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Police Science Technical Abstracts and Notes

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POLICE SCIENCE TECHNICAL ABSTRACTS AND NOTES

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Gas Chromatography in Detection of Kerosene Residues—K. Narayanaswami and H. L. Bami, *International Criminal Police Review*, 251: 216-221 (October 1971). Several cases are discussed in which GLC was used to analyze evidence suspected of containing hydrocarbon material. (GDM)

Graphometry—The Problem of "Closing-Lines"—S. V. Margadant, *International Criminal Police Review*, 251: 212-215 (October 1971). The author presents a geometric approach used in the examination of handwriting cases involving "closing-lines." (GDM)

A Special Case of Handwriting Analysis—Andre Mertens, *International Criminal Police Review*, 251: 210-211 (October 1971). The author discusses the analysis in cases where an illiterate person uses an "x" as a legal signature. (GDM)

French Small—Firearm Cartridge Headstamps—Christian Clanet, *International Criminal Police Review*, 251: 198-203 (October 1971). A history of cartridge headstamps used by French ammunition manufacturers over the years is presented. Cartridges dating back to the mid 19th Century are included. (GDM)

How to Handle Evidence—R. A. Steindler, *Law & Order*, 19(12): 90-97 (December 1971). The author presents methods of handling for many types of evidence and a wide variety of crimes. (GDM)

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Planning a Forensic Science Lab—John W. Gunn, Jr. and Richard S. Frank, *The Police Chief*, 39(1): 36-41 (January 1972). The planning, design, and implementation of the crime laboratory is presented. Areas examined are staff, operating budget, facility, and equipment. Each is discussed in detail as an aid to those involved in the implementation of new laboratories. (GDM)

Polymer Identification and Quantitative Determination of Additives by Photolysis—Richard S. Juvet, Jr., John L. S. Smith, Kuany-Pang Li, *Analytical Chemistry*, 44(1): 49-56 (January 1972). The authors describe the use of photolytic degradation and gas chromatography in the identification of polymeric materials and the quantitative determination of common polymer additives. The polymers are pressed into films prior to photolytic degradation and G.C. analysis. A description and diagram of the compressing unit is included in the article. (GDM)

The Uses of Silicone Rubber by the Document Examiner—William D. Thorpe, *Journal of Forensic Sciences*, 16(4): 530-534 (October 1971). The author describes the use of silicone rubber casting in document examinations. Some of the uses listed are: (1) the casting of typewriter fonts and ribbons, (2) the casting of cheque protector parts and ribbons, (3) the casting of adding machine fonts, (4) the casting of rubber stamps and (5) the casting of indented writings. (PJC)

Photographic Evidence and the Assassination of President John F. Kennedy—Don Olson and Ralph F. Turner, *Journal of Forensic Sciences*, 16(4): 399-419 (October 1971). The authors con-

clude that the events of President Kennedy's assassination did not happen as described in the Warren Report. They give a detailed analysis of the photographic films upon which the Warren Commission based their conclusion of the "single bullet theory". (PJC)

Death of a Medical Examiner's System—Joseph C. Rupp, *Journal of Forensic Sciences*, 16(4): 420–437 (October 1971). The circumstances of a lawsuit which destroyed a medical examiner's office is described in this article. (PJC)

Sound, Speech, Phonetics, and Voiceprint Identification—James J. Hennessy and Clarence H. A. Romig, *Journal of Forensic Sciences*, 16(4): 438–454 (October 1971). The acoustical, physical, biological, and phonetic aspects of sound and speech are discussed by the authors in this article. It is the sound of the phoneme spoken by a person which is the basic unit of analysis for voiceprint identification. The uniqueness of an individual's speech pattern is hypothesized by the theory of invariant speech upon which voiceprint identification is based. (PJC)

Variation in Premortem Statural Measurements Compared to Statural Estimates of Skeletal Remains—Clyde C. Snow and Joan Williams, *Journal of Forensic Sciences*, 16(4): 455–464 (October 1971). The variation in premortem statural records of a single subject and its bearing on the interpretation of skeletal estimates of stature is described in this article. The authors illustrate this variation by a single case which they investigated. (PJC)

Landmarks and Hallmarks in Scientific Evidence—Edwin Conrad, *Journal of Forensic Sciences*, 16(4): 465–470 (October 1971). The author briefly discusses the progress in the acceptance of scientific evidence. He holds the Coppolino case of 1969 as hallmark of scientific evidence. The Coppolino criterion for scientific evidence states that new and novel tests in the scientific field do not necessarily render them invalid, if they are authenticated by their discoverer. (PJC)

The Legal Dynamics of the American Campus—Oliver Schroeder, *Journal of Forensic Sciences*, 16(4): 471–483 (October 1971). The author presents

his reflections on the law which emerged from his contemporary experiences on several American campuses. (PJC)

Cerebral Embolism with Infarction and Death from Dislodged Thrombus During Retrograde Femoral Arterial Catheterization—William Q. Sturner, Donald Mierzwiak, and Clifton R. Daniel, *Journal of Forensic Sciences*, 16(4): 484–492 (October 1971). A case of a patient who underwent a retrograde catheterization of the femoral artery and shortly afterwards developed cerebral infarction which caused her death is described. (PJC)

An Instrument for the Determination of Ethanol in Breath in Law Enforcement Practice—R. A. Harte, *Journal of Forensic Sciences*, 16(4): 493–510 (October 1971). The author describes a new device, the Intoxilyzer, for determining ethanol in breath samples. The Intoxilyzer relies on infrared absorption of energy by ethanol vapor in the breath sample for the determination. Digital display and copy printout by a tamper-proof printer are provided. (PJC)

Dating Iron-Base Ink Writings on Documents—N. K. Sen and P. C. Ghosh, *Journal of Forensic Sciences*, 16(4): 511–520 (October 1971). The authors describe a new method for TLC evaluation of progressive changes of the blue dye and iron content in the ink strokes on documents of known ages written with iron-base inks. This method may be useful in determining the age of documents bearing such inks. The TLC System used was: 0.25 mm silica gel G plates, n-butanol:acetic acid:water (45:10:45) developer. (PJC)

Matching of Stolen Telephone Wire by Activation Analysis of the Trace Element Composition—Jack N. Weaver and Worth B. Bowman, *Journal of Forensic Sciences*, 16(4): 521–529 (October 1971). The authors describe the use of NAA as an analytical tool for determining the trace composition of copper telephone wire samples for the purpose of matching those of common origin. The typical trace elements found in copper wire are cobalt, tin, antimony, and silver. (PJC)

Identification of Seminal Strains by the Inhibition of Acid Phosphatase by L(+)-Tartrate—S. Sivaran and H. L. Bami, *Journal of the Forensic*

Science Society, 11(1): 187-194 (April 1971). Human seminal plasma is extraordinarily rich in acid phosphatase which is mainly of prostatic origin. Based on the fact that the prostatic acid phosphatase is specifically and almost completely inhibited by L(+) tartrate, a comparatively simple and specific method for identification of stains of human semen in the forensic lab has been developed and is presented in detail. (SID)

The Chromatographic Separation of Mixtures of Benzodiazepine Drugs—H. M. Stevens and R. W. Jenkins, *Journal of the Forensic Science Society*, 11(1): 183-186 (April 1971). Rapid separation of mixtures of benzodiazepine drugs was achieved using a thin-layer system based on alumina, complemented by a silica gel loaded paper system. Location of the spots was by short-wavelength ultraviolet light and acidified potassium iodoplatinate. The compounds examined were chlordiazepoxide, diazepam, nitrazepam, oxazepam, bromazepam, medazepam, and dibenzepam. Their behavior to ultraviolet light of wavelength 254 nm and 350 nm under neutral, acid, and alkaline conditions was examined in the form of spot tests on filter paper. (SID)

Comparison of Tungsten Filaments by Means of the Scanning Electron Microscope—J. I. Thornton, G. T. Mitosinka and T. L. Hayes, *Journal of the Forensic Science Society*, 11(1): 197-200 (July 1971). The application of the scanning electron microscope to the examination of exceedingly minute striae on tungsten filaments is described. The visible spectrum is not relied upon as the mode of information transfer, thus allowing an examination of the striae with greatly enhanced magnification, resolution, depth of focus, and little interference from specular reflectance. (SID)

A Search for Uncorrelated Thin-Layer Chromatographic Systems for the Identification of Basic Drugs—K. W. Smalldon, *Journal of the Forensic Science Society*, 11(1): 171-176 (July 1971). Rf values for 50 relatively common basic drugs have been determined in 5 chromatographic systems using Merck pre-coated plates. The suitability of these systems for use in combination is discussed both in terms of their Rf frequency distributions and correlation coefficients. (SID)

Luminescence of Automobile Engine Oils, Part II—J. B. F. Lloyd, *Journal of the Forensic Science Society*, 11(1): 153-170 (July 1971). The technique of synchronous excitation applied to the fluorescence emission of trace amounts of automobile lubricants, fuels, and soots, and to various other fluorescent mixtures yield distinctive spectra that vary according to the origin and use of these materials. Identity of different samples by fluorescence spectra can be valuable for evidence of common origin. (SID)

Do We Really Have Adequate Signature Standards—Ordway Hilton, *Journal of the Forensic Science Society*, 11(1): 145-149 (July 1971). The adequacy of a set of specimen signatures is considered from both a theoretical and practical point of view. The number of signatures necessary, and some factors which could affect these signatures are suggested. (SID)

A Rapid Method for Grouping Dried Bloodstains—W. J. Chisum, *Journal of the Forensic Science Society*, 11(1): 205-206 (April 1971). The ammoniacal extraction of bloodstains has been adapted to a microscopic technique. By eliminating time-consuming steps, a rapid method of grouping ABO stains by absorption elution is presented. The technique rivals the Lattes slide technique in simplicity and time. (SID)

Determination of the ABO Blood Group in Hair—F. Wynbrandt and W. J. Chisum, *Journal of the Forensic Science Society*, 11(1): 201-204 (April 1971). A method for determining the ABO blood group from a strand of hair is given. The method involves crushing the hair, then proceeding with a modified absorption-elution technique. Blood groups were determined on 50 different samples. (SID)

Determination of Sex of Exfoliated Cells and Its Significance in Forensic Science—Susan Renard, *Journal of the Forensic Science Society*, 11(1): 15-20 (January 1971). A rapid method is described for the determination of nuclear sex of exfoliated epithelial cells in stains. Useful applications of the technique to various items encountered in the forensic laboratory are briefly discussed. (SID)

Tyres and Crime—R. J. Grogan and T. R. Watson, *Journal of the Forensic Science Society*, 11(1): 3-14 (January 1971). The author emphasizes the need for accurate, comprehensive and speedy permanent records of tyre marks. The significance of various features found in tyre marks is discussed, and the means by which the make of vehicle may be deduced from tyre marks are suggested. Features which enable a tyre mark to be related to a specific tyre are detailed. Reference is also made to the double transfer of tyre marks onto clothing and cloth marks onto tyres. (SID)

Murder and Suicide?—A. Fattah, *Journal of Forensic Medicine*, 18(3): 122-123 (July-September 1971). Gives a synopsis of a case of a woman lying dead in bed in her home and describes the scene. The report goes on to show that the case was one of suicide and not murder. (SID)

Putrefaction: A Difficulty in Forensic Medicine—J. Meyersohn, *Journal of Forensic Medicine*, 18(3): 114-117 (July-September 1971). Discusses age determination, identification, and cause of death as related to cases of putrefaction. The need for a more meticulous post-mortem is stressed. The author goes on to state that up to the 18th year age can be established fairly accurately by x-rays of the bones of the hand compared with x-rays of known normals. He also states that even when all circumstances and conditions are known, both before and after death, an answer as to time of death would only be speculation. (SID)

Problems in the Diagnosis of the Causes of Death in Burned Bodies—M. O. A. Malik, *Journal of the Forensic Science Society*, 11(1): 21-28 (January 1971). The pathologist is often required to perform an autopsy on a burned body and to report to the coroner on the cause of death. The post-mortem findings by themselves may not always give the answer—mainly because of the destructive nature of incineration and the associated heat artifacts, the difficulty in differentiating antemortem and post-mortem burns, the different circumstances under which burns can be sustained and the presence of burns on people who might have died from many other causes. The true cause of death, however, can usually be worked out if the autopsy findings are closely interpreted in the light of the case history, evidence from the scene and the

results of the relevant laboratory investigations. These points are discussed and illustrative cases are reported (SID)

Neutron Activation Analysis of Human Hair Collected at Regular Intervals for 25 Years—Rita Cornelis and A. Speecke, *Journal of the Forensic Science Society*, 11(1): 29-46 (January 1971). A study was made of the trace elements (Au, Hg, Cu, As, Sb, Mn, and Zn) present in the hair of two brothers, the samples having been obtained over a period of about 29 years. The elements were activated by neutron irradiation and detected by means of their 2 emitting radioisotopes. The results obtained were analyzed to see how the concentration of the elements varied with time, and also to compare the values obtained for the 2 brothers, with a view to using this technique as a means of identifying a person by means of their hair. (SID)

Terminal Ballistics Effects Using Calibre .30 Military Ammunition—W. C. Smith and A. A. Biasotti, *Journal of the Forensic Science Society*, 11(1): 49-54 (January 1971). The anomalous appearance of entry and exit bullet holes in $\frac{1}{4}$ " mild steel plate is noted. The reasons for these phenomena are discussed. (SID)

A Technique for Determining and Illustrating the Trajectory of Bullets—G. T. Mitosinka, *Journal of the Forensic Science Society*, 11(1):55-61 (January 1971). A discussion of the technique employed in the development and interpretation of a paint fracture pattern which is generated when a projectile comes into violent contact with a painted malleable material. (SID)

Vehicle Lights and Their Use As Evidence—D. N. Dolan, *Journal of the Forensic Science Society*, 11(1): 69-82 (April 1971). The paper discusses the role of vehicle lighting in traffic accident investigations, including previous work in this field. Laboratory experiments simulating various types of lamp failure and described, using a wide range of 12 volt vehicle lamps. The results in general confirm earlier published work, and also fill some of the gaps in the field of evaluation of vehicle lighting conditions by examination of lamp remains. A systematic analysis scheme in tabular form is presented for the benefit of the forensic scientist. (SID)

Luminescence of Automobile Engine Oils—Part I—J. B. F. Lloyd, *Journal of the Forensic Science Society*, 11(1): 83-94 (April 1971). A description is given of a new spectrophotofluorimetric technique that yields considerably more detailed fluorescence spectra of complex mixtures than conventional methods. The spectra are of fluorescence emission excited at a wavelength varied synchronously with the plotted emission. The spectra are particularly useful in the examination of traces of mineral oils and of other related materials likely to be encountered in the scientific investigation of crime. (SID)

High Speed Liquid Adsorption Chromatography in Criminalistics—P. J. Cashman and J. I. Thornton, *Journal of the Forensic Science Society*, 11(1): 115-126 (April 1971). Considers the implementation of high speed liquid adsorption chromatography as a standard analytical procedure in the crime laboratory, with primary emphasis placed on the theoretical factors governing both resolution and speed. Also considered are the practical aspects of high speed liquid adsorption systems and how these systems relate to other chromatographic techniques currently in use. (SID)

Low Blood Sugar Levels and Handwriting—C. S. Towson, *Canadian Society of Forensic Science Journal*, 4(4): 133-144 (December 1971). Studies the effect of low blood sugar level on handwriting showing that there is a highly significant relationship between abnormally low blood sugar levels and handwriting impairment. Details of the method and conclusions are given. (SID)

Abnormal Cardiac Rhythm and Handwriting—J. L. G. Remillard, *Canadian Society of Forensic Science Journal*, 4(4): 145-153 (December 1971). Indicates that a person's ability to write is impaired if the writing is done under abnormal cardiac rhythm induced by violent exercises. Even if impairment is found in the writing performed under abnormal cardiac activity such writings can, nevertheless, be associated or identified with the writing of the same author under normal conditions. The procedure and conclusions drawn from it are given in detail. (SID)

Determination of Sex from Handwriting—J. H. Hodgins, *Canadian Society of Forensic Science*

Journal, 4(4): 124-132 (December 1971). Gives details of a study indicating that sex can be determined from handwriting at better than the level of chance. (SID)

A New Attempt of Personal Identification by Means of Lip Print—Kasuo Suzuki and Yasus Tsuchihashi, *Canadian Society of Forensic Science Journal*, 4(4): 154-158 (December 1971). The authors show the results of their study in which they discovered that an individual does not have the same pattern of lip grooves as others. The classification of lip prints which they established is also given as is a criminal case report on lip print identification. (SID)

The Role of Data Processing in Questioned Document Examination—Ordway Hilton, *Canadian Society of Forensic Science Journal*, 5(1): 5-9 (March 1972). The article discusses the present application of data processing to the area of questioned documents which involves information as to the manner in which fraudulent documents are passed rather than a sorting of handwriting characteristics. Reference material and research are hopeful applications of the future. (SID)

New Considerations on the Subject on Headlights of a Motor Vehicle—H. Zielesny, L. A. Speckin, A. Schontag, R. Schmidt, *Archiv fur Kriminologie*, 148(3, 4): 79-93 (September-October 1971). This paper treats a number of special cases concerning the examination of lighting systems from vehicles which were involved in night time accidents. The individual nature of these cases requires a special method of examination. Two new findings are also reported which concern the examination of: 1) wires connected to lights in cases where the glass bulb, together with its electrical wiring, was torn out from its support by the force of the collision but where the glass bulb remained unbroken. In these cases the examination of the electrical wiring can be very rewarding; 2) the helix of a light to which the current was broken by the collision a split second before the destruction of the glass bulb, and the resulting effects on the inrushing oxygen on the partially cooled helix. Twenty-three photographs illustrate the article. (ER)

Close Fire Residue Patterns of Handguns with Manipulated Muzzle—U. Ulages, H. Mundstedt,

W. Janssen, *Archiv fur Kriminologie*, 148(5, 6): 146-156 (November-December 1971). The effects of firing patterns of special muzzle devices such as silencers and decelerators were investigated. While the results are not conclusive certain patterns are suggestive to the use of a silencer. The article has eight illustrations. (ER)

Analysis of Lead Shot—A Comparison of Analysis Using Atomic Absorption and Neutron Activation Analysis—K. A. Gillespie and S. S. Krishnan, *Canadian Society of Forensic Science*, 2(4): 96-103 (December 1969). A survey of trace elements in lead shot alloys has been made using atomic absorption spectrophotometry (AA) and neutron activation analysis (NAA). It was found that NAA is more sensitive to Sb, As, and Sn while AA is preferred for Ag, Zn, and Cr. The detection limit of Cu is the same for both instruments. Pb does not show any matrix effect for either method. Samples as small as 0.1 mg can be analyzed by NAA while AA requires at least 5 mg. In most cases the determination of the amounts of Sb and As is sufficient to individualize a sample. The article is accompanied by an extensive statistical treatment. (ER)

Breathalyzer Programme Planning—W. R. Pictou and R. A. Huber, *Canadian Society of Forensic Science Journal*, 2(3): 63-79 (September 1969). This article is intended as a guide to police forces (primarily Canadian) that might contemplate the introduction of a Breathalyzer program. The article briefly discusses the role of the breathalyzer, the instrument requirements, breathalyzer operator training, and finally policy considerations. (TRD)

The Harper Autopsy—J. L. Penistan, *Canadian Society of Forensic Science Journal*, 2(3): 54-63 (September 1969). The author presents the observations made at the autopsy of Lynne Harper, a girl raped and murdered by a 14 year old boy who was subsequently arraigned and convicted at a trial before the Ontario Supreme Court, and the conclusions based on them. (TRD)

A Classification System for Typewriting Specimens—G. de la Durantaye, *Canadian Society of Forensic Science Journal*, 1(4): 61-64 (December 1968). Because of the increase of typestyles being

used on typewriters there has also been an increase in requests for the establishing of the make of the machine on which a document was typed. This article discusses a system of classification which allows the elimination of several groups of specimens and therefore reduces the number of type-faces to examine. (TRD)

Organic Protective Coatings—Their Relation to Forensic Science—Allen R. Corrigan, *Canadian Society of Forensic Science Journal*, 1(1): 5-10 (March 1968). The author briefly discusses the many facets of protective coatings, that is, the chemical make-up of protective coatings, how the coatings are applied, how samples should be submitted to the forensic analyst, and the various laboratory examinations performed. (TRD)

Restoration and Preservation of Charred Documents—A. Bartha and N. W. Duxbury, *Canadian Society of Forensic Science Journal*, 1(1): 2-4 (March 1968). The author discusses various experiments used for the separating, interpreting, and preserving of burned documents. Several different chemical solutions were found effective for the separation of charred paper. Further burning of charred documents at a controlled temperature seemed to increase the contrast of the writing and the burned paper. Since the documents become more fragile with further burning, the author suggests treatment with Neatan or lamination. (TRD)

A Histological Technique for Forensic Ballistics—H. C. Rolfe, Dennis Curle, and David Simmons, *Journal of Forensic Medicine*, 18(2): 39-46 (April-June 1971). The author suggests a histological technique for the identification of nitrate-nitrite radicals in discharge wounds particularly those of a difficult nature. (TRD)

Detection of Rhesus Factors in Bloodstains—Robert R. Ogle, Dorothy Northey, and John I. Thornton, *American Laboratory*, 4(2): 13-15 (February 1972). This article discusses the application of the AutoAnalyzer for the detection of Rhesus factors in bloodstains. The authors are of the opinion that not only is the instrument sensitive, but coupled with its adaptability indicate that the instrument can be utilized for the detection of blood group determinants in other blood group systems. (TRD)

Marijuana and the Current Drug Scene—H. B. Cotnam, M.D., *Canadian Society of Forensic Science Journal*, 4(2): 30-65 (June 1971). The author states his several reasons for urging both scientific studies of the uses and effects of marijuana (which are embarrassingly scarce to date) and its legalization (to improve control of the drug and to minimize the involvement of organized crime). He feels more attention is paid to "pot" than is due, thus masking what to him are the more dangerous problems of "sedative-hypnotic-tranquilizer-alcohol combinations" and "speed"-type stimulants. More education is needed to put the total drug scene in its total perspective. (MMS)

Collaborative Study of the Single Tablet Determination of Reserpine—Susan Barkan, *Journal of the A.O.A.C.*, 55(1): 149-151 (January 1972). A single tablet adaptation of a fluorometric method for determining reserpine using vanadium pentoxide is described. Modifications of the original method set forth by Urbanyi and Stober include changing the technique of tablet disintegration and diluting the V_2O_5 reagent to facilitate measuring. Fourteen collaborators in two groups approved the modified method. (MMS)

Partition Chromatographic-Gravimetric Assay of Opium—Edward Smith, Eric B. Sheinin and Joseph Levine, *Journal of the A.O.A.C.*, 55(1): 173-176 (January 1972). The article describes a two-day "hybrid" chromatographic separation of enough morphine from opium to do a gravimetric quantitative assay. The procedure was initiated due to a preference of the WHO for gravimetric rather than spectrophotometric quantitation, which can be done after a three-hour partition chromatography technique. Results of both methods show that this longer, more complex procedure has no appreciable advantages. (MMS)

Rapid Gas Chromatographic Assay for Heroin in Illicit Preparations—James M. Moore and Frank E. Bena, *Analytical Chemistry*, 44(2): 385-387 (February 1972). The authors, using a 3% OV-1 on 80- to 100-mesh chromosorb WHP column packing at a temperature of 275°C, obtained an elution of heroin hydrochloride, quinine hydrochloride, and N-triacontane (internal standard) in less than five minutes. Assays of heroin hydrochloride in illicit samples are compared using

the GLC method and a UV spectrophotometric procedure. The conclusions were that the GLC method is as accurate as UV, more rapid and better suited to smaller samples. The latter conclusion was based on analysis of narcotic paraphernalia such as cookers, strainers, and syringes. (GHK)

Column Partition Chromatographic Assay for Codeine in Tablets Containing APC—Emil G. Siegmund, *Journal of the A.O.A.C.*, 55(1): 142-145 (January 1972). The author gives a column chromatographic method for the separation of codeine in combination with APC followed by UV spectrophotometric determination. Other methods for the determination of the four components were cited. However, it was mentioned that they were deficient in some respects. Most of the collaborators involved found the method to be straight forward, simple and rapid." In the discussed procedure, a celite pH 5.1 buffer column is used. The APC mixture is eluted with ether while the codeine is eluted with DEHP-ether solution (DEHP = Di-(2-ethylhexyl) phosphoric acid). The ion pair is then broken by extracting codeine with .1 N H_2SO_4 . The A.O.A.C. procedure is used to separate the APC combination. UV spectrophotometry is then used to determine all four components. (REC)

Rapid Method for the Determination of Proof of Alcoholic Products Containing Dissolved Solids—Duane H. Strunk, *Journal of the A.O.A.C.*, 55(1): 13-14 (January 1972). The author describes a rapid method for proof determination using the Jaulmes distillation unit and a proof hydrometer. Result comparisons between this method and the more conventional modified A.O.A.C. method are presented in literature and in table form. As a result of his study the author concludes that his described method is not only reproducible and accurate but also faster than the more conventional methods. (REC)

Column Chromatographic Assay for Sodium Butabarbital in Tablets—Gilbert B. Kaplan and Joseph Levine, *Journal of the A.O.A.C.*, 55(1): 152-154 (January 1972). The authors briefly discuss the difficulties encountered in the extraction of barbiturates—particularly from commercial sodium butabarbital tablets. A column chromatographic method which achieves quantitative recovery of sodium butabarbital from tablets and