MAAFS NEWSLETTER

A Publication of the Mid-Atlantic Association of Forensic Scientists

Editors: Dr. Donald R. Lundy
Dr. Antonio A. Cantu

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MESSAGE FROM THE PRESIDENT

We were extremely fortunate in selecting Joe Gorski and Walter Hrynkiw as Chairmen of the Fall meeting held at Tamiment, Pennsylvania, in October. They did an outstanding job and it is a real pleasure to extend congratulations and offer sincere thanks to them from all our members. We are also indebted to the many others who contributed to the program. For example, the papers were outstanding in quality, quite obviously the products of much hard work. Again, from all the membership, we are most grateful.

This brings to mind the objectives for which our Association was formed, among which are the exchange of ideas and information within the field of forensic science, and the promotion of professional expertise among persons working in this field. These objectives, particularly the exchange of information, are paramount for the crime laboratory just making a start.

As many of us know, the facilities for learning the methods and procedures of forensic science traditionally have been limited largely to on-the-job training in established laboratories. Now, as in the past, when this type of apprenticeship is not available the beginner who is left to his own devices has a problem of serious dimensions in attempting to establish a secure foothold in his chosen area of forensic science. He also is at a stalemate in another direction because the opportunities to learn the methodology of forensic science through formal academic training are likewise extremely limited.

Thus, it was most heartening to learn from Bell Herndon at the Tamiment meeting of FBI Director Clarence M. Kelley's plans to provide training for the personnel of all forensic laboratories. Mr. Kelley's action is a most significant contribution to forensic science. Needless to say we applaud his decision and welcome his support with deepest gratitude.

Sincerely,

JOSEPH L. GORMELY
President

THE FALL MEETING - BRIEF SYNOPSIS

Many fine features of the fall meeting will be remembered. First, the location and facilities should be mentioned. There is no question about it,

the Poconos are indeed gorgeous. This was appreciated more on the second day of the meeting as rain dominated the first day. The meals and rooms provided were something to mention also. Apparently the rooms we had were designed only for sleeping and cleaning up - this, however, should not be a complaint as the Tamiment Resort offers a wealth of attractions. Regarding the food, some of us swear that we left a few pounds (or kilos nowadays) heavier than when we arrived; those desserts were something else! Despite the ala Eva Gabor "Darling" from a delightful waitress and the explainably slow service (the dining room was packed most of the time), the personnel had a warm and helpful attitude. The four fine meals, a room for one night, and the meeting registration cost most of us a little under $40.00.

Following is a summary of the events of the meeting.

18 October 1973

12:00 to 12:45 PM	Registration - Main Lobby
12:45 to 2:00 PM	Lunch - Main Dining Room
2:30 to 5:00 PM	Presentation of Papers - Constellation Room 1. Methods of Dry Blood Typing - Robert Shaler, Allegheny County Crime Laboratory 2. Firearms and Toolmarks Examination - Jack Harriman, Bureau of ATF, U.S. Treasury 3. "Shotgun Method of Tox" A Quick Method Toxicology Screen - Dr. Jane Speaker, Philadelphia Medical Examiners Office 4. p-Methyl Amphetamine - Michael Horvath, Pennsylvania State Police Crime Laboratory 5. Document Dating - Dr. A. A. Cantu, Bureau of ATF, U. S. Treasury
7:00 to ?	Banquet - Main Dining Room Speaker: Dr. George Hudock, Forensic Pathologist - "The Devil's Dozen" Popular Misconceptions about Forensic Medicine

19 October 1973

8:00 to 9:00 AM	Breakfast - Main Dining Room
9:00 to 10:00 AM	Business Meeting - Constellation Room
10:00 to 11:30 AM	Presentation of Papers and Panel Discussion - Constellation Room 1. Forensic Applications of UV, IR, and GC - Michael Boland, Beckman Instruments, Inc. 2. Panel Discussion - The Problem of Training Forensic Scientists
11:30 to 12:30 PM	Lunch - Main Dining Room

As mentioned elsewhere in this Newsletter, Beckman Instruments sponsored a social gathering after the Banquet. Following are abstracts of some papers presented.

ABSTRACTS

TOOLMARK AND FIREARM EXAMINATIONS

AT THE BUREAU OF AT&F

By

Jack J. Harriman
Bureau of AT&F
U. S. Department of Treasury
Washington, D. C. 20226

The U. S. Department of Treasury Bureau of Alcohol, Tobacco and Firearms Laboratory handles many types of scientific examinations on cases from state, local and federal law enforcement agencies. The services discussed here concern the identification of firearms and toolmarks.

The capabilities of this section address several types of problems. These include: the identification of bullets and/or cartridge cases which were used in a shooting, for example; the determination of the type of weapon which could have fired a bullet when only the bullet is available; in some cases, the determination of the muzzle-to-body distance by using the Walker chamical test; and the restoration of serial numbers of weapons in order to identify the true owner or the originating source.

In the area of toolmarks, typical requests are associated with settling a burglary case. Often evidence is in the form of a tool, such as a screwdriver, taken from a suspect and a striker plate taken from the scene of the crime. When the marks from the screwdriver simulated in the laboratory match the marks on the plate, the tool is identified as that used to pry or tamper the plate.

A brief scientific review of the uniqueness and reproducibility of markings made by tools and firearms is outlined. Just as fingerprints have individual characteristics, so do firearms and toolmarks which provide the basis for their identification.

SHOTGUN METHOD OF TOXICOLOGY

By

Dr. Jane H. Speaker
Chief of Toxicology
Office of the Medical Examiner
Philadelphia, Pa. 19103

Dr. Speaker discussed a "one shot" screening method for determining the presence of drugs in blood. The method utilizes a TLC screening procedure currently being practiced in the Toxicology Laboratory of the Philadelphia Medical Examiner's Office.

The essential point of the method is that it involves a single extraction from blood into ethyl acetate with the help of a saturated ammonium sulfate solution at a single pH of 6.6. No separate procedure for an alkaline or acid extract is undertaken. This single extract is then chromatographed with a mixture of solvents followed by a sequential application of proper spraying agents. For specificity, the method should be complemented with GC or other analytical techniques.

The method on which Dr. Speaker's talk was based will appear in the Journal of Chromatography sometime in early 1974. The principal author is Dr. Fred Reiders. This abstract was prepared by Dr. A. A. Cantu, Editor.

PROPERTIES OF ANOTHER AMPHETAMINE:

p-METHYL AMPHETAMINE

By

Michael A. Horvath
Criminalist III
Pennsylvania State Police
Crime Laboratory
Bethlehem, Pa.

This laboratory has commonly encountered amphetamine (phenylisopropylamine) and methamphetamine and on occasion has received several of the other hallucinogenic derivatives. In the early part of 1973 this laboratory came in contact with another form of amphetamine, 4-methyl phenylisopropylamine which is classified as an isomer of methamphetamine as defined by the New Controlled Substance, Drug Device and Cosmetic Act of the Commonwealth of Pennsylvania.

A series of chemical and physical properties have been determined for raw samples of this compound. The Marquis and Mandelin reagents differentiate this compound from its isomer as also does the GC retention time which differentiates a larger class of similar compounds. The UV spectra has been obtained for the white powder in pure, alkaline, and acidic methanol. A treatment of the sample with NaOH followed by a chloroform extraction yielded an oily free base which was then converted to the hydrochloride salt. The UV spectra of the pure, acidic and alkaline methanol solution with this latter compound has been determined.

DOCUMENT DATING

By

Dr. Antonio A. Cantu
Bureau of AT&F
U. S. Department of Treasury
Washington, D. C. 20226

Determining the absolute age of a document, either through its paper or ink, is almost an impossible task due to the many parameters that can influence aging. However, attempts can be made at determining when the paper or ink was commercially available.

The method used by the Bureau of AT&F for analyzing paper relies on the premise that the trace element content of paper, as determined by neutron activation analysis, provides a type of "fingerprint" of its manufacturer and at least its production year. The manufacturer is usually identified by its watermark and when this is not frequently changed (e.g. yearly), single paper samples are requested from a particular sequence of batches. A match between the trace element characteristics from a questioned and a known paper sample implies that, to a high degree of scientific certainty, both papers have the same production year.

For inks, the Bureau of AT&F possesses a standard library of different ink formulations and their first production date. A standard set of physical and chemical characteristics, which have been determined for each ink (dried on paper), usually differentiates between the different formulations, but occasionally further refined characteristics need to be obtained. Questioned inks (and paper blanks) are subjected to the entire battery of examinations in order to find a match with a standard ink.

Presently there is research being conducted at the Bureau of AT&F in the area of ink tagging. As being designed, such efforts should alleviate the problem of encountering an ink which has not changed with sufficient frequency (e.g. yearly) and of having a non-match be due to a questioned ink having been exposed to severe deteriorating conditions. Furthermore, such tagging will be simple and inexpensive to perform and should make a match be a positive identification, i.e., a match is an identification to the highest degree of scientific certainty.

AFTER DINNER SPEECH

SCIENCE AND TECHNOLOGY IN CRIMINALISTICS
&
"THE DEVIL'S DOZEN" POPULAR MISCONCEPTIONS IN LEGAL MEDICINE

By

George E. Hudock, Jr., M.D.
who among other things is
Director of Laboratory
Wyoming Valley Hospital
Wyoming, Pa.

In December 1887, the readers of "Beeton's Christmas Annual" in London were introduced to Sherlock Holmes, the most famous detective in history, and Dr. Watson, Holmes' faithful companion. Also in that year, in Paris, Alphonse Bertillon, the founder of scientific criminology, climbed the first crucial rungs of his ladder to world fame.

Arthur Conan Doyle, a 27- year old physician who used the long intervals between patients to write magazine stories, did not know Bertillon, nor could he boast of any connection with Scotland Yard.

The phenomenen of Bertillon and the impetus he gave to the investigation of crime sprang from the same root as the literary career of Sherlock Holmes. What was involved was the fundamental belief of the late 19th century that all of life's problems could be solved by precise thinking, precise scholarly deductions and scientific knowledge.

These two men were developing procedures that were to become the basic foundation of detective work: fingerprinting, forensic medicine, toxicology, ballistics and serology. It was during this time that medicine was changing from an empirical art to a scientific method and what Sherlock Holmes did was to avail himself of all the chemical biological, physical, and technological methods which were springing up at the turn of the century.

In 1893 when Conan Doyle, by now out of ideas and sick of the whole thing, sent his hero Sherlock Holmes plunging to his death in the Gorge of Reichenbach along with his arch-enemy Moriaty, a book appeared in Germany which was a far cry from literary fantasies but which gave substance to the ideas and methods of the early Sherlock Holmes. This was a book written by Haun Gross which was a scholarly book on crime and the law. Gross strongly advocated using the techniques of toxicology, ballistics, serology and forensic medicine. In addition, he included a number of chapters dealing with matters which had never been considered in a work on criminology. Some of the chapter headings were: employment of the microscopist, employment of the chemist, employment of the physicist, employment of the mineralogist, zoologist and botanist. What Gross was doing in his book was appealing to the criminologists to avail themselves of the potential uses of science and technology.

Now today, like these gentlemen in the past, you forensic scientists are bringing an increased sureness to law enforcement efforts which has greatly advanced the pursuit of justice. Recent supreme court decisions

have placed an added burden on the work that you forensic scientists do. Our ideal of justice requires objectivity tempered with compassion. Gone are the days of the vigilantes. The basic tenet of our system of justice is that a man is innocent till he is proven guilty; therefore we need irrefutable evidence to distinguish between guilt and innocence. It is forensic science which is providing the means which makes it easier to achieve this distinction. More and more people are realizing the importance of the forensic scientists and law enforcement. We all know that for a person to be found guilty, his guilt must be proven beyond a reasonable doubt. A forensic scientist in his determined efforts to ascertain truth must exonerate the innocent with the same precision as he condemns the guilty. I am glad that science has come to be in staunch opposition to crime. We all know that discovery is the lifeblood of science while concealment is vital to crime. The acceptance of science in law enforcement strengthens the forces of justice and is a powerful ally of the war on crime.

(From the Editor - At this stage Dr. Hudock presented the Devil's Dozen Medicolegal Misconceptions. The following is an outline of this part of his speech)

I. Introduction

A. Persistence of untrained, unqualified personnel

B. Misconceptions

II. Most Frequent Misconceptions

A. That the time of death can be precisely determined by an examination of the body.

B. That the autopsy always yields the cause of death. In fact:
1. The actual percentage varies with the individual examiner, his philosophy, his rigidity
2. In 1-5 % of the cases, the cause is never known
3. There may not be enough of the body left
4. There may be the sudden death syndrome in infants

C. That an autopsy can properly be carried out without a "history".

D. That an autopsy is over when the body leaves the morgue.

E. That embalming will not obscure the effects of disease and trauma.

F. That only true and suspect homicide victims need examination.

G. That the cause and manner of death are the only results of autopsy. In fact, one can determine also:

1. Correlation of weapon with wounds
2. If auto vehicle safety features were used
3. If it was an hereditary disease
4. Settlement of estates

H. That any pathologist is qualified.

I. That the autopsy must be immediate.

J. That poison is always detected by the toxicologist.

K. That all physicians are good death investigators.

L. That the medicolegal investigation is criminally or prosecution oriented.

BECKMAN INSTRUMENTS, INC. AT THE MEETING

Most of us at the meeting will remember the fine social gathering we had after the Banquet with the Beckman representatives, Lou DiCave and Mike Boland, and their wives. They hosted a most enjoyable after-dinner cocktail reception. The entropy (from an information theoretic point of view) of the group had a tremendous upsurge, i.e. the exchange of information was fervent.

Aside from this fine gesture, for which we sincerely offer our thanks to the Beckman representatives, they formally presented to us some of the forensic science research they are doing. Also a fine display of some of their recent instruments was set up at the meeting. They instilled an interest in us which most likely will prove valuable to them.

MINUTES OF THE MAAFS BUSINESS MEETING

The meeting was presided over by Joseph Gormley. A motion was proposed by Joseph Gorski and amended by Jean Andres appointing a nominating committee which will present a slate of candidates for MAAFS officers at the coming spring meeting. The amended motion was carried unanimously.

President Gormley appointed the following nominating committee:

Charles L. Killion from Virginia,
Delbert Agee from Virginia, and
James Adams from Baltimore

It was agreed that the spring MAAFS meeting should be held sometime

between the first week of April and the middle of May, avoiding Easter weekend and cherry blossom time. The meeting is to be held in the Washington, D. C. area. Bell Herndon and Tony Cantu are to be co-chairmen for the spring meeting.

Those people attending the Tamiment meeting who wished to become MAAFS members will be sent the necessary application forms after the Tamiment meeting. A membership list will be made out including addresses and credentials.

The twenty-five people present at the business meeting voted a preference for a certificate of membership instead of a membership card. Tony Cantu will initiate the production of membership certificates.

It was agreed that anyone applying for membership in the fall will pay $7.50 (one year's dues) to include the period from acceptance through December of the following year.

PANEL DISCUSSION

The panel discussion centered around the problems in, and approaches to the training of forensic scientists. The panel consisted of Joe Gormley, Bell Herndon, and Lt. James Sagens; audience participation was encouraged. Joe Gormley opened the discussion by introducing the subject and delineating his recent efforts to train personnel in his laboratory. His staff consists mostly of evidence technicians who welcome the opportunity to obtain more forensic training. Joe described how he obtained an LEAA grant for inviting two former FBI scientists, Dr. Fred Miller, documents examiner, and Bob Zimmerman, toolmark and firearms analyst, to the Maine State Police Laboratory. They will evaluate and then train personnel in appropriate areas. Here Joe reminded us of how LEAA can be of assistance in training efforts. Later he introduced a possible "tour" proposal where a team of scientists might visit several laboratories around the nation for the purpose of training.

Bell Herndon mentioned the "FBI Questionnaire" being sent to state and local laboratories throughout the U.S. The questionnaire concerns laboratory operations and needs. The resulting information will eventually be used to obtain indices for research and training priorities. This was discussed later.

Lt. James Sagens told us of the in-house method he uses to train personnel in the set of Pennsylvania State Police Laboratories. The use of AOAC methods plus others was indicated. Here Bell mentioned the on-going project at the FBI concerning a forensic science manual being prepared by them and others. This will be sent to authorities in specific fields for review. Dr. Jane Speakers and others reminded us of the importance of having a qualified scientific interpreter of results as opposed to having a cookbook

follower. It was agreed that any method, AOAC, forthcoming FBI manual, or any other procedure should be taken as a suggested approved analysis which courts have accepted and not as a required method.

Joe Gorsky also brought out the importance of training a scientist in the judicial process and preparing him or her to be an expert witness.

The discussion then centered around Bell's presentation of an LEAA supported plan to train and exchange ideas with state and local forensic scientists. This will be in effect soon at the Quantico FBI Academy. The FBI will provide the facilities and experts from federal and state and local agencies will participate in the training. Tony Cantu mentioned here the on-going LEAA grant to the American Association of Forensic Scientists for assessing the present training facilities for forensic scientists - a program whose results will be most valuable to the planning of a training program.

The discussion concluded with an agreement on the importance of cooperation between all law enforcement agencies. Besides appreciating the ethical value of such an effort, we also were aware of the "New Federalism" policy of our present government; it is of a decentralizing nature. LEAA has certainly aided tremendously in this effort through its funding of programs aimed at improving state and local agencies. With regard to how this will affect federal agencies, Bell Herndon commented that the FBI Laboratory will continue serving its agency and those state and local agencies requiring its services; furthermore, any additional time that becomes available will be spent on training state and local scientists (Quantico) and pursuing research and development needs (from questionnaire).

LIST OF PARTICIPANTS

Several members suggested that a list of the people present at the meeting be published. This was provoked by the desire to continue the extensive exchange of ideas brought about by the meeting. This obviously indicates the success of the meeting for which the coordinators, Joe Gorsky and Walter Hrynkiw, are to be thanked. Following is a list of those persons who attended the meeting. Those with asterisks by their names were accompanied by their spouses.

I. Bureau of Forensic Science

A. Division of Consolidated Labs
1 N. 14th St.
Richmond, Va. 23219

1. Delbert T. Agee*
2. J. Donald Armstrong
3. Dwight Burgess
4. Jean G. Endress*
5. C. David Martin
6. Cleon C. Mauer
7. James R. McElwain
8. June Brown
9. Joseph Starks

B. Northern Virginia Branch
2714 Dorr Ave. P.O. Box 486
Merrifield, Va. 22116

1. Karl E. Hepner, Jr.
2. Charles L. Killion*
(Regional Director)
3. Joseph M. Phillips, Jr.

C. Tidewater Regional Laboratory
401 Colley Ave.
Norfolk, Va. 23507

1. Steven C. Sigel

II. Pennsylvania State Police Lab

A. 21st and Herr Streets
Harrisburg, Pa. 17104

1. Kevin J. Mimm*
2. Lt. James Sagens
(Director)

B. 475 Wyoming Ave.
Wyoming, Pa. 18644

1. Joseph John Gorsky*
2. Walter Hrynkiw

C. P.O. Box 2005
Bethlehem, Pa. 18001

1. Michael A. Horvath

III. Bureau of AT&F
1111 Constitution Ave. N.W.
Washington, D.C. 20226

1. Antonio A. Cantu
2. Jack J. Harriman

IV. U.S. Customs Service, Region III
103 S. Gay St. (Lab Division)
Baltimore, Md. 21202

1. James M. Adams*(Regional Director)
2. Gary J. Hermann*

V. Allegheny County Crime Laboratory
Allegheny County Court House
Pittsburg, Pa.

1. Peter Marone
2. Robert Shaler

VI. Beckman Instruments, Inc.

1. Lou DiCave*
2. Mike Boland*

VII. Single Representatives

1. Douglas Cromwell
Ordway Hilton
15 Park Row
New York, N.Y. 10038

2. Joseph L. Gormley*, Director
Maine State Police Laboratory
36 Hospital St.
Augusta, Maine 04330

3. Bell P. Herndon*
FBI Laboratory
9th and Penn. Ave. N.W.
Washington, D.C. 20535

4. Dr. George Hudock*
c/o Mercy Hospital
Wilkes-Barre, Pa.

5. Rose Lanzetta
Maryland State Police Crime Lab
Pikesville, Md. 21208

6. Jane H. Speaker
Office of the Medical Examiner
312 University Ave.
Philadelphia, Pa. 19103

7. Albert G. Wilshire
Waters Associates Inc.
Maple Street
Milford, Mass. 01757

8. Joseph A. Vorozilchak
Philadelphia Police Crime Lab
Philadelphia, Pa. 19106

REQUEST FROM THE FORENSIC SCIENCES FOUNDATION

The Forensic Sciences Foundation, which is the education and research arm of the American Academy of Forensic Sciences, is conducting a survey of the extent of involvement of the forensic scientists in the criminal justice process. They have asked the MAAFS members to participate in their survey. Following is a notice regarding this matter which they have asked us to publish.

Notice For Expert Witnesses

The Forensic Science Foundation is currently conducting a research project the objective of which is to define and evaluate the various services performed by the forensic science profession in the criminal justice process.

If, since 1972, you have given reports or testimony in criminal court or elsewhere in the criminal justice process as an expert witness for either the prosecution or for the defense, would you mail a card or note to the Forensic Sciences Foundation giving your name, address and area of expertise. The Foundation, in turn, will mail to you a short questionnaire designed to group your type and degree of involvement with other individuals who have similar expertise.

If you know others who should be included in this survey would you call their attention to this appeal for help?

It is emphasized that this is a federally sponsored research project. The results will not identify any individuals. No form of solicitation will result from your participation since all names, addresses and questionnaires will be treated as confidential information.

We urgently need your support and solicit your help!

Mail to: Forensic Sciences Foundation
11400 Rockville Pike
Rockville, Maryland 20852

SPRING MEETING

At the fall meeting we discussed the subject of the joint meeting of the Southern Association of Forensic Scientists and the Mid-West Association of Forensic Scientists to be held in Lexington, Kentucky. The idea of having the MAAFS also join this meeting was not favored. Furthermore, the Mid-West Association also felt this would lead to difficulties. However, they stressed the fact that we are more than welcome to attend their meeting.

Tony Cantu and Bell Herndon are co-chairmen for the coming MAAFS Spring Meeting. As mentioned in the Minutes of the Fall Meeting, it will be held in the Washington, D. C. area. Here are the preliminary plans for it:

A. The DATE and TIME are set for 10:00 AM Friday, April 26 to 12:00 noon Saturday, April 27, 1974.

B. The PLACE is tentatively set for the Holiday Inn in the Rosslyn area of Arlington, Va. This is by the Key Bridge and within walking distance of Georgetown.

- Consideration is being given to the following possibilities -

C. Having a formal group lunch and dinner banquet (both on Friday).

D. Hearing about 10 to 12 half-hour speakers.

E. Having about three coffee and pastry breaks.

F. Having a sponsored cocktail hour.

G. Having an informal "gab" session for several groups (toxicology, serology, drugs, documents, forensics, etc.)

REQUEST FOR PAPERS! If you would like to participate as a speaker, please contact by phone or mail Dr. A. A. Cantu, Bureau of AT&F, 1111 Constitution Ave. N.W., Washington, D. C. 20226, (202) 964-6677.

The co-chairmen are presently designing the formal announcement of the meeting and the application forms. These should be out to the members by late February.

The Holiday Inn is being considered for several reasons of which the major one is the reasonable cost combined with the useful location. They do not charge for the meeting room; a double room is $30.74 (tax included), i.e. each of two in a room pays $15.37; and their banquet and luncheon rates were the most reasonable of the several other places visited nearby.

THE FALL MEETING OF THE

CALIFORNIA ASSOCIATION OF CRIMINALISTS

The 42nd Semiannual Seminar of the California Association of Criminalists was held at the Stanford Research Institute, Menlo Park, California on October 18th through 20th, 1973 - same time as our fall meeting. For those

interested we are duplicating a Seminar Program of that meeting. Copies of this program together with abstracts and author's addresses can most likely be obtained from the Stanford Research Institute. Your co-editor, Tony Cantu, can also xerox a copy for those interested.

Add to page -14-

SEMINAR PROGRAM

THURSDAY

9:00	OPENING REMARKS	Larry Ragle, President Jerry Chisum, Seminar Chairman
9:05	WELCOME	Charles Cook, Executive Director, Physical Sciences Division, SRI
9:15	THE NEW POLICE OFFICER	Victor Cizanckas, Chief Menlo Park Police Department
9:30	THE DRUGGED DRIVER	Berniece Stone Sacramento County Coroner's Office
9:50	A FLUOMETRIC METHOD OF DETECTING Pb AND Sb GUNSHOT RESIDUES	Peter Jones & Robert Nesbitt Aerospace Corporation
10:15	COFFEE BREAK	

NOTE: NO COFFEE OR FOOD ALLOWED IN AUDITORIUM

10:40	A SUPER-FAST OPIUM ASSAY	Tom Noguchi & George Nakamura L. A. Coroner's Office
11:00	BIO PHOSPHORESCENCE - A RAPID TECHNIQUE FOR IDENTIFICATION OF ORGANIC SAMPLES	Richard A. Harte Omicron
11:30	DRUG DETECTION BY TLC, A COMPARATIVE STUDY	Donald Jones, George Sherman, DeWitt Hunter Sierra Laboratories
11:50	GCI VS. BLOOD ANALYSIS	Martin Breen Orange County Sheriff's Office
12:10	FORENSIC CHARACTERIZATION OF SAND	Francis Fitzpatrick & John I. Thornton U. C. Berkeley
12:35	BIOCHEMICAL CHARACTERIZATION OF SOIL II INTERPRETATION OF SOIL ENZYME LEVELS	John Thornton U. C. Berkeley

Sorry this is a loose page - this portion was left out by the printer.

THURSDAY
(cont.)

1:00	LUNCH BREAK - SRI DINING ROOM	
2:00	DEVELOPMENT OF LATENT FINGER-PRINTS WITH 4-DIMETHYLAMINO-CINNALMALDEHYDE	Edward Rhodes John Thornton U. C. Berkeley
2:20	VOICE-PRINT FOR VOICE IDENTI-FICATION	Fausto Poza SRI
2:40	REALTIME SIGNATURE VERIFICA-TION	Hewitt D. Crane R. E. Savoie SRI
3:05	BREAK	
3:30	THIN LAYER ELECTROPHORESIS; ANALYSIS OF INKS	L. F. Harding George Sensabaugh U. C. Berkeley
3:50	EXPLOSIVES DETECTION	Sid Benson, SRI
4:15	CRIMINALISTICS IN IRELAND	Dr. A. J. Howard Belfast, Ireland
4:35	ANIMAL HAIR - A HAIR RAISING EXPERIENCE	David Q. Burd Sacramento District Attorney's Lab.
5:00	DISMISSED	

COMMITTEE MEETINGS AND BOARD MEETINGS AT RICKEY'S

FRIDAY

8:30	1. ANYTHING YOU CAN DO.... SIMULTANEOUS DETERMINATION OF THREE ISOZYMES	Merridee Richey
8:45	2. HEADACHES, PROBLEMS AND FRUSTRATIONS. LOOSING YOUR HAIR OVER G.P.T.	Jim Streeter
9:00	3. GROUPING IN THE DARK TAKING ADVANTAGE OF E.A.P.	Keith Smith
9:15	4. NOW YOU SEE IT--NOW YOU DON'T. TROUBLESHOOTING P.G.M.	John Cockerham

FRIDAY
(cont.)

9:30	5. CHEAP AT TWICE THE PRICE EVERYTHING YOU NEED AND CAN AFFORD	John Cockerham
9:45	6. I DON'T KNOW, BUT I'LL LOOK IT UP...DISCUSSION AND QUESTIONS	Entire Group Above Department of Justice Sacramento Crime Laboratory
10:00	COFFEE BREAK	
10:30	FIREARMS RESIDUE AND MICRO-ANALYSIS; DISPERSIVE X-RAY FLUORESCENSE	J. G. Kulleck Analex, Inc., & Victor Reeve DOJ/ISB Sacramento
10:45	NATIONAL BUREAU OF STANDARDS "CRIMINALISTICS PROGRAMS"	Robert Mills NBS/Washington, D.C.
11:10	RESTORATION OF SERIAL NUMBER NUMBERS BY ULTRASONIC CAVITATION	Stanley Young Lewis Research Center, NASA Cleveland, Ohio
11:35	WEAPON LOCATION BY EJECTION PATTERN	John Bowden & James Booker DOJ/ISB Sacramento
12:00	LUNCH	
1:00	BUSINESS MEETING - RICKEY'S HYATT HOUSE - MARSTON ROOM	

Followed by EXIBITION OF EQUIPMENT - EDWARDS ROOM

VAN WATERS & ROGERS
OMICRON
PERKIN ELMER
LEITZ
SIRCHIE
FISHER SCIENTIFIC
LOS ANGELES SCIENTIFIC INSTRUMENTS

6:30 COCKTAIL HOUR - SRI INTERNATIONAL HOUSE

7:30 BANQUET

SPEAKER: STANFORD FIELD

"The Energy Dilemma--United States and the World"

SATURDAY

8:30	CHEMICAL ALTERATION OF TRAVELER'S EXPRESS MONEY ORDERS	David Bellomy & William Baird San Bernardino Sheriff's Office
8:50	NATIONAL INSTITUTE FOR LAW ENFORCEMENT AND CRIMINAL JUSTICE "CRIMINALISTICS PROGRAMS"	Joseph Peterson LEAA/NILE Washington, D.C.
9:15	ANALYSIS AND SURVEY OF MARINE FUELS AND POLLUTION SAMPLES	R. A. Rouen Royal Canadian Mounted Police Victor Reeve DOJ/ISB Sacramento
9:40	COFFEE BREAK	
10:10	NEW DEVELOPMENTS IN MASS SPECTROMETRY APPLIED TO FORENSIC SCIENCE	Michael Anbar SRI
11:00	SHOTGUN CASING COMPARISON FROM MANUFACTURER'S MARKINGS	Michael White DOJ/ISB Sacramento
11:30	SHORT NOTES	Robert Cooper Alameda County Sheriff's Office
12:00	WRAP-UP	

MAAFS Newsletter
Dr. D. R. Lundy Dr. A. A. Cantu
Dept. of Treasury
Bureau of Alcohol, Tobacco & Firearms
1111 Constitution Ave., N.W.
Washington, D.C. 20226

Mr. Joseph E. Koles
7313 Gateway Blvd.
District Heights, Md. 20028