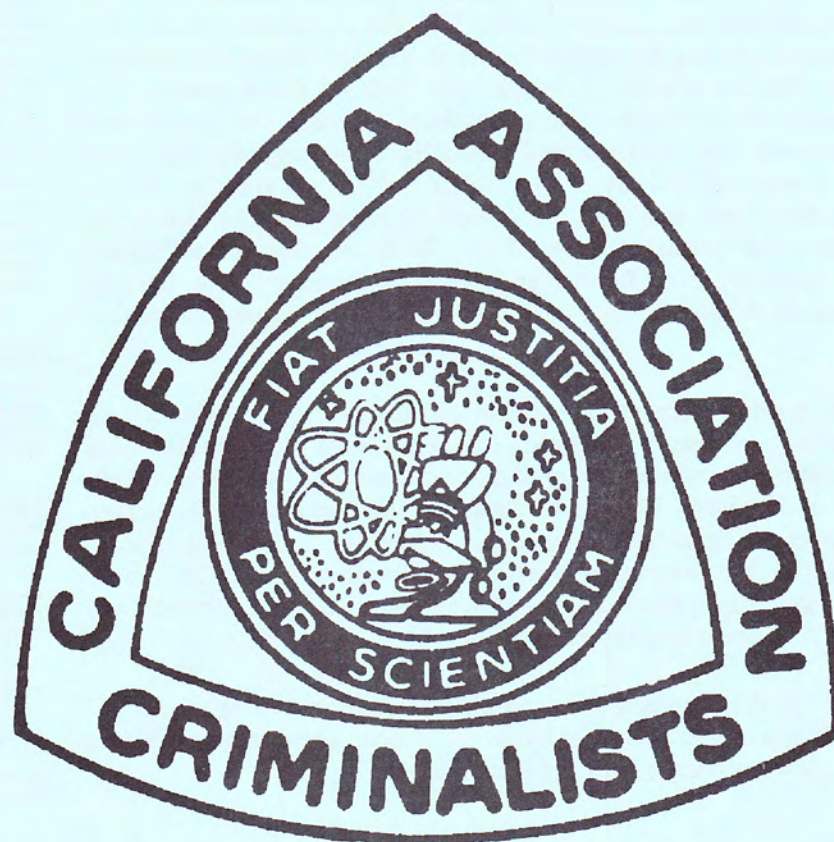


NEWSLETTER



JULY 1991

A MESSAGE FROM THE PRESIDENT

As the Association ends one year and begins another, I would like to thank all of you who volunteered your time and talents to make last year a great one for the Association. Eston Schwecke, during his year as President, kept the Association growing and moving forward. His opening act at the Comedy Club set a new standard for Presidential performance. Sandy Wiersema has completed her three year tour of duty on the Board of Directors. She leaves behind a long list of accomplishments. Her seemingly boundless energy will be missed. Jim Norris has "retired" from the Board, and all of us on the Board will miss him. Jim's most visible accomplishment is the enhanced appearance of the Newsletter. I would also like to welcome our new Board members, Editorial Secretary Lisa Brewer and Regional Director-South Barbara Johnson, and to thank all of you who have agreed to work on the various committees this year.

Having the C.A.C. provide more in the ways of training and/or education for its members has always been one of my goals. This year will be especially satisfying for me, because we will break exciting new ground. Sometime during the year, thanks to the generous gift of Reed and Virginia McLaughlin, the Endowment Committee will award its first grants of financial assistance for the training and/or education of our members. Having such a program makes your membership in the C.A.C. even more valuable. I am also asking the Training and Resources Committee to look into other ways that the C.A.C. could sponsor more training.

I am looking forward to the upcoming year and playing a role in making the C.A.C. better than ever. If you are interested in becoming a more active member, please contact me. We can always use more help and fresh ideas.

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Barbara Crosby

Martin Fink

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- - - - To be confirmed

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Jeff Thompson

Karen Sheldon

Lynne Herold

Barbara Johnson

Jennifer Super-Mihalovich

Peter Barnett - abstracts

Pam Smith - abstracts

CLANDESTINE LABORATORY INVESTIGATING CHEMISTS*September 4-7, 1991*

The First Annual Seminar of the Clandestine Laboratory Investigating Chemists will be held at the Bahia Resort Hotel on Mission Bay in San Diego, CA. The conference will include a course on Bombs and Booby Traps and a legal update on State and Federal laws relating to clandestine laboratories. The technical paper session will also include a historical lecture on the clandestine laboratory problem in the United States. An informal BYOS (Bring Your Own Slides) session will discuss cases, analytical techniques, etc. For further information, please contact:

Pam Smith, DEA Southwest Laboratory, 410 W. 35th Street, National City, CA 92050 (619) 557-6490

CANADIAN SOCIETY OF FORENSIC SCIENCE*September 23-27, 1991*

The 38th Annual Meeting of the Canadian Society of Forensic Science will be held at Le Grand Hotel in Montreal, Quebec. The meeting will be held jointly with the Society of Forensic Toxicologists (SOFT) and the International Association of Bloodstain Pattern Analysts (IABPA). The conference will include workshops on the Application of FTIR to Forensic Science, Immunoassay of Drugs, Mass Spectrometry, DNA and Arson.

For further information, please contact:

Canadian Society of Forensic Science, 2660 Southvale Crescent, Suite 215, Ottawa, Ontario, Canada K1B 4W5 (613) 731-2096

NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS*October 1-4, 1991*

The Semi-Annual Seminar of the Northwest Association of Forensic Scientists will be held at the Coeur d'Alene Resort in Coeur d'Alene, Idaho. For further information, please contact:

Daryl Brender, WSP Crime Lab, Public Safety Building, Spokane, WA 99201 (509) 456-4145
Alan Spanbauer, Bureau of Forensic Services, 2195 Ironwood Court, Coeur d'Alene, ID 83814 (208) 667-5825

MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS*October 7-11, 1991*

The 20th Anniversary Meeting of the Midwestern Association of Forensic Scientists will be held at the Adam's Mark Hotel in Kansas City, Missouri. The meeting will include workshops on PCR (AGTC), Bone Identification, Clandestine Laboratory Series, Steroid Analysis, Microscopic Examination of Non-Mineralogical Trace Evidence (Skip Palenik) and a Document Facility Tour. For further information, please contact:

Bill Chapin, Johnson County Crime Lab, 6000 Lamar, Mission, Kansas 66202 (913) 384-1100 ext. 5609

MEETING**ANNOUNCEMENTS**

CALIFORNIA ASSOCIATION OF CRIMINALISTS*October 17-19, 1991*

The Semi-Annual Seminar of the California Association of Criminalists will be held at the Clarion Hotel in Ontario, California and is being hosted by the San Bernardino Sheriff's Department. The seminar will include workshops on firearms examinations (Sturm Ruger), Occult Crime (Sgt. Randy Emon) and microcrystal tests (Joseph Koles, DEA).

For further information, please contact:

Donna Vidergar or Don Jones, San Bernardino Sheriff's Department, 200 South Lena Road, San Bernadino, CA 92415 (714) 387-2200

AMERICAN ACADEMY OF FORENSIC SCIENCES*February 17-22, 1992*

The 44th Annual Meeting the the American Academy of Forensic Sciences will be held at the Hyatt Regency Hotel in New Orleans, Louisiana.

For further information, please contact:

Anne H. Warren, AAFS, PO Box 669, Colorado Springs, CO 80901-0669 (719) 636-1100

CERTIFICATE OF PROFESSIONAL COMPETENCY IN CRIMINALISTICS

The next offering of the CAC Certification Examination leading to a Certificate of Professional Competency in Criminalistics will be held

SATURDAY, OCTOBER 19, 1991

IN

ONTARIO, CALIFORNIA

8:30 - 11:30 A.M.

Applicants must hold an earned baccalaureate or higher degree in a natural science from an accredited college or university, and must have been employed for a minimum of two years in a paid professional capacity primarily engaged in the examination of physical evidence, interpretation of data, and/or technical consultation for litigation purposes.

APPLICATION DEADLINE: SEPTEMBER 4, 1991

Applications are available from:

Steve Renteria

Los Angeles County Sheriff's Office

2020 West Beverly Blvd., Los Angeles, CA 90057

CRIMINALIST/FORENSIC TOXICOLOGIST

The Orange County Sheriff-Coroner Department is seeking applicants for the position of Criminalist as well as Forensic Toxicologist at both entry and journeyman levels. The Orange County Sheriff-Coroner Laboratory is a full service forensic laboratory. Duties vary with section of assignment. Applicants should have a four-year degree in criminalistics, chemistry, biology, biochemistry or a closely related science. Salary ranges from \$2463 to \$3319 per month. Additional qualification for the senior position is two years of experience in a forensic laboratory. Salary ranges from \$3277 to \$4339 per month. For further information, contact Margaret Kuo, Orange County Sheriff-Coroner Department, Forensic Science Services, PO Box 449, Santa Ana, CA 92702, (714) 834-4549.

FORENSIC SCIENTIST III (SEROLOGIST)

The Palm Beach Sheriff's Crime Laboratory is currently seeking applicants for a Forensic Scientist III (Serologist) position in our new laboratory facility. Minimum qualifications include a Bachelor's degree in biology, chemistry, forensic science or closely related field plus 5 years of work experience. Additional education or DNA training may be substituted for some experience. Position duties include analysis of biological materials in a full range of case work applications. Candidates must be qualified to render expert witness testimony and are subject to polygraph and background examination. Salary ranges from \$32,511 to \$48,300 per year with benefits. For further information, contact Barbara K. Caraballo, Serology Department, Palm Beach Sheriff's Crime Laboratory, 3228 Gun Club Road, West Palm Beach, FL 33406 (407) 471-2220.

EMPLOYMENT

OPPORTUNITIES

CRIMINALIST III

The Santa Clara County District Attorney's Crime Laboratory is seeking applicants for two Criminalist III positions. Minimum qualifications include an appropriate Bachelor's degree and four years of forensic science experience. Background in serology and trace are needed. Monthly effective salary is \$3843 to \$4653 (salary increase is currently being negotiated). For further information, contact Benny Del Re, Santa Clara County Crime Laboratory, 1557 Berger Drive, Suite B-2, San Jose, CA 95112 (408) 299-2220.

CRIMINALIST I

The City of San Mateo Police Department is seeking applicants for the position of Criminalist I. This is an entry level position and testing is anticipated later this summer. Salary ranges from \$3005 to \$3584 per month with a liberal benefit package. For further information, contact Gordon Deeg, San Mateo Police Department, 2000 S. Delaware Street, San Mateo, CA 94403, (415) 377-4588.

MOST OUTSTANDING PRESENTATION TO MARTHA BLAKE

The best paper at the Spring 1991 Seminar was presented by Martha Blake of the San Francisco Police Department. Co-authored by Verle R. Truman, the paper entitled "Now You See It, Now You Don't, Now You See It" concerned the use of Physical Developer, a latent fingerprint development system, to develop indented handwriting. The judging staff were particularly impressed with Martha's ability to present technical material from a specialized field in a form the non-specialists could understand. Martha's efforts in presenting her paper will be rewarded with a Merit Award and a \$100 stipend.

Dave Stockwell
Awards Committee

CAC QUESTIONNAIRE

Out of the 99 responses to the CAC Questionnaire, names were drawn to receive a prize. The following individuals will receive the following CAC items:

Gary Harmor (Serological Research Institute) - Scarf
Diana Holsinger (LAPD) - Scarf
Sandra Rakestraw (Forensic Laboratory Services) - Scarf
Michael Parigian (Ventura County Sheriff's Dept) - Coffee Cup
Anthony Sprague (Alameda County Crime Lab) - Coffee Cup
Dr. Walter Birkby (Human Identification Lab) - Coffee Cup

Individuals who have not returned their completed questionnaire are encouraged to do so. The information obtained is being used to aid in forming CAC committees. A copy of the questionnaire is included in this newsletter mailing.

Jennifer Super-Mihalovich
Regional Director-North

CAC NORTHERN SECTION ACTIVITIES

NORTHERN SECTION

On June 13, 1991, the CAC Northern Section Dinner Meeting was held at the Department of Justice, Bureau of Forensic Services facility in Sacramento. Hosted by CCI and the Sacramento Lab, the occasion provided a chance for members to tour CCI (the tour intended originally for the CAC Seminar in May 1989!). Attendees saw vacuum metal deposition, the GC/FTIR and DEC data system in action and some hands-on experience with the CCI library system. The Sacramento Lab also hosted a tour of their facility. They demonstrated the InfoSoft firearms inventory and tracking system. Mike Bullian, a DOJ special agent, gave a presentation to the Firearms Study Group on current assault weapon control efforts. The Serology Study Group also met for a planning session to decide on topics and schedules for future meetings.

Lou Maucieri and the CCI office staff organized a catered dinner and welcoming refreshments were served in the courtyard at the DLE facility. Lou arranged for perfect weather as well!

John DeHaan

FIREARMS STUDY GROUP

On April 18, 1991, the Northern Section Firearms Study Group met at the Contra Costa County Lab in Martinez. The topics of discussion were as follows:

- The 1990 AFTE meeting was reviewed and discussed by those who attended it.
- The Sacramento "Thrill Killer" homicides were discussed. This case involves a total of six homicides which occurred on two successive Tuesday nights. Information was given out regarding the class characteristics of the weapon involved.
- No gun cases. It is proposed that the study group produce a photographic data base of firearm breech faces.
- There was a discussion involving current investigations in various jurisdictions.

On June 13, 1991, the Firearms Study Group met at the Department of Justice facility in Sacramento. Mike Bullian of the DOJ Bureau of Narcotic Enforcement discussed the pitfalls and problems with the current California law banning certain assault weapons.

Eric Parsons

SEROLOGY STUDY GROUP

On June 13, 1991, the Northern Section Serology Study Group met at the California Criminalistics Institute in Sacramento. Chairperson Michele Horne led a discussion of a variety of topics. The group decided that, in light of the large number of new serologists, it would be worthwhile to review basic topics such as species testing, ABO typing and report writing. Also, with the arrival of DNA typing technology, additional problems such as evidence handling and decision-making will need to be addressed. The group plans to meet every other month with the next meeting scheduled for August.

Gary Sims

TRACE EVIDENCE STUDY GROUP STATUS

To introduce myself, I'm Ron Nichols, a Criminalist with the Oakland Police Department Crime Lab. In March 1991, the Northern Regional Director, Jennifer Super-Mihalovich asked me to chair the Trace Evidence Study Group upon the resignation of the former chairperson.

At the time I became chairperson, the group was already involved in a project involving the analysis of arson samples. Bill Deitz and Brad Cooper of ATF were volunteering their time and expertise in this area by agreeing to give two talks -- one of which was done in 1990. It was my desire to see this project through because the value of such training is immense to those who will use it.

I set a time up with Bill and Brad to provide the second half of the training which involved the recovery and analysis of arson accelerants from arson debris. Unfortunately, due to my prior commitments at the AFTE conference in Houston and other business in Buffalo, I could not arrange for this meeting to take place at the CAC dinner meeting in Sacramento. An announcement was sent out detailing the meeting and the date.

That meeting was canceled because of the lack of a significant response. I expect that many of you were burned out on CAC meetings which is understandable. However, I felt strongly that this training seminar would be extremely valuable and a re-scheduling was in order so that more might attend. Once this meeting is held, it is unlikely that it will be held again, anywhere in the near future.

My regrets to those who expressed an interest in attending it when it was offered. It will be offered again later in the summer at a time convenient with Bill and Brad. An announcement will be sent out with enough advance notice. I encourage those members who are interested to please contact me as soon as possible. Thanks!

Ron Nichols

EDWARD RHODES SELECTED DISTINGUISHED MEMBER 1991

President Eston Schwecke presented the 1991 Distinguished Member Award to Dr. Ed Rhodes at the Spring CAC banquet hosted by San Francisco Police Department Crime Laboratory. If one word were to summarize this year's recipient, that word would have to be modesty. Ed's acceptance speech was predicated on "being at the right place at the right time" throughout his career. Perhaps this is true, but it is just as true that Ed has routinely devoted his time to the Association in an entirely selfless manner. A simple glance at his CAC activities speaks volumes about Ed's concern for the CAC and the profession:

- 1976 CAC Member
- 1979-1981 Regional Director South
- 1981-1982 President
- 1987-1988 Ethics Committee Chair
- 1987-1988 Original Member, Certification Committee
- 1988- Original Member, Current Chair, Board of Examination
- Currently- Member, DNA Quality Control Committee; Peer Group Advisor (Arson and Explosives) to the American Board of Certification

Ed has also always expressed a desire to train others from his own experience. Carolyn Gannett, Ed's primary nominator, stated it this way: "Perhaps his most important contribution to the field of criminalistics has been the inspirational influence he has afforded in the role of mentor to students and to those who have had the good fortune to work alongside him. Dr. Rhodes embodies sharp inquiring intellect, long-term dedication to criminalistics and a love of sharing knowledge, while always ascribing to high moral and ethical standards. It is this unique mixture of qualities which inspires those around him to excel and makes him an outstanding candidate for the CAC Distinguished Member Award."

If all of this still does not convince you of your worthiness Ed, then perhaps mathematical reasoning will influence your opinion. Carolyn's nomination was co-signed by twenty CAC members. When was the last time you remember twenty criminalists agreeing on anything?

Dave Stockwell
Awards Committee

CALL FOR PROPOSALS

The Endowment Committee of the California Association of Criminalists is requesting that interested persons submit proposals for funding. The deadline for receipt of proposals is August 31, 1991.

Proposals should be in the form of a letter to the Chairman of the Endowment Committee, at the following address:

James L. Norris

San Francisco Police Department

Crime Laboratory

850 Bryant Street, Room 435

San Francisco, CA 94103

This is the first year that the CAC will be in a position to fund proposals and we hope that members will respond with requests for funding of a wide variety of training, scholarships, research, etc.

If you have any questions, please call Jim Norris at (415) 553 - 1161.

CCI COURSE SCHEDULE

1991 SUMMER QUARTER (July - Sept)

- A103 Courtroom Presentation of Evidence
- B201 Forensic Serology - Zone Electrophoresis
- B211 Forensic Serology - Isoelectric Focusing
- C101 Clandestine Laboratory Forensic Investigation
- C151 Arson Accelerant Detection
- E101 Firearms Safety in a Laboratory Environment
- E251 Specialized Latent Print Techniques
- S111 Forensic Crime Scene Investigation I

1991 FALL QUARTER (Oct - Dec)

- A101 Forensic Academy
- A103 Courtroom Presentation of Evidence
- B202 Forensic Examination of Sexual Assault Evidence
- C100 Supervisor's Training - Controlled Substances
- E101 Firearms Safety in a Laboratory Environment
- E151 Latent Print Techniques
- L101 Online Forensic Science Information Resources
- M201 Principles of Hair Identification and Comparison
- M202 Principles of Fiber Identification and Comparison
- S201 Bloodstain Pattern Interpretation

For detailed information regarding a specific course, please contact the California Criminalistics Institute (CCI) at (916) 739-4380.

SELECTED REFERENCES

"Bloodstain Pattern Analysis with a Scientific Calculator"

A.L. Carter and E.J. Podworny, *Canadian Society of Forensic Science Journal*, Vol. 24, No 1 (1991)

A procedure is described for calculating the horizontal position (X,Y coordinates) of the point of convergence for the paths of a pair of blood droplets selected from a bloodstain pattern. Both fast upward moving droplets and the slower downward moving droplets can be utilized. The latter stains, which are excluded from the string method, can be included in this method because no attempt is made to determine the vertical position of the point of convergence. The procedure is a fast reliable technique for locating preliminary convergence points without using the cumbersome string method. The calculation is straightforward and can easily be done at the scene of the crime. Accuracy is mainly limited by the estimates of the incidence angles of the two stains. These estimates are determined from the shape of the droplet stains in the usual manner.

"Infrared Microspectroscopy"

J.E. Katon et al., *Applied Spectroscopy Reviews*, Vol. 25, No 3 & 4, pp. 173-211, (1989-90)

This is a review article of infrared microspectroscopy. It is divided into four sections that are an introduction to the technique, instrumentation, sample handling and applications.

"The Pharmacodynamics of Ethanol: Effects on Performance and Judgement"

F.M. Gengo et al., *Journal of Clinical Pharmacology*, Vol 30, No 8, pp. 748-754, 1990

The objective and subjective effects produced by increasing and decreasing ethanol concentrations were studied in healthy volunteers...

"Relationship between Blood and Breath Alcohol Concentration in a Subject Absorbing Alcohol at the Time of Testing"

A.W. Jones, *Journal of Analytical Toxicology*, Vol 15, pp. 44-45, Jan/Feb 1991

In a Letter to the Editor, Dr. A.W. Jones describes an experiment designed to determine blood-breath ratios of ethanol during drinking spree (social drinking). Results in this study show that the breath tests do not overestimate venous BAC in a subject absorbing alcohol at the time of the test.

"Absorption Time, Alcoholic Beverage Type, and Breath Analysis"

G. Simpson, *Journal of Analytical Toxicology*, Vol 14, pp. 393-395, Nov/Dec 1990

In a Letter to the Editor, G. Simpson has reviewed studies on the effect of alcoholic beverage type on the time required for absorption of alcohol in fasting subjects.

"Aspirin Increases Blood Alcohol Concentrations in Humans After Ingestion of Ethanol"

R. Roine et al, *JAMA*, Vol 264, No 18, pp. 2406-2408, Nov 14, 1990.

Studied five healthy volunteers after ingestion of ethanol (0.3 g/kg of body weight) and found that blood alcohol concentrations in the fed state were significantly higher when subjects received 1 g of aspirin 1 hour before ingestion of ethanol.

"Using the Tools of Chromatography, Mass Spectrometry, and Automated Data Processing the Detection of Arson"

W. Bertsch et al, *Journal of High Resolution Chromatography*, Vol 13, No 9, pp. 597-605, Sept 1990

A look at the interplay of chromatographic resolution, noise reduction by mass spectrometry and automated data evaluation. Examples from model experiments and from simulated arson samples are presented.

"Sample Preparation for the Chemical Analysis of Debris in Suspect Arson Cases"

W. Bertsch et al, *Analytica Chimica Acta*, Vol 236, No 1, pp. 183-195, 1990

A broad review of current methods for recovery of liquid residual accelerants in fire debris is given. A summary of current practices of sample preparation methods in the United States is also given.

"The Use of Fourier Transform Raman Spectroscopy in the Forensic Identification of Illicit Drugs and Explosives"

C.M. Hodges et al, *Spectrochimica Acta*, Vol 46A, No 2, pp. 303-307, 1990

Conventional Raman spectroscopy is not routinely used by forensic laboratories for the identification of drugs and explosives because of high background scatter and time consuming sample alignment. Using Fourier Transform Raman spectroscopy overcomes these problems. The technique is non-destructive, uses small samples with no sample preparation required.

"Evaporation Rate of Gasoline from Shoes, Clothing, Wood and Carpet Materials and Kerosene from Shoes and Clothing"

T.E. Folkman et al, *Canadian Society of Forensic Science Journal*, Vol 23, No 2 & 3, pp. 49-59, June/Sept 1990

This study measures the persistence of gasoline and kerosene on various unburned substrate materials. Results show that relative volatility, surrounding temperature and the absorption characteristics of the substrate are important factors in determining the evaporation rate of the petroleum product.

"The Effect of Various Stain Carriers on the Quality and Quantity of DNA Extracted from Dried Bloodstains"

M. Prinz et al, *Zeitschrift Fur Rechtsmedizin*, Vol 103, No 3, pp. 191-197, 1990

Bloodstains were made on 11 different common substrates to examine the effect of the stain carrier on the amount and quality of DNA recoverable.

"Quantitative and Qualitative Analysis of DNA Extracted from Postmortem Muscle Tissues"

M. Ogata et al, *Zeitschrift Fur Rechtsmedizin*, Vol 103, No 6, pp. 397-406, 1990

DNA extracted from 33 postmortem muscle specimens was analyzed using MZ 1.3, a hypervariable minisatellite probe, as well as locus-specific minisatellite probes. Concluded that high quantity and quality DNA can be recovered from muscle tissues for RFLP analysis.

"Effect of Storage Time and Temperature on DNA Extracted from Whole Blood Samples"

B. Towne et al, *Human Biology*, Vol 62, No 2, pp. 301-306, April 1990

Report the findings of an initial experiment designed to simulate best, worst and indifferent treatment of blood samples. High molecular weight genomic DNA was extracted from the samples following storage, quantitated and its quality assessed by electrophoresis and hybridization of restriction fragments.

"A Method for Improving the Griess & Sodium Rhodizonate Tests for GSR Patterns on Bloody Garments"

L.C. Haag, *Southwestern Association of Forensic Scientists Journal*, Vol 13, No 1, pp. 13-18, April 1991

Post-injury bloodstains can obscure gunshot residues associated with close proximity discharges onto or through clothing. Dried blood may also act as a barrier to transfer or lifting techniques used to raise nitrite and/or lead residues. This article describes a procedure for the preferential removal or reduction of such interfering bloodstains.

"Some Observations on the Identification of Glocks"

W.K. Tannert, *SWAFS Journal*, Vol 12, No 2, pp. 36-39, Oct 1990

This article discusses the author's experience in examining bullets fired from GLOCKS.

"Routine Enhancement of Breech Face and Firing Pin Impressions Via Mikrosil Casts"

T.W. Weaver, *SWAFS Journal*, Vol 12, No 2, pp. 40-47, Oct 1990

The purpose of this paper is to investigate the use of Mikrosil casts for breech face and firing pin impressions as a supplement to direct viewing.

"Magazine Lip Mark Identification"

J. Miller, *Journal of Forensic Identification*, Vol 41, No 3, pp. 168-170, 1991

This is a case report showing the value of magazine lip marks identification in this particular case.

"Nuclear Magnetic Resonance Identification and Estimation of Solvent Residues in Cocaine"

H.W. Avdovich et al, *Forensic Science International*, Vol 49, No 2, pp. 225-235, March 1991

NMR was used to determine solvent residues in illicit cocaine exhibits. An internal standard was used for the quantitative estimation of five solvents commonly found in exhibits. Methylene chloride and ethyl acetate were also detected in cocaine exhibits.

"Determination of Ring- and N-substituted Amphetamines as Heptafluorobutyl Derivatives"

P. Lillsunde et al, *Forensic Science International*, Vol 49, No 2, pp. 205-213, March 1991

An improved derivatization method for analyzing 12 ring- and N-substituted amphetamine derivatives in body fluids or seized materials by gas chromatograph combined either with mass spectrometer, electron capture or nitrogen phosphorous detector is presented.

"The Synthesis and Spectra of 4-Ethoxyamphetamine and its Isomers"

A.W. By et al, *Forensic Science International*, Vol 49, No 2, pp. 159-170, March 1991

2-, 3- and 4-ethoxyamphetamine were synthesized and instrumental data for each are included (UV, IR, ¹H-NMR ¹³C-NMR and GC-MS).

"A Basic Program for the Analysis of Cocaine on the HP 5880A GLC"

C. Clark, *SAFS Newsletter*, Vol 19, No 1, pp. 14-18, March 1991

Quantitative and qualitative information about cocaine exhibits can be obtained through the use of gas-liquid chromatography. A BASIC program was written to allow the HP 5880A, equipped with a level 4 terminal and 7672A autosampler, to operate unattended overnight. Program includes a number of useful features.

"Clean-Up of Contaminated 'Crack' Procedure (CCCP: Do You See Red?)"

E. Ard, *SAFS Newsletter*, Vol 19, No 1, pp. 11-13, March 1991

Based on the work of Kessler (1984) and Sorgen (1977, 1983b), a general procedure has been devised which allows the rapid, reliable separation of cocaine from the majority of the common contaminants found in "crack" samples.

"Determination of Optical Isomers of Propoxyphene by 'Mixed' FTIR Difference Spectroscopy"

C.G. Shank, *SWAFS Journal*, Vol 13, No 1, pp. 19-33, April 1991

This paper describes the use of infrared difference spectroscopy (IDS) to discriminate the optical isomers of propoxyphene.

"Gas Chromatographic and Mass Spectrometric Analysis of Samples from a Clandestine Laboratory Involved in the Synthesis of Ecstasy from Sassafras Oil"

F.T. Noggle et al, *Journal of Chromatographic Science*, Vol 29, No 4, pp. 168-173, April 1991

"Identification of Human Urine Stains on Cloth"

H. Tsutsumi et al, International Journal of Legal Medicine, Vol 104, No 2, pp. 105-108, March 1991

Experimental stains of human urine prepared on 4 different types of cloth. Cloth stains were examined by two methods: a chemical method determining uric acid and urea nitrogen content and an enzyme-linked immunosorbent assay (ELISA) to determine uromucoid.

"Species Identification of Blood and Bloodstains by High Performance Liquid Chromatography"

H. Inoue et al, International Journal of Legal Medicine, Vol 104, No 1, pp. 13-16, 1990

A reverse-phase high-performance liquid chromatographic method for species identification of blood and bloodstains is described. The species could be identified from blood stains at least 3 months old and the method has the advantage of simplicity, speed and sensitivity.

"Genetic Markers in Human Bone Tissue"

R.E. Gaensslen et al, Forensic Science Review, Vol 2, No 2, pp. 125-146, Dec 1990

This article reviews the use of genetic markers in bone and tissues, describing methods for the identification of human remains and case situations requiring them. It studies tissue and bone ABO grouping from both anthropological and medicolegal perspective, including work on the typing of other genetic marker systems in bone. It concludes with a discussion of DNA polymorphism typing and its forensic applications.

"Subclassification of Polyacrylonitrile Fibres by Pyrolysis Capillary Gas Chromatography"

J. Almer, Canadian Society of Forensic Sciences Journal, Vol 24, No 1, pp. 51-65, March 1991

63 acrylic and 22 modacrylic fibre samples from various manufacturers were analysed by pyrolysis capillary gas chromatography. On the basis of pyrogram variations the acrylics were subclassified into 9 groups and the modacrylics into 6 groups.

"Characteristics of Forensic Glass Samples using Inductively Coupled Plasma Mass Spectrometry"

A. Zurhaar et al, Journal of Analytical Atomic Spectrometry, Vol 5, No 7, pp. 611-617, 1990

The analytical technique of inductively coupled plasma mass spectrometry (ICP-MS) was evaluated for its applicability to the characterisation of window glass fragments, having identical refractive indices, and of the type that are frequently presented as physical evidence to a forensic laboratory.

"Separation of Adhesive Tapes"

B.M. Campbell, Journal of Forensic Identification, Vol 41, No 2, pp. 102-106, March/April 1991

This experiment examined tape standards that represent common types of tapes used for criminal purpose. Heat was used to straighten the tapes. Heat did not interfere with the further analyses for fingerprints or physical matching.

"Superior Method for Obtaining Test Prints from Footwear and Tires"

E.E. Hueske, Journal of Forensic Identification, Vol 41, No 3, pp. 165-167, 1991

This paper describes a technique that uses silicone spray and magnetic powder for obtaining test prints from footwear and tires.

The preceding abstracts of technical papers are for the benefit of the CAC members. If any difficulty is encountered in obtaining an article, contact the CCI Library at (916) 739-4380. The CCI staff are very resourceful in quickly tracking down citations.

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The current offerings are listed here. if you would like to see a particular product offered, contact John DeHaan at BFS-CCI, 4949 Broadway, Room A-104A, Sacramento, California 95820, (916) 739-4380.

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We are pleased to announce that the long-awaited **LADIES SCARVES** are available now and sale-priced at just \$12.00 each. White with red and blue trim, they have the CAC logo silk-screened at one end.

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Plaques: \$20.00

PUBLICATIONS

The following publications are available from the CAC. These are available at the CAC table at our semi-annual seminars. For further information, contact John DeHaan.

Explosion Investigation, Yallop \$25.00

Science Against Crime, Kind/Overman \$15.00

Eight Peak Index of Mass Spectra \$65.00

Measurement of Breath Alcohol \$13.00

Bibliography on Ethyl Alcohol, Holleyhead \$25.00

The Controlled Substances Act: A Resource Manual of the Current Status of the Federal Drug Laws, Alexander Shulgin \$25.00

CAC Policy Manual, complete with By-Laws, Officer Duty Statements, CAC Policy Statements, Ethics Enforcement Procedure with Binder: \$20.00

Index to CAC Seminars - free to members, \$10.00 to non-members.

CAC Abstracts (with index, in a three ring binder with the CAC logo) - \$25.00 for members, \$50.00 for non-members

Three Ring Binders: Blue & Grey with CAC Logo: \$10.00

MESSAGE FROM THE TREASURER

The following memberships have lapsed because of non-payment of 1991 Dues:

Tom Abercrombie
Wilkaan Fong
Dale Hachiya
John Holland
Keith Inman
Ray Jensen
Paul Lebish
Randy Leister
Rhonda Roby
Tom Simonick
Ernie Williams

Jim White

Notice to Contributors

The California Association of Criminalists Newsletter is published four times a year (January, April, July, and October) by the California Association of Criminalists, a non-profit, professional society dedicated to the furtherance of forensic science in both the public and private sectors.

This newsletter publishes material of interest to its readers and is pleased to receive manuscripts from potential authors. Meeting announcements, employment opportunities, course announcements, etc. are also solicited.

Advertisements are also accepted, although a fee is charged for their inclusion in the Newsletter. The acceptance of any advertisement is at the sole discretion of the Editorial Secretary.

This Newsletter is prepared using Ventura Publisher™ Ver. 3.0, running on an IBM compatible 386/25MHz microcomputer and printed on an HP Laserjet™ III printer. Because of its mode of preparation, the Editorial Secretary requests that, if possible, all submissions to the Newsletter be made in the form of files contained on 5.25 inch IBM formatted diskettes (Either 360KB or 1.2MB) or on 3.5 inch IBM formatted diskettes (Either 720KB or 1.44MB). The following word processing programs can be accommodated: Wordperfect 4.2, 5.0 or 5.1; Wordstar 3.0, 4.0 and 5.0; Microsoft Word; XyWrite, and Multimate. Because of its widespread availability, Wordperfect 5.0 or 5.1 is preferred. Output from wordprocessing programs not listed above should be submitted in ASCII format. If possible, the submitted files should contain as few enhancements (bold, italic, centering, multiple typefaces) as possible. Drawing and images can also be directly imported, contact the Editorial Secretary for details and acceptable file formats. FAX submissions are also accepted. The FAX number for the Editorial Secretary is (415) 486-6681.

The deadlines for submissions to the newsletter are December 15, March 15, June 15, and September 15.

Lisa M. Brewer

