

1972

Police Science Technical Abstracts and Notes

Follow this and additional works at: <https://scholarlycommons.law.northwestern.edu/jclc>

 Part of the [Criminal Law Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

Recommended Citation

Police Science Technical Abstracts and Notes, 62 J. Crim. L. Criminology & Police Sci. 450 (1971)

This Criminology is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.

POLICE SCIENCE TECHNICAL ABSTRACTS AND NOTES

Edited by
Gary D. McAlvey¹

Abstractors

William E. Kirwan²
Paula J. Cardosi³

Sally I. Dillon³
Timothy R. Dixon³
Edgars Rudzitis³

Theodore R. Elzerman⁴
Michael J. Kreiser⁵

An Interesting Homemade Revolver—Abert Lindermann, *Fingerprint and Identification Magazine*, 52(10): 3-6 (April 1971). Described is a completely homemade revolver with the exception of the barrel. The weapon of 7.5 mm. also had homemade cartridges. Penetration of test shots was equivalent to a 7.65 mm. Browning. The weapon was made by an illegal immigrant to Austria who had escaped from an eastern country. (GDM)

The Prieto Single Print System—Michael A. Prieto, *Fingerprint and Identification Magazine*, 52(8): 3-13 (February 1971). The author outlines a classification system he has devised for single fingerprints. The system is currently in use by four agencies in the State of Florida. (GDM)

Methods for Reversal of Color of Latent Fingerprint Negatives—Anthony L. Califana, *Law and Order*, 19(2): 26-27 (February 1971). Four methods are listed for use in reversing color in latent print negatives. Each technique allows the reversal of ridge color as it appears on the original latent lift. (GDM)

Latent Print Techniques for Firearms—James Watson, *Fingerprint and Identification Magazine*, 52(11): 3-10 (May 1971). Presented are various techniques used to overcome the problems encountered in processing latent prints on firearms.

¹ Superintendent, Illinois Bureau of Identification, Joliet, Illinois.

² Superintendent, New York State Police, Albany 1, New York.

³ Crime Laboratory Analyst, Illinois Bureau of Identification, Joliet, Illinois.

⁴ Assistant Superintendent, Illinois Bureau of Identification, Joliet, Illinois.

⁵ Crime Laboratory Analyst, Illinois Bureau of Identification, Springfield, Illinois.

Fingerprint powders, lighting, and photo techniques are discussed in considerable detail. The use of low temperature to process grease prints is also outlined. (GDM)

Effects of Diseases on Fingerprints—T. J. David, A. B. Ajdukiewicz, and A. E. Reid, *Identification News*, 21(3): 4-5 (March 1971). A study of patients with coelaie disease revealed changes varying between moderate and high with regard to ridge atrophy. A correlation was found between the degree of atrophy and the patient's condition. (GDM)

Fingerprint Classification by Core Formation—Douglas Grant, *The Criminologist* 6(19): 74-93 (Winter 1971). The author presents a system of fingerprint classification. This system is a modification of the Battley system and is designed for a file size of 10 to 20 thousand subjects. The system is suggested for single print use in files subdivided by crime classification, i.e. burglary, sex crimes, etc. (GDM)

Forensic Odontology and Its Role in the Problems of the Police and Forensic Pathologist—J. J. Hodson, *Medicine, Science, and the Law*, 10(4): 247-250 (October 1970). Discusses a procedure for identifying bite marks with a suspect. Four cases are given along with a brief outline of how dental science may be of use in forensic medicine. (SID)

Cyproterone Acetate in Sexual Misbehaviour—T. S. Davies, *Medicine, Science, and the Law*, 10(4): 237 (October 1970). Discusses the use of cyproterone in the treatment of sexual activities which conflict with social convention. (SID)

How Much Specialization in Pathology Can We Afford—Editorial, D. F. Barrowcliff, *The Journal of the Forensic Science Society*, 10(3): 127-128 (July 1970). Discusses the training and experience necessary for a good pathologist. The question of centres of forensic medicine is raised along with the clinical pathologist vs forensic expert. (SID)

Dibenzepin Poisoning—V. J. McLinden, *Journal of Forensic Science Society*, 10(3): 135-138 (July 1970). Describes a fatal case of poisoning by dibenzepin hydrochloride. Levels of dibenzepin in blood, kidney, liver, and stomach contents along with urine are given together with infrared and ultraviolet spectra and thin-layer chromatography data. (SID)

The Variation in Refractive Index and Density across Two Sheets of Window Glass—M. D. G. Dabbs and E. F. Pearson, *Journal of the Forensic Science Society* 10(3): 139-148 (July 1970). The density and refractive index of variously sized samples of glass were measured over a pane using a number of different methods. The results from each method are compared with the experimental error, and it is shown that a variation across a pane of glass is detectable using small fragments of glass by either density or refractive index measurement. In addition, the Becke line method for the determination of the refractive index of small fragments has been studied. Different immersion liquids have been investigated and the precision of different instruments is shown. (SID)

Information Retrieval—A. S. Curry, *Journal of the Forensic Science Society*, 10(3): 151-158 (July 1970). Given is an account of the searching of the world's scientific literature by manual and computer techniques. The storage of the information and the methods of retrieval are also discussed. The collection of analytical data is mentioned together with a description of the feature card system for the identification of an unknown infrared curve. (SID)

Infrared Luminescence in the Examination of Documents—D. M. Ellen and K. E. Creer, *Journal of the Forensic Science Society*, 10(3): 159-164 (July 1970). A description is given of a simple and easily constructed aid to the document examiner using luminescence and certain necessary precautions are mentioned. Some illustrations are

given of the value of this technique to the modern forensic laboratory and two cases in which it has proved of particular use are quoted. (SID)

Micromorphology of Feathers Using the Scanning Electron Microscope—Anne Davise, *Journal of the Forensic Science Society*, 10(3): 165-174 (July 1970). Two men were accused of stealing twelve chickens. They denied this saying that any feathers on their clothing were duck feathers. A few feather fragments were found. Investigation of these using the scanning electron microscope revealed that they were not from duck feathers, but from the feathers of a member of the sub-order Galli to which the domestic chicken belongs. (SID)

Attempted Murder by Calor Gas—D. V. Baldock, *Journal of the Forensic Science Society*, 10(3): 175-178 (July 1970). A woman attempted to murder her husband by filling his bedroom with calor gas. A blood sample was taken from the husband about six hours after he was removed from exposure. A method was devised, using gas chromatography, to detect the constituents of calor gas in the blood. The compositions of calor gas, calor propane, and natural gas are compared. (SID)

Age Changes Occurring in the Teeth—G. E. Moore, *Journal of the Forensic Science Society*, 10(3): 179-180 (July 1970). The various changes which occur in teeth with increasing age are discussed. The growth of secondary dentine causing a reduction in the size of the pulp chamber over a period of time is examined in detail, with a view to determining age from teeth. (SID)

The Sadistic Murderer—Robert P. Brittain, *Medicine, Science, and the Law*, 10(4): 198-207 (October 1970). An attempt is made to describe the sadistic murderer. The description rests on the examination of many men of this kind near the time of the crime and on continuing observations of them over periods of years. It rests also on examination of victims and of scenes of such crimes. In addition, account has been taken of others who show the features of the syndrome and who fantasy committing similar murders although they have not done so.

The Effect of Storage upon the Activity of Phosphoglucomutase and Adenylate Kinase Enzymes

in Blood Samples and Bloodstains—T. J. Rathwell, *Medicine, Science, and the Law*, 10(4): 230-234 (October 1970). The ease of grouping bloodstains and blood lysates of various ages in the PGM and AK systems has been studied. It was found that neither enzyme remained groupable in bloodstains indefinitely, and that PGM was the less stable of the two. Both enzymes remained groupable in deep frozen red cell lysates for much longer periods, although in these samples also, PGM appeared to be the less stable enzyme. (SID)

Acid Phosphatase—Its Significance in the Determination of Human Seminal Traces—Gottfried Walther, *Journal of Forensic Medicine*, 18(1): 15-17 (January-March 1971). The qualitative reaction of acid phosphatase has not been used much in forensic medicine. The use of o-carboxyphenylphosphate is recommended. The disc separation by electrophoresis with the determination of 2 isoenzymes allows differentiation of human seminal acid phosphatase from that of other origins and strengthens the evidence supporting the presence of human seminal fluid. (SID)

The Sexual Assault Examination—Joseph C. Rupp, *The Forensic Science Gazette*, 2(1): (February 1971). The author outlines a procedure for examining alleged sexual assault victims, the obtaining of necessary information in event the case should go to court, examination of vaginal fluid, and a report format to be followed for submission to the investigating police agency. (TRE)

Empirical Determination of the Dispersion of Pellets—O. P. Chugh, *Arch. f. Kriminologie*, 146(5, 6): 168-176 (November-December 1970). The dispersion of shotgun pellets depends on initial velocity, size and shape of pellets, presence of shot wads and meteorological conditions. The author presents empirical formulae which can be used for the estimation of firing range. (ER)

Isolation and Identification of the Insecticide Parathion and Its Metabolites—S. N. Tewari, L. Ram, *Arch. f. Kriminologie*, 146(5, 6): 164-167 (November-December 1970). TLC separation of parathion and its metabolites present in tissues was found to be a quick and reliable technique. (ER)

TLC—Enzymatic Detection of Cholinesterase Inhibiting Insecticides—M. Geldmacher, V. Mal-

inkrodt, and Giok-Lien Ong, *Arch. f. Kriminologie*, 146(5, 6): 154-163 (November-December 1970). Aluylphosphates and carbamates are highly toxic to humans. The cholinesterase inhibiting feature of those chemicals can be used as a sensitive group test. The separation within a group can be achieved by TLC. The application of the technique is illustrated by nine poisoning cases. (ER)

Identification of Synthetics by IR Spectrophotometry—G. Schaidt, M. Driver, *Arch. f. Kriminologie*, 146(5, 6): 148-153 (November-December 1970). The method is applicable to thermoplastic synthetics. Individual fibers are melted on a KBr pellet and the spectrum taken utilizing a micro-condenser (Beckman IR 8). The spectra of various fibers are presented. (ER)

Training and Action of Drug-Sniffing Dogs—E. Jaksch, *Kriminalistik*, 25(3): 159-162 (March 1971). The Austrian method for training drug-sniffing (hashish, opium) dogs which is different from the Swedish-American school is described. The use of dogs is illustrated by a number of practical cases. (ER)

Comment on Identification of Typewriters—W. Lang, *Kriminalistik*, 25(3): 150-154 (March 1971). Three pages of illustrations show the effects of type face defects and impressions of identical type face on various forms of paper. The author also discusses the problems encountered in movable head typewriters of type IBM 72. (ER)

Low Temperature Ashing Increases the Sensitivity of Firing Distance Determinations by Emission Spectrometry—A. Schontag, *Arch. F. Kriminologie*, 147(1, 2): 32-34 (January-February 1971). The utilization of arc emission spectra of lead, antimony, and barium for estimation of firing distance are limited to small amounts (0.5 x 0.5 cu) of fabric because of the size of electrodes. This in turn limits the firing distance to approximately 1 minute. Preashing of larger amounts of fabric at 50-100 C in activated oxygen (Tracerlab LTA-600 combustion device) removes the limitation and consequently increases the sensitivity of the method. (ER)

Bullet Damage on Plate Glass on Impact Velocities between 50 to 300 m./sec.—A. Schontag, *Arch. f. Kriminologie*, 147(1, 2): 16-21 (January-Feb-

ruary 1971). The objective of the investigation was to determine the borderline where glass buckling with resultant extensive breakage pattern changes to characteristics of high velocity impact without significant breakage pattern. The somewhat inclusive results place this changeover region between 50 and 150 m./sec. The experiments were carried out using glass plates 30 x 30 cen. x 0.6 mm. and a 7.65 mm. automatic pistol with propellant graduated ammunition. The author emphasizes that the effect of a number of variables has to be determined before definite conclusions can be drawn. (ER)

The Estimation of the Bullet Velocity of Ricochet Shots—M. Jauhari, *Arch. f. Kriminologie*, 147(1, 2): 12–15 (January–February 1971). A simple formula for calculation of the approximate bullet velocity after ricochet has been derived. This formula involves the incident bullet velocity, angle of incidence, and angle of ricochet and neglects the friction effect. The outlined method can be used to assess the wounding power of a bullet after ricochet and thus help to evaluate the theory of the accident (article in English). (ER)

A New Important Possible Proof of Functioning of Lightbulbs of Vehicles in Nighttime Accidents—A. Schontag, *Arch. f. Kriminologie*, 147(1, 2): 1–6 (January–February 1971). A bicycle was hit from the rear by a motor vehicle at high speed. Despite the 100 km/hr. impact, the rear light of the bike remained unbroken; however, droplets of filament material were observed inside. The author concluded that there must have been a sharp acceleration of the rear wheel which caused the generation of excessive current by the attached generator, which in turn caused the melting. *Conclusion*: The rear light was illuminated at the time of accident. (ER)

Gas Chromatographic Analysis of Barbiturates in Tablets—Arthur A. Neckapulos, *Journal of Chromatographic Science*, 9(3): 173–175 (March 1971). Prior to GLC determination, the barbiturates are extracted from the tablets via an acid extraction procedure. The extracted barbiturates are determined on a 3%/OV-17 column. The procedure was tested on four barbiturates (sodium butobarbital, sodium pentobarbital, secobarbital and phenobarbital). (PJC)

Improved Method for Determination of Chlorinated Hydrocarbon Pesticide Residues in Whole Blood—S. J. Henderson, J. G. DeBoer, and H. M. Stahi, *Analytical Chemistry*, 43(3): 445–447 (March 1971). The method described increases the accuracy and precision of the determination of chlorinated hydrocarbon residues in whole blood. (PJC)

Rapid Analysis for Sub-Nanogram Amounts of Chromium in Blood and Plasma Using Electron Capture Gas Chromatography—Larry C. Hansen and William G. Scribner, *Analytical Chemistry*, 43(3): 349–353 (March 1971). Chromium in blood and plasma is chelated with 1,1,1-trifluoro-2,4-pentanedione and extracted into hexane by direct reaction in a sealed tube. The chromium is then determined by G.C. using a tritium detector. (PJC)

Versatile as Well as Unique—David Beatie, *American Rifleman*, 119(5): 70 (May 1971). Various loads are suggested for different calibers. (Low velocities attributed to these loads diminish mutilation upon firing test bullets into a recovery box and therefore facilitate identification.) (MJK)

Determining Wound Ballistics—Charles M. Byers and Duncan McRae, *American Rifleman*, 119(5): 30–32 (May 1971). Bullet performance may be evaluated by using a simple casting technique. Aropol WEP resin is used as the main casting compound and regular modeling clay as the target material. The casts of the cavities formed in the clay by the bullets provide a standard for comparison of the terminal ballistics of the different bullets. (MJK)

Traced and Transferred Signatures—Robert Lynch, *Police*, 15(4): 14–18 (March–April 1971). The author discusses two types of forgeries namely, the traced signature and the mechanically reproduced and transferred signature. With respect to the traced signature he talks about tracing by transillumination, by outlining with pencil or carbon paper and by indentation. With regard to the transferred signature he talks about transfers by waxed paper lift, electrostatic copy machine, and by offset printing. (TRD)

Legal Liability for Unauthorized Autopsies and Related Procedures—Jon R. Waltz, *Journal of*

of *Forensic Sciences*, 16(1): 1-14 (January 1971). The current state of the law regarding dead human bodies is unsatisfactory. The existing patchwork of judicial decisions and statutes does not make clear the rights of those concerned with orthodox official and unofficial autopsies and postmortem examinations. There is, manifestly, a need for uniform and comprehensive legislation. In 1968 the Commissioners on Uniform State Laws approved the Uniform Anatomical Gift Act, which goes far toward filling the urgent need for a comprehensive statute regulating the disposition of dead human bodies. It is to be hoped that this model statute will be widely enacted by state legislatures. (WEK)

The Social Scientist as Coroner's Deputy—Norman L. Farberow and Charles Neuringer, *Journal of Forensic Sciences* 16(1): 15-39 (January 1971). A study conducted in Los Angeles County motivates the authors to conclude "The advantages of a behavioral scientist in the Coroner's office include much greater accuracy in certifications of suicide and other deaths, a more exact picture of the mental and public health of the community, and a more effective service to the members of the community." (WEK)

Massive Subarachnoid Hemorrhage Due to Laceration of the Vertebral Artery Associated with Fracture of the Transverse Process of the Atlas—Dimitri L. Contostavlos, *Journal of Forensic Sciences*, 16(1): 40-56 (January 1971). Three cases are described in which traumatic subarachnoid hemorrhage was found at autopsy to have resulted from vertebral artery laceration associated with atlas transverse process fracture due to manual battery to the neck. (WEK)

Pulmonary Embolism by Hepatic Tissue—M. Arsenio Nunes, *Journal of Forensic Sciences*, 16(1): 57-67 (January 1971). Pulmonary embolism by hepatic tissue is generally considered to be rare. Fifty cases of violent death, the majority due to traffic accidents, were selected and studied. The total number of positive cases, independent of the type of emboli, was 32 out of 50. (WEK)

Microscopic, Microchemical, and Thin-Layer Chromatographic Study of Marijuana Grown or Confiscated in Iowa—David P. Carew, *Journal of Forensic Sciences*, 16(1): 87-91. Samples of marijuana growing wild in the state of Iowa have been

subjected to microscopic, microchemical, and thin-layer chromatographic analysis. A method of thin-layer separation of CBD, THC, and CBN and the R_f values obtained are reported. (WEK)

Scanning Electron Microscopy of Forged Dots on 1936 Canadian Coins—P. G. Rodgers, J. R. G. Jacob, P. Blais, and D. C. Harris, *Journal of Forensic Sciences*, 16(1): 92-102 (January 1971). A method for detecting counterfeit dots on otherwise genuine 1936 coins by means of scanning electron microscopy has been described. (WEK)

Methods for the Detection and Determination of Ibogaine in Biological Materials—H. I. Dhahir, N. C. Jain, and R. B. Forney, *Journal of Forensic Sciences*, 16(1): 103-108 (January 1971). UV and TLC methods for the detection and determination of ibogaine in biological materials have been described. (WEK)

Detection of Powder Particles at the Crime Scene—J. K. Sinha and G. J. Misra, *Journal of Forensic Sciences*, 16(1): 109-111 (January 1971). A sensitive and specific method for the detection of nitrite particles at the crime scene around the bullet hole has been developed. (WEK)

Carbon Monoxide Determination in Postmortem Clotted Blood—A. W. Freireich and David Landau, *Journal of Forensic Sciences*, 16(1): 112-119 (January 1971). A rapid, accurate determination of CO in blood can be made by use of the CO-Oximeter. A modification of the procedure has been described to make the method and instrument applicable to the determination of HbCO and the percentage saturation of the total hemoglobin in postmortem, clotted blood. (WEK)

Headspace Analysis for Ethyl Alcohol in Blood, Breath, and Urine Specimens Using a Specialized Gas Chromatograph—Manley J. Luckey, *Journal of Forensic Sciences*, 16(1): 120-127 (January 1971). Excellent accuracy and good precision were obtained by the headspace method using the Alco-Analyzer special purpose gas chromatograph. The most critical feature of the procedure is the temperature of the sample. This, however, is satisfactorily controlled by the precision hot water bath and cell blocks that are available. (WEK)

A Modern Medicolegal Investigative System within the Framework of a State Division of Health—Experience in Utah—James T. Weston, *Journal of Forensic Sciences*, 15(4): 461–475 (October 1970). An outline of the enabling legislation and resulting early development of a state-wide medical examiner program in Utah has been presented. This program is unique in that it provides for the establishment of a state-wide program in a well-established Division of Health in close cooperation with a University Medical Center. The legislation retains the sovereignty of the local jurisdiction in reporting appropriate deaths. The advantages and some of the disadvantages of establishing these interrelationships are presented. (WEK)

Disguised Handwriting, a Statistical Survey of How Handwriting is Most Frequently Disguised—Edwin F. Alford, Jr., *Journal of Forensic Sciences*, 15(4): 476–488 (October 1970). Disguised writings are frequently encountered by the examiner of questioned documents. Recognition of the various elements associated with disguise is most important. Wrongly attributing differences to disguise, or overlooking possible identifying features because they are masked, could lead to serious error. Observations regarding the various aspects of disguise such as use of the awkward hand; change of slope, size, letter forms and numbers; alteration of upper and lower extensions; deceptive spelling and arrangement habits; altered approach and terminal strokes; change of angularity of writing, etc. are reported. (WEK)

Histochemical Changes as Evidence of the Antemortem Origin of Skin Burns—M. O. A. Malik, *Journal of Forensic Sciences*, 15(4): 489–499 (October 1970). In an effort to detect earlier and unequivocal evidence of vital reaction in skin burns, recourse was made to the techniques of enzyme histochemistry. An extensive study, carried out on both human and guinea pig skin burns, investigated the changes in the burnt area as regards four enzymes—alkaline phosphatase, acid phosphatase, leucine aminopeptidase and non-specific esterase. The results revealed that an increase in enzyme reaction in the periphery of a burn was a definite indication of its vital origin since a similar change was never observed in any post-mortem burn. (WEK)

Tissue Transplantation—The Universal Donor and Blood Group Antibodies—Frank R. Camp, Jr., Harold S. Kaplan, Frank R. Ellis, Chester M. Zmijewski, and Nicholas F. Conte, *Journal of Forensic Sciences*, 15(4): 500–506 (October 1970). The observations by various workers that 15–30% of patients requiring renal transplantation have detectable lymphocytotoxic antibodies at the time of transplantation have resulted in a plea for avoidance of sensitization to the HL-A antigens. Consideration is given to reports that A and B antigens play a significant role in graft rejection and, in this respect, to the problem posed by the group O universal donor who receives vaccination products containing A and/or B substance. (WEK)

The Importance of Autopsies in Workmen's Compensation Cardiac Fatalities—A Study of Sixty-Seven Autopsy Subjects—Irving I. Lasky, *Journal of Forensic Sciences*, 15(4): 507–528 (October 1970). This report further establishes the importance of the autopsy in the adjudication of workmen's compensation cardiac fatalities. In addition to revealing totally unrelated disorders as a cause of death and ruling out unnecessary and expensive pedagogy, the physician can, by autopsy, supply the trier of facts with the most optimal correlation of pathologic changes and the clinical history. This is the best known method of establishing a cause and effect relationship in workmen's compensation cardiac fatalities. (WEK)

The Toxicology of *Abrus Precatorius* Linnaeus—S. K. Niyogi, *Journal of Forensic Sciences*, 15(4): 529–536 (October 1970). The toxic principles of *A. precatorius* seeds are water extractable. The aqueous extract of *A. precatorius* agglutinates red blood corpuscles, and it exhibits ultraviolet as well as far ultraviolet absorption. It contains toxic protein fractions. The toxicity of d_3 —the most toxic fraction—seems to be associated with the presence of the amino acids, half cysteine, methionine and tyrosine. The separation of toxic principles of *A. precatorius* from stomach contents was discussed. (WEK)

Medicolegal Investigation of a Bomb Explosion in an Automobile—Werner U. Spitz, Irvin M. Sopher, Vincent J. M. DiMaio, *Journal of Forensic Sciences*, 15(4): 537–552 (October 1970). The post-mortem examination of two victims of an automobile explosion indicated their relative

positions within the vehicle and permitted precise localization of the explosive. An account of unusual procedures resorted to for the identification of one of the victims has been given. The cause of death of one of the victims was massive hemorrhages in the lungs associated with the shock wave resulting from the blast. (WEK)

The Use of Radioactive Iodine 125 for Dental Identification in Mass Disasters—Daniel Graham and S. M. Corless, *Journal of Forensic Sciences*, 15(4): 553-564 (October 1970). A method for the efficient radiography of the whole dentition, using a radioactive source I-125 has been described, including the manufacturing of the source itself. This method is proposed as being particularly suitable in the case of dental identification at mass disasters. (WEK)

Prolonged Survival with Retention of Bullet in Orbit, Lung, or Spleen—Pierre A. Fick and Emmet F. Donnelly, *Journal of Forensic Sciences*, 15(4): 565-580 (October 1970). Three cases of retention of a bullet are reported, one in a person who allegedly attempted suicide and the other two in veterans of World War I. The missiles remained in the left orbital region for 9 years, in the left lung for 40 years, and in the spleen for 51 years, respectively. There was also a malignant lymphoma of the spleen. An approach to the identification of bullets, as well as the relationship between trauma and malignancy, is presented. (WEK)

Disseminated Magnesium and Aluminum Silicate Associated with Paregoric Addiction—William C. Butz, *Journal of Forensic Sciences*, 15(4): 581-587 (October 1970). Paregoric, a camphorated tincture of opium, in various combinations with oral drugs is frequently used by narcotic addicts. Since these oral preparations frequently contain hydrous magnesium and aluminum silicate, deposits in organs may ultimately occur with severe damage. (WEK)

The Identification of Lysergic Acid Amide in Baby Hawaiian Woodrose by Mass Spectrometry—Kimm W. Crawford, *Journal of Forensic Sciences*, 15(4): 588-594 (October 1970). The presence of LAA and iso-LAA has been confirmed in the seeds of *Argyrea nervosa* by extraction and thin-layer chromatographic separation, followed

by infrared and mass spectrometry of the recrystallized fractions. The spectra of the isolated alkaloids were identical with those of those prepared by synthesis. (WEK)

A Spectrophotofluorometric Method for the Determination of Amphetamine—C. R. Nix and A. S. Hume, *Journal of Forensic Sciences*, 15(4): 595-600 (October 1970). A spectrophotofluorometric procedure for the determination of amphetamine alone or in combination with other drugs has been described. The determination is based upon the reaction of amphetamine with formaldehyde and acetylacetone to produce a fluorescing lutidine derivative. The method is relatively more specific and more sensitive than existing photometric methods of detecting amphetamine. (WEK)

Determination of Warfarin in Liver Tissue by Gas Chromatography—H. S. Funnell and N. Platonow, *Journal of Forensic Sciences*, 15(4): 601-604 (October 1970). A technique is described for the extraction of warfarin from biological material, the purification of the extract and the determination of this compound in a silylated form of gas chromatography. The recovery of warfarin added to liver tissue over the range 4 to 100 ppm was approximately 80%.

Spectrophotometric Determination of d-Propoxyphene (Darvon®) in Liver Tissue—Edward Thompson, Jack Villaudy, Lawrence B. Plutchak, and Ramesh C. Gupta, *Journal of Forensic Sciences*, 15(4): 605-609 (October 1970). A spectrophotometric method for the determination of d-propoxyphene in liver tissue has been described. The drug is extracted from NaOH-alkalized tissue with ether and after extraction and re-extraction is taken up in 0.05N hydrochloric acid, and the UV spectrum is recorded. An aliquot of the acid solution is exposed to UV radiation for 45 minutes and the UV spectrum is again recorded using the unexposed solution as a reference. The optical density difference between 253 and 293 m μ is proportional to the propoxyphene concentration. The quantity of the drug is determined using a graph prepared from data obtained by analysis of tissue containing various known amounts of d-propoxyphene. (WEK)