carrier gas flow was 0.7 mL/min. MSD was operated at electron impact, scan mode. Scanning range was m/z 34 to m/z 300. Electron multiplier voltage was 200 volts over autotune voltage.

Fluoroacetate standards (0.1, 1.0, and 10.0 µg/mL respectively) and reagent blank were extracted and analyzed with each set of biological specimens. Retention times for pentafluorobenzyl fluoroacetate and 1,2-dibromobenzene were 6.6 min. and 7.2 min. respectively. Some of the prominent fragments of pentafluorobenzyl fluoroacetate were: m/z 181 (base peak), m/z 258 (molecular ion), and m/z 161. Full mass spectrum of pentafluorobenzyl fluoroacetate was obtained at 100 ng/mL of fluoroacetate with this modified method.

#### References:

- (1) I. Okuno, D. L. Meeker, and R. R. Felton, "Modified Gas-Liquid Chromatographic Method for Determination of Compound 1080 (Sodium Fluoroacetate)", J. Assoc. Off. Anal. Chem., Vol. 65, No. 5, pp. 1102-1105 (1982).
- (2) H. H. Casper, T. L. McMahon, and G. D. Paulson, "Capillary Gas Chromatographic-Mass Spectrometric Determination of Fluoroacetate Residues in Animal Tissues", J. Assoc. Off. Anal. Chem., Vol. 68, No. 4, pp. 722-725 (1985).

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# LISTERINE® INGESTION

By Ricky P. Betah, Ph.D., Consolidated Laboratory Services, Jacksonville, FL

Listerine® Antiseptic, an over-the-counter mouthwash, is considered to be the "strongest" mouthwash on the market. Its formulation consists primarily of ethanol (28.65% - SD 37 alcohol) along with other minor components (0.1% or less - eucalyptol, menthol, thymol). Listerine ingestion is common in areas where individuals - particularily urban-nomadic alcoholics - seek/consume inexpensive forms of alcohol.

Presented here is a case of a 44-year-old white male who was transported by his spouse to the emergency department of a local hospital for acute ethanol ingestion. In addition to exhibiting signs/symptoms of alcohol intoxication, the patient complained of nausea and epigastric discomfort. A blood alcohol level and a urine drug screen were ordered to evaluate polydrug use.

The blood alcohol level was determined to be 0.24 g/dL. A preliminary screen of the urine using thin-layer chromatography (TOXI-LAB® A procedure - Marion/Analytical Systems) detected the presence of substances indicative of thymol and/or its metabolites. The TLC characteristics (refer to TOXI-LAB® compendium) with TOXI-

LAB® are rather specific for samples associated with Listerine® ingestions. The physician was contacted for a clinical history. Although the patient denied consuming Listerine®, the spouse confirmed a past history of using Listerine® as a source of ethanol.

The presumptive positive screen for thymol and/or its metabolites by TLC was confirmed by gas chromatography/mass spectrometry (Hewlett Packard 5970 B system). The operating system of the GC/MS was used in its standard configuration with the column (12.5 m methyl silicone) flow at 0.4 mL/min. the column head pressure at 10 psi, the injection port temperature at 220 °C, and the interface temperature at 285 °C. The temperature program for the system was comprised of temperature 1 (75 °C) being held for 1 minute. The temperature was then ramped at 20° C/min to a temperature of 280°C. Temperature 2 was held for 4 minutes. Thymol was detected at 6.0 minutes with this temperature program. Its primary base peak is 135. The mass spectrum of thymol is shown in Figure 1.

This case is presented to illustrate how an

unusual toxicologic finding can lead one to confirm a differential diagnosis consistent with a clinical presentation. •

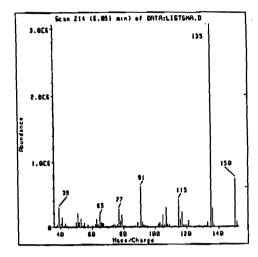


Figure 1. Mass Spectrum of Thymol

# **HPLC ARTIFACTS**

By Joan Vogel, B.A., Department of Laboratories and Research, Westchester County, Valhalla, NY 10595

While screening for Barbituates using HPLC, we see peaks of other coextracted acidic and neutral substances. The procedure uses a Methylene Chloride solvent extraction at a neutral pH. The extracts are filtered and dried. The residue is reconstituted in 0.5 ml of the eluting solvent

The column is 250 mm x 4.6 min containing C18 packing with a pellicular C18 packed guard column. The mobile phase is 35% Acetonitrile — 65% (pH 3.0) Phosphate buffer. The eluting solvent flow is 1.5 ml/min. The detection wavelength 205 nm; the attenuation is 32. The internal standard is 5 Ethyl 5p Tolyl Barbituric Acid (0.2 ml of a 10 mg/100 ml solution).

The list below includes Barbituates that are routinely detected and other substances that are also detected by relative retention times to the internal standard.

| Substance        | RR No. to<br>Tolyl Barbituric | Comments   |
|------------------|-------------------------------|--|
| ?                | 0.4                           | In decomposed samples  |
| Trimethoprim     | 0.48                          | Found in Bactrim used in AIDS patients and for Urinary infections            |
| Salicylic Acid   | 0.53                          | Detectable in overdoses  |
| Phenobarbital    | 0.72                          | ·  |
| Sulfamethoxazole | 0.74                          | In Bactrim   |
| Butabarbital     | 0.78                          |  |
| ?                | 0.8                           | In decomposed samples  |
| Butalbital       | 0.88                          |  |
| Pentobarbital    | 1.10                          |  |
| Amobarbital      | 1.11                          |  |
| Phenytoin        | 1.19                          |  |
| Etchlorvyno      | 1.32                          | Requires a different extraction for quantitation.<br>Detectable in overdoses |
| Secobarbital     | 1.38                          |  |
| Glutethimide     | 1.46                          |  |
| Carbamazepine    | 1.50                          |  |
| Chlorpropamide   | 1.60                          | Oral Hypoglycemic  |
| ?                | 1.7                           | In decomposed samples  |
| Methaqualone     | 2.39                          |  |

SOFT BOARD OF DIRECTORS MEETING Wednesday — September 30th 3:30 - 5:00



# FIRST 1987 SOFT E.R.A. ANNOUNCED

The first 1987 SOFT Educational Research Award recepient is Parrin Tareyl Barton. Ms. Barton is presently working on a doctorate of pharmacy degree at Mercer University Southern School of Pharmacy. Her research is being conducted in collaboration with the Georgia Bureau of Investigation, Division of Forensic Sciences. The research is entitled "A Novel In-Depth Analysis of DUI - Drugs Suspects" and focuses on determining blood concentration of drugs from subjects displaying behavior and characteristics suggestive of drug intoxication. It will compare the drug content and behavioral characteristics at arrest to drug content and behavioral characteristics at interview conducted at a later time. This project correlates with the endeavors of the SOFT DUID Committee which has attempted to better understand the relationship between drug use, drug concentrations and driving impairment.

# HIGHLIGHTS OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES MEETING

By Vickie Watts, Toxicologist, Mesa Police Department Crime Laboratory, Mesa, AZ

The 1987 AAFS Meeting held in San Diego was an all time success. Approximately 1500 members migrated south in February to combine the warm California sunshine with a week of forensic science. We can thank the Toxicology Section program chairman, Rod McCutcheon, as well as the Academy program chairman, Dan Labowitz, for an intense week of forensic toxicology. For those of you who were not able to attend and others who are not able to remember, the following account highlights the week's activities as they relate to forensic toxicology. The discussion will be limited to the scheduled scientific sessions although all of us know that a vast amount of information exchange occurs at the opening reception, the wine and cheese reception, and most of all the infamous SOFT hospitality suite.

The week started off right with two toxicology workshops held on Monday. The morning workshop dealt with environmental and industrial toxicology where case histories on occupational exposures were presented. The afternoon session dealt with a troublesome problem for forensic toxicologists today, the designer drugs. Dr. Gary Henderson gave both a detailed history and the current state of the art for fentanyl and the fentanyl analogs. Of the 109 fentanyl overdoses Dr. Henderson has reviewed, all but three have occured in California. Unexpectedly, there were no overdose cases reported in the Los Angeles area, but 30 cases originated from San Diego County with Orange County having the next highest number (both are prime recreational areas). The profile that Dr. Henderson gives for the typical fentanyl overdose victim is as follows: A blue collar worker who has a job, is possibly a recreational user of cocaine, and has had a past history of herion use. The death usually occurs at home or in the automobile, but not on the street. The combination of drugs most often found with fentanyl in order of occurrence were: ethyl alcohol, cocaine, and morphine.

Donald Cooper, with the DEA Special Testing and Research Laboratory, presented the analytical approach they use when faced with identifying a general unknown. Through the use of NMR and GC-MS results, the lab elicits a structure for previously unidentified designer drug preparations. As a final confirmation technique, they synthesize the suspected drug that has been identified and match the NMR or GC-MS results.

The informal Toxicology Session held Wednesday evening was well attended. There were many new faces alongside the familiar ones of Irving Sunshine, Fredric Rieders, and of course the discussion group leader, Rod McCutcheon, all of whom gave much of their time and expertise in answering questions. The main areas of discussion were: confirmation techniques and what constitutes a positive finding and postmortem redistribution of drugs and alcohol. Later in the session, the technique of vapor phase silation of glassware (1) used for detecting low levels of drugs in blood, such as THC or LSD, was discussed.

The scientific sessions on Thursday and Friday were uniquely organized. The early morning oral presentations were given from 9:00

to 10:30 followed by the poster sessions from 10:30 until 12:00. The afternoon oral presentations were then continued from 1:30 to 5:00. The longer time allowed for the poster sessions separate from the noon lunch break resulted in a large attendance and good interaction with the poster presenters.

A number of oral presentations on Thursday dealt with organo-phosphate pesticide analysis and cholinesterase monitoring. Papers on two of the newer immunoassay techniques were also presented. Carl Peterson gave a poster presentation on the Abuse Screen RIA Kit now available for screening LSD and metabolites. Al Polkis presented data from the TDx-cocaine assay. The TDx was compared with EMIT and HPLC data for 120 urine specimens which were positive for benzoylecgonine. All three methods tested positive for BE in 116 of the samples. There also was no interference reported with the TDx-cocaine assay for a number of other drugs such as opiates, amphetamines, and antidepressants.

Rokus de Zeeuw in his presentation on a Systematic Toxicological Analysis made reference to a newly published book titled "Gas-Chromatographic Retention Indices of Toxicologically Relevant Substances on SE-30 or OV-1." This book is available at \$35 from VCH Publishers, 303 North West 12th Avenue, Deerfield Beach, Florida. For those interested, though, the book can be purchased through TIAFT for \$12.50 and can be ordered by sending a U.S. money order or check to Bryan Finkle at 31 San Pablo Avenue, San Francisco, CA 97127, USA. A book containing systematic thin layer chromatography data is currently being prepared and will hopefully be available by the July TIAFT meeting in Banff, Canada.

After a somewhat structured morning and early afternoon, the 'Standard Operating Procedures for Inspection of Forensic Toxicology Drug Test Labs' was presented by Robert Simon. This was followed by a panel discussion on urine drug testing. The attendance at these last two sessions had doubled that of the morning due to members from numerous other sections sitting in to hear the new developments in this area. This response reflected the general concern from the Toxicology Section of the Academy in reference to the proposed NIDA guidelines.

The Friday morning session began with the guest lecturer, Douglas Rollins, from the Center for Human Toxicology. Dr. Rollins presented an overview on new developments in the area of benzodiazepines. The metabolism and elimination half-life for a number of benzodiazepines was discussed including alprazolam and triazolam. Comments were made from the audience that in Miami and Dallas alprazolam and triazolam have been found to be used in combination with alcohol as the new "Mickey Finn" in drug-related crimes. Looking more to future issues, Dr. Rollins reported on the drug buspirone released in December of 1986. This drug does not have a benzodiazepine structure but may bind to the benzodiazepine receptors. Buspirone has been found to be effective in treating anxiety, has a low abuse potential, and low incidence of side effects.

Dr. Rollins also discussed the benzodiazepine antagonists. This class of compounds is being used clinically to reverse the CNS depressent effects of the benzodiazepines. A recent publication in Science (2) also suggests that these compounds may reverse the CNS effects of alcohol.

The Friday poster session was also well attended. The issue of DWI chemical testing is always a concern at forensic meetings. Two of the poster presentations dealt with breath test issues. Robert Zettl reported on the Intoxilyzer Model 5000 and Paul Williams on the Alcometer AE-D3. Looking to the area of drugs, a postmortem fentanyl case was presented by Barry Levine, and a California survey of PCP in drivers was presented by Raymond Cole.

With the meeting coming to a close on Friday, the membership now will focus on the 1988 Academy meeting to be held in Philadelphia. The Toxicology section should be especially proud this year as one of our key members, Dr. Yale Caplan, is serving as the Academy president. Dr. Caplan has provided guidance and support to numerous toxicologists in the field and the position of Academy president is well deserved. The program chairman for the Philadelphia meeting is Dr. Marina Stajic, also from the Toxicology Section. The 1988 Academy meeting promises to be one that all toxicologists should definitely plan on attending.

- D.L. Fenimore, C.M. Davis, J.H. Witford, and C.A. Harrington. Vapor-phase silylation of glassware. Anal. Chem. 48, 2289-2290 (1976).
- P.D. Suzdak, J.R. Glowa, J.N. Crawley, R.D. Schwaitz, P. Skolnick, and S.M. Paul. A selective imidazobenzodiazepine antagonist of ethanol in the rat. Science 234, 1243-1247 (1986).

#### QUALITY ASSURANCE WORKSHOP FOR FORENSIC TOXICOLOGY DRUG TESTING

September 29, 1987 SOFT Annual Meeting Key Biscayne, FL

See insert or contact:
Robert K. Simon, Ph.D.
Workshop Co-chairman
Washington Analytical Lab, Inc.
14214 Coda Place
Chantilly, VA 22021
(703) 631-6871

# ELMER GORDON OPEN FORUM

COMPUTERS - Dick Pinder is seeking information on computerized data storage and retrieval systems to monitor medical examiner's case information, particularly case status. The system softshould ware/hardware allow simultaneous multiterminal access to data on a minimum of 20,000 cases without exchanging data storage units and should also allow recall of specific cases based upon customized blocks of data. (Example, recall all cases of male stabbing victims between ages 17-20 with + opiate results and autopsied between 1/85 and 9/87.) If you have experience with or knowledge of a possible application systems, contact:

Richard D. Pinder, Ph.D.
Office of the Chief Medical Examiner
P.O. Box 427
Farmington, CT 06034

QUALITY PRINTING NEEDED — If you have access to a high quality computer printer and IBM compatible system, SOFT needs you. Would you be willing to print material from a disk specifically for SOFT related needs (programs, ToxTalk inserts, etc.)? Or do you have a system capable of variable fonts to fill in certificates? Contact Pat Monforte c/o ToxTalk or call (313) 884-4718.

# **ANNOUNCEMENTS**

- J.A.T. UPDATE Dr. Joseph R. Monforte reports that the SOFT Special Issue of JAT has been sent to the publisher and should be available for distribution at the Annual Meeting in Florida. His committee wishes to thank the contributing SOFT members.
- Submit any bills for reimbursement for SOFT expenses to Treasurer Jim Valentour so that he may close out the 1986-87 fiscal year. Also, don't forget to pay your SOFT annual dues.
- Secretary Nick Hodnett would like to receive your completed Membership Profile if you have not sent it yet.

## **CALL FOR PAPERS**

1987 SOFT Annual Meeting See insert or contact:

Joseph Balkon, Ph.D.
SOFT Scientific Program Chairman
St. Johns University
College of Pharmacy
Dept. of Pharmacology & Toxicology
Jamaica, NY 11439
(718) 990-6064

### **NEW S.O.F.T. MEMBERS**

FULL MEMBERS -

Thorne J. Butler, M.D., Joseph A. Crifasi, B.S., William L. Hearn, Ph.D., and John W. Soper, Ph.D.

ASSOCIATE MEMBERS — Somasundaram Addanki, Ph.D., Donald F. Loomis, B.S., and Marian F. Papiernik, M.S.

The following members were promoted: Ronald R. Bell, B.S., (full) and Ausrine K. Balaitis (full).

## **MEMBERS ON THE MOVE**

Robert J. Osiewicz, Ph.D., Erie County Laboratories, Toxicology Division, 462 Grider Street, Buffalo, NY 14215. (716) 892-4415.

Be sure to notify **ToxTalk** of any address change.

# **CAREER OPPORTUNITIES**

Do you have a position available that may be of interest to SOFT members? Please submit the information to ToxTalk. There is no fee for this service. •

# **SPECIAL AIR FARES FOR 1987 SOFT ANNUAL MEETING**

# Save 65% Off Published Coach Round Trip Fare Or 30% Off First Class Round Trip Fare On Eastern Airlines

The Official Airline for the 1987 SOFT Meeting

Take advantage of this opportunity to save money and have the convenience of nationally-recognized AAA (Michigan) CONVENTION SERVICES taking care of your travel plans to the 1987 SOFT Annual Meeting in Key Biscayne, Florida, September 29th to October 2nd. Any person participating in the SOFT meeting is eligible for this great discount!

#### DO NOT WAIT — RESERVATIONS MUST BE MADE AT LEAST 10 DAYS IN ADVANCE.

It's easy. Follow these simple steps.

- 1. Review the meeting schedule
- 2. Preferred date of departure: \_\_\_\_\_\_\_return: \_\_\_\_\_\_ \*\* The special rates are applicable from September 26th to October 5th \*\*
- 3. If using a major credit card, have it handy.
- 4. Call 1-800-468-7022 (toll-free call).
- 5. Give the special S.O.F.T. Identification No.: E Z 9 B P 7 8. Note reservation information here for your reference:

| TO MIAMI/Key B | Biscayne: # | Departs | Arrives: |  |
|----------------|-------------|---------|----------|--|
| FROM MIAMI: #  | D           | enarts: | Arrives: |  |

If you have further questions or any difficulties, you may contact AAA Convention Services Group Travel Specialist Sylvia Shaw at (313) 443-8946.

Your participation will help SOFT negotiate future air/travel discounts.

## PROFESSIONAL CALENDAR

JULY 28-31, 1987: INTERNATIONAL ASSOCIATION OF FORENSIC TOXICOLOGISTS, Banff, Alberta. Contact Graham Jones, Ph.D., TIAFT '87, 4070 Sowness Road, N.W., Calgary, Alberta, Canada T38 3R7.

AUGUST 2-7, 1987: INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES 11th Meeting, Vancouver. Contact AIFS, Suite 801, 750 Jervis Street, Vancouver, B.C., Canada V6E 2A9.

AUGUST 10-14, 1987: 3rd INTERNATIONAL MEETING OF THE PAN AMERICAN ASSOCIATION OF FORENSIC SCIENCES AND 1st WORLD MEETING OF POLICE SURGEONS AND MEDICAL OFFICERS, Wichita, KS. Contact William G. Eckert, P.O. Box 8282, Wichita, KS 67208 (telephone 316-685-7612)

SEPTEMBER 29 - OCTOBER 2, 1987: SOFT NATIONAL MEETING, Key Biscayne, FL. Contact Leonard Bednardczyk, Ph.D., 864 Northwest 23rd Street, Room 203, Miami, FL 33127 (telephone: 305-638-5765)

OCTOBER 1988: SOFT ANNUAL MEETING, Philadelphia.



It's easy. Follow these simple steps.

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