# Journal of Forensic Sciences Subject Index to Volume 31 1986

#### A

#### Absorption

Lasers and optical spectroscopy in questioned document examination (Sinor, Wilde, Everse, and Menzel), July, 825

#### Accelerants

Development in arson analysis: a comparison of charcoal adsorption and direct headspace injection techniques using fused silica capillary gas chromatography (Reeve, Jeffery, Weihs, and Jennings), April, 479

Fractionation of accelerants and arson residues by solid phase extraction (Aldridge and Oates), April, 666

Is it a petroleum product? how do you know? (Midkiff), Jan., 231

Quick test for accelerants after steam distillation (Fulton and Meloan), July, 1086

#### Accidents

Dispensing error causing fatal chlorpropamide intoxication in a nondiabetic (Scala-Barnett and Donoghue), Jan., 293

#### Adenosine deaminase

Double origin electrophoretic method for the simultaneous separation of adenosine deaminase, adenylate kinase, and carbonic anhydrase II (Murch, Gambel, and Kearney), Oct., 1349

# Adenylate kinase

Double origin electrophoretic method for the simultaneous separation of adenosine deaminase, adenylate kinase, and carbonic anhydrase II (Murch, Gambel, and Kearney), Oct., 1349

# Age determination—see Human identification

Lightning damage of bearing surfaces in turboprop aircraft engines (Hart and Anderson), July, 1096

#### Alcohol

Alcohol: its effect on handwriting (Galbraith), April, 580

Effect of skin cleansing agents on ethanol results measured with the Du Pont automatic clinical analyzer (Ryder and Glick), April, 574

Pathological intoxication and alcohol idiosyncratic intoxication—Part I: diagnostic and clinical aspects (Perr), July, 806

Pathological intoxication and alcohol idiosyncratic intoxication—Part II: legal aspects (Perr), July, 812

#### Alcohol - (cont.)

Tolerance at high blood alcohol concentrations: a study of 110 cases and review of the literature (Perper, Twerski, and Wienand), Jan., 212

#### Alprazolam

Fatality involving clomipramine (Fraser, Isner, and Moss), April, 762

#### Amphetamines

Resolution of some enantiomeric amines of forensic interest by high-performance liquid chromatography (Noggle and Clark), April, 732

#### Amylase

Amylase levels in semen and saliva stains (Auvdel), April, 426

# Anesthetics

Hemolysis and hyperkalemia complicate malignant hyperpyrexia during anesthetic death (Ward, Eisele, Reay, and Horton), April, 543

#### Antigen systems

Enzyme-linked immunosorbent assay for A and B water soluble blood group substances (Bolton and Thorpe), Jan., 27

#### Arson

Development in arson analysis: a comparison of charcoal adsorption and direct headspace injection techniques using fused silica capillary gas chromatography (Reeve, Jeffery, Weihs, and Jennings), April, 479

Fractionation of accelerants and arson residues by solid phase extraction (Aldridge and Oates), April, 666

Is it a petroleum product? how do you know? (Midkiff), Jan., 231

Quick test for accelerants after steam distillation (Fulton and Meloan), July, 1086

# Asphyxia

Homicidal asphyxia by pepper aspiration (Cohle), Oct., 1475

Unusual hanging deaths (Clark and Kerr), April, 747

# Automobiles

Jigsaw puzzle identification of a hit-and-run automobile (Zugibe and Costello), Jan., 329

Speed analysis of passenger cars in free-fall launch motions (Le Fevre), July, 886

Autopsy-see Postmortem examinations

#### н

Ballistics—see also Wound ballistics
Close proximity gunshot residues (Thornton),
April, 756

#### Ballistics—(cont.)

Copper and nickel detection on gunshot targets by dithiooxamide test (Lekstrom and Koons), Oct., 1283

Detection of bullet residue in bone using protoninduced X-ray emmission (PIXE) analysis (Fischbeck, Ryan, and Snow), Jan., 79

Detection of iron traces on hands by ferrozine sprays: a report on the sensitivity and interference of the method and recommended procedure in forensic science investigation (Lee), July, 920

Effect of tempered glass on bullet trajectory (Thornton and Cashman), April, 743

Ensembles of subclass characteristics in physical evidence examination (Thornton), April, 501

Glass fracture mechanism—a rethinking (Thornton and Cashman), July, 818

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part I (Starrs), April, 630

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part II (Starrs), July, 1050

Projectile entry angle determination (Cashman), Jan., 86

Regression analysis applied to shotgun range-offire estimations: results of a blind study (Fann, Ritter, Watts, and Rowe), July, 840

Winchester Silvertip® ammunition—a study in ordnance gelatin (Ragsdale and Josselson), July, 855

# Barbiturates

Screening for barbiturates in vitreous humor by the EMIT\*-st\* serum enzyme immunoassay (Ojanperä, Vuori, Nieminen, and Penttilä), April, 707

Battered child syndrome—see Child abuse Battered woman syndrome—see Spouse abuse Bite marks

Adjunctive use of scanning electron microscopy in bite mark analysis: a three-dimensional study (David), July, 1129

Analysis of photographic distortion in bite marks: a report of the bite mark guidelines committee (Rawson, Vale, Herschaft, Sperber, and Dowell), Oct., 1261

Bullet or bite—a contribution to the morphogenesis of gunshot dermal injury (Adelson), Oct., 1479

Reliability of the scoring system of the American Board of Forensic Odontology for human bite marks (Rawson, Vale, Sperber, Herschaft, and Yfantis), Oct., 1235

#### Blood

Analysis of restriction fragment length polymorphisms in deoxyribonucleic acid (DNA) recovered from dried bloodstains (Kanter, Baird, Shaler, and Balazs), April, 403

Blood droplet dynamics—I (Pizzola, Roth, and De Forest), Jan., 36

Blood droplet dynamics—II (Pizzola, Roth, and De Forest), Jan., 50

#### Blood—(cont.)

Determination of carbon monoxide in blood by gas chromatography using a thermal conductivity detector (Goldbaum, Chace, and Lappas), Jan., 133

Microplate method for reverse ABO typing of bloodstains (Mudd), April, 418

Simultaneous separation of the enzymes glyoxalase I, esterase D, and phosphoglucomutase (Wraxall and Stolorow), Oct., 1439

Subtyping phosphoglucomutase-1 in semen stains and bloodstains: a report on the method (Budowle, Murch, Davidson, Gambel, and Kearney), Oct., 1341

Use of microspectrophotometry to characterize microscopic amounts of blood (Kotowski and Grieve), July, 1079

**Blood groups**—see Genetic typing, Blood, and Antigen systems

#### **Body fluids**

ABO typing studies on liquid urines (Chase), July,

Detection of cocaine metabolite in perspiration stain, menstrual bloodstain, and hair (Smith and Liu), Oct., 1269

Bones-see Musculoskeletal system

#### **Book reviews**

Critical Issues in American Psychiatry by Rosner (Drucker), Oct., 1520

Death Investigation and Examination Medicolegal Guidelines and Checklists by Lipskin and Field (Froede), April, 782

Environmental Dispute Resolution by Bacon and Wheeler (Starrs), Oct., 1517

Evidence, Proof & Probability by Eggleston (Mills), Oct., 1515

The Expert Witness by Cantor (Froede), Oct., 1514

Fatal Vision by McGinniss (Tanay), July, 1163 Gunshot Wounds by DiMaio (Coe), July, 1166

The Human Skull by Rogers (Rhine), April, 783 Legal Encroachment on Psychiatric Practice by Rachlin (Tuchler), July, 1168

Serological Methods in Forensic Sciences by Rolih and Judd (Taylor), Oct., 1519

## Breaking

Breaking of tempered glass vehicle windows using broken spark plug insulators (Springer and Zeichner), April, 691

# Breath-alcohol testing devices

Infrared quantitative evidential breath-alcohol analyzers: in vitro accuracy and precision studies (Goldberger and Caplan), Jan., 16

Bullets-see Ballistics

C

#### Cachets

Facsimile signatures produced by gelatin transfer duplicator—recognition and identification (Gencavage), Jan., 106

Cannabinoids—see Marijuana Cannabis—see Marijuana

#### Carbon monoxide

Accidental poisonings involving carbon monoxide, heating systems, and confined spaces (Caplan, Thompson, Levine, and Masemore), Jan., 117

Determination of carbon monoxide in blood by gas chromatography using a thermal conductivity detector (Goldbaum, Chace, and Lappas), Jan., 133

# Carbonic anhydrase

Double origin electrophoretic method for the simultaneous separation of adenosine deaminase, adenylate kinase, and carbonic anhydrase II (Murch, Gambel, and Kearney), Oct., 1349

Population frequencies of carbonic anhydrase II (CA II), esterase D (EsD), and glyoxalase I (GLO) in the metropolitan Birmingham, Alabama area (Meighen, Smith, Angus, and McClelland), Oct., 1366

Catecholamines in the vitreous fluid and urine of guinea pigs dying of cold and the effect of postmortem freezing and autolysis (Lapinlampi and Hirvonen), Oct., 1357

# Chemical analysis

Analysis of N.N-diethyl-m-toluamide (DEET) in human postmortem specimens (Crowley, Geyer, and Muir), Jan., 280

Dectection of cannabinoids in homicide victims and motor vehicle fatalities (Garriott, Di Maio, and Rodriguez), Oct., 1274

Identification of fentanyl derivatives (Copper, Jacob, and Allen), April, 511

Spectral differentiation and gas chromatographic/mass spectrometric analysis of the lacrimators 2-chloroacetophenone and o-chlorobenzylidene malononitrile (Ferslew, Orcutt, and Hagardorn), April, 658

#### Child abuse

Pseudoabuse—the misdiagnosis of child abuse (Kaplan), Oct., 1420

#### Children

Mid-facial tissue depths of white children: an aid in facial feature reconstruction (Dumont), Oct., 1463

# Chlordane

Investigation of alleged insecticide toxicity: a case involving chlordane exposure, multiple sclerosis, and peripheral neuropathy (Blisard, Kornfeld, McFeeley, and Smialek), Oct., 1499

# Chlorpropamide

Dispensing error causing fatal chlorpropamide intoxication in a nondiabetic (Scala-Barnett and Donoghue), Jan., 293

Chromatographic analysis—see also Chemical analysis

Analysis of polyvinylchloride wire insulation by gel permeation chromatography (Baer, Rudolph, and Bender), April, 471

Applications of pyrolysis gas chromatography/mass spectrometry to toner materials from photocopiers (Levy and Wampler), Jan., 258

Case of fatal rotenone poisoning in a child (De

# Chromotographic analysis—(cont.)

Wilde, Heyndrickx, and Carton), Oct., 1492

Confirmation of Syva enzyme multiple immunoassay technique (EMIT®) d.a.u. and Roche Abuscreen® radioimmunoassay (RIA) (125]) urine cannabinoid immunoassay by gas chromatographic/mass spectrometric (GC/MS) and bonded-phase adsorption/thin-layer chromatographic (BPA-TLC) methods (Kogan, Al Razi, Pierson, and Willson), April, 494

Determination of carbon monoxide in blood by gas chromatography using a thermal conductivity detector (Goldbaum, Chace, and Lappas), Jan., 133

Development in arson analysis: a comparison of charcoal adsorption and direct headspace injection techniques using fused silica capillary gas chromatography (Reeve, Jeffery, Weihs, and Jennings), April, 479

Fatality involving clomipramine (Fraser, Isner, and Moss), April, 762

Fractionation of accelerants and arson residues by solid phase extraction (Aldridge and Oates), April, 666

Preliminary examination of machine copier toners by infrared spectrophotometry and pyrolysis gas chromatography (Zimmerman, Mooney, and Kimmett), April, 489

Profiles of Δ<sup>9</sup>-tetrahydrocannabinol metabolites in urine of marijuana users: preliminary observations by high performance liquid chromatography-radioimmunoassay (Alburges and Peat), April, 695

Resolution of some enantiomeric amines of forensic interest by high-performance liquid chromatography (Noggle and Clark), April, 732

Technique for transferring ink from a written line to a thin-layer chromatographic sheet (Kuranz), April, 655

#### Cleaning

Effect of garment cleaning on the recovery and redistribution of transferred fibers (Roberston and Olaniyan), Jan., 73

# Clomipramine

Fatality involving clomipramine (Fraser, Isner, and Moss), April, 762

#### Clothing

Effect of garment cleaning on the recovery and redistribution of transferred fibers (Robertson and Olaniyan), Jan., 73

## Cocaine

Cocaine-related deaths in Pima County, Arizona, 1982-1984 (Rogers, Henry, Jones, Froede, and Byers), Oct., 1404

Detection of cocaine metabolite in perspiration stain, menstrual bloodstain, and hair (Smith and Liu), Oct., 1269

#### Collision research

Fiber-plastic fusions in traffic accident reconstruction (Masakowski, Enz, Cothern, and Rowe), July, 903

Speed analysis of passenger cars in free-fall launch motions (Le Fevre), July, 886

#### Colors (materials)

Color comparison in questioned document examination using microspectrophotometry (Olson), Oct., 1330

#### Comparative analysis

- Comparison of modern typestyles (Anthony), April, 710
- Critical analysis of quantitative fingerprint individuality models (Stoney and Thornton), Oct., 1187
- Method for the description of minutiae pairs in epidermal ridge patterns (Stoney and Thornton), Oct., 1217
- Multicenter evaluation of ultrafiltration, dialysis, and thermal coagulation as sample pretreatment methods for the colorimetric determination of paraquat in blood and tissues (De Zeeuw, Wijsbeek, Franke, Bogusz, and Klys), April, 504
- Reliability of the scoring system of the American Board of Forensic Odontology for human bite marks (Rawson, Vale, Sperber, Herschaft, and Yfantis), Oct., 1235

#### Computers

- Decision-making concepts in postmortem identification (Lorton and Langley), Jan., 190
- Design and use of a computer-assisted postmortem identification system (Lorton and Langley), July, 972
- **Confidentiality**—see Privacy and Doctor-patient privilege

#### Crania—see Musculoskeletal system

#### Criminal aliases

Diagnostic study of the criminal alias (Harry), July, 1023

#### Criminalistics

- Analysis of polyvinylchloride wire insulation by gel permeation chromatography (Baer, Rudolph, and Bender), April, 471
- Breaking of tempered glass vehicle windows using broken spark plug insulators (Springer and Zeichner), April, 691
- Close proximity gunshot residues (Thornton), April, 756
- Collision marks on plastic materials on motor vehicles (Ponnuswamy and Kuppuswamy), April, 778
- Copper and nickel detection on gunshot targets by dithiooxamide test (Lekstrom and Koons), Oct., 1283
- Detection of cocaine metabolite in perspiration stain, menstrual bloodstain, and hair (Smith and Liu), Oct., 1269
- Development in arson analysis: a comparison of charcoal adsorption and direct headspace injection techniques using fused silica capillary gas chromatography (Reeve, Jeffery, Weihs, and Jennings), April, 479
- Effect of skin cleansing agents on ethanol results measured with the Du Pont automatic clincial analyzer (Ryder and Glick), April, 574
- Effect of tempered glass on bullet trajectory (Thornton and Cashman), April, 743
- Ensembles of subclass characteristics in physical evidence examination (Thornton), April, 501

#### Criminalistics—(cont.)

- Examination of U.S. automotive paints: 1. make and model determination of hit-and-run vehicles by reflectance microspectrophotometry (Nowicki and Patten), April, 464
- Forensic science applications of diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS): I. principles, sampling methods, and advantages (Suzuki and Gresham), July, 931
- Forensic science applications of diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS): II. direct analysis of some tablets, capsule powders, and powders (Suzuki and Gresham), Oct., 1292
- Fractionation of accelerants and arson residues by solid phase extraction (Aldridge and Oates), April, 666
- Identification of the murder weapon by intricate patterned injury measurements (Zugibe and Costello), April, 773
- Implications of Trombiculid mite bites: report of a case and submission of evidence in a murder trial (Prichard, Kossoris, Leibovitch, Robertson, and Lovell), Jan., 301
- Jigsaw puzzle identification of a hit-and-run automobile (Zugibe and Costello), Jan., 329
- Lasers and optical spectroscopy in questioned document examination (Sinor, Wilde, Everse, and Menzel), July, 825
- Magnetic identification of headlight glass (Mires), July, 913
- Manufacturing processes for athletic shoe outsoles and their significance in the examination of footwear impression evidence (Bodziak), Jan., 153
- Microplate method for reverse ABO typing of bloodstains (Mudd), April, 418
- Modified Super Glue® technique—the use of polycyanoacrylate for fingerprint development (Almog and Gabay), Jan., 250
- Patterned injury and its evidentiary value (Rao), April, 768
- Projectile entry angle determination (Cashman), Jan., 86
- Quick test for accelerants after steam distillation (Fulton and Meloan), July, 1086
- Regression analysis applied to shotgun range-offire estimations: results of a blind study (Fann, Ritter, Watts, and Rowe), July, 840
- Reptile leather trade: the forensic science examiner's role in litigation and wildlife law enforcement (Brazaitis), April, 621
- Results of a study to determine the probability of chance match occurrences between fibers known to be from different sources (Fong and Inami), Jan., 65
- Sensitivity enhancement of ninhydrin-treated latent fingerprints by enzymes and metal salts (Everse and Menzel), April, 446
- Trace evidence—the invisible witness (Petraco), Jan., 321
- Unusual explosive, triacetonetriperoxide (TATP) (Evans, Tulleners, Sanchez, and Rasmussen), July, 1119

#### Criminalistics—(cont.)

Unusual hanging deaths (Clark and Kerr), April, 747

Video superimposition of skulls and photographic portraits—a new aid to identification (Bastiaan, Dalitz, and Woodward), Oct., 1373

#### Criminal sex offenses

Detective magazines: pornography for the sexual sadist? (Dietz, Harry, and Hazelwood), Jan., 197

Pedophile types and treatment perspectives (Travin, Bluestone, Colemen, Cullen, and Melella), April, 614

υ

#### Death

Death as a result of an adverse reaction from nalidixic acid (Frazer and Gault), July, 1145

Distribution of morphine in body fluids and tissues in fatal overdoses (Chan, Chan, and Kaliciak), Oct., 1487

Fatal intravenous drug abuse secondary to streptomycin overdose (Rance and Randall), July, 1150

Impact of psychological autopsies on medical examiners' determination of manner of death (Jobes, Berman, and Josselson), Jan., 177

Insanity defense to suicide (Massello), July, 1009 Proof in law of suicide (Massello), July, 1000

Sudden death associated with contrast medium, Sinografin® (Edelstein), July, 1142

Sudden death in an adolescent four years after recovery from mucocutaneous lymph node syndrome (Kawasaki disease) (Quam, Edwards, Bambara, and Luzier), July, 1135

#### Decomposition

Experimental study of postmortem change under field conditions: effects of freezing, thawing, and mechanical injury (Micozzi), July, 953

# Deer

Sex Identification of white-tailed deer using frozen venison (Kerr), July, 1108

#### Density (mass/volume)

Three-dimensional presentation of glass density versus refractive index data (Espinoza and Thornton), April, 687

#### Dentition

Correlation of age and incremental lines in the cementum of human teeth (Lipsinic, Paunovich, Houston, and Robison), July, 982

Design and use of computer-assisted postmortem identification system (Lorton and Langley), July, 972

Postmortem examination of incinerated teeth with the scanning electron microscope (Carr, Barsley, and Davenport), Jan., 307

# Deoxyribonucleic acid (DNA)

Analysis of restriction fragment length polymorphisms in deoxyribonucleic acid (DNA) recovered from dried bloodstains (Kanter, Baird, Shaler, and Balazs), April, 403

Application of deoxyribonucleic acid (DNA) polymorphisms to the analysis of DNA recovered from sperm (Giusti, Baird, Pasquale, Balazs, and Glassberg), April, 409

# Deoxyribonucleic acid (DNA)-(cont.)

Forensic biology—is recombinant DNA technology in its future? (Sensabaugh), April, 393

#### **Detective magazines**

Detective magazines: pornography for the sexual sadist? (Dietz, Harry, and Hazelwood), Jan., 197

#### Deviant sexual behavior

Detective magazines: pornography for the sexual sadist? (Dietz, Harry, and Hazelwood), Jan., 197

Pedophile types and treatment perspectives (Travin, Bluestone, Colemen, Cullen, and Melella), April, 614

#### Diabetes mellitus

Pharmaceutical error resulting in fatal diabetic ketoacidosis (Cohle, Lang, and Kosek), April, 758

#### Dialysis

Multicenter evaluation of ultrafiltration, dialysis, and thermal coagulation as sample pretreatment methods for the colorimetric determination of paraquat in blood and tissues (De Zeeuw, Wijsbeek, Franke, Bogusz, and KIys), April, 504

#### Dicyclomine

Dicyclomine in the sudden infant death syndrome (SIDS)—a cause of death or an incidental finding? (Randall, Gerry, and Rance), Oct., 1470 **Drops** (liquids)

Blood droplet dynamics—I (Pizzola, Roth, and De Forest), Jan., 36

Blood droplet dynamics—II (Pizzola, Roth, and De Forest), Jan., 50

# Drug identification

Comparison of extraction methods for methamphetamine and its metabolites in tissue (Inoue and Suzuki), July, 1102

**Drugs**—see Toxicology and specific headings **Dulcin** 

Dulcin: a centennial perspective (Goldsmith), Jan., 333

E

## Editorials

Code of ethics for the academy (Mills), July, 798 Developing a forensic science laboratory operating strategy (Fisher), Oct., 1177

Forensic biology—is recombinant DNA technology in its future? (Sensabaugh), April, 393

Justice in the forensic sciences (Caplan), Jan., 5 Electrophoresis

# Applications of isoelectric focusing in forensic se-

rology (Murch and Budowle), July, 869
Double origin electrophoretic method for the simultaneous separation of adenosine deaminase, adenylate kinase, and carbonic anhydrase II (Murch, Gambel, and Kearney), Oct., 1349

#### Emission

Lasers and optical spectroscopy in questioned document examination (Sinor, Wilde, Everse, and Menzel), July, 825

EMIT®-see Immunoassay

#### Engineering

Glass fracture mechanism—a rethinking (Thornton and Cashman), July, 818

Lightning damage of bearing surfaces in turboprop aircraft engines (Hart and Anderson), July, 1096

Speed analysis of passenger cars in free-fall launch motions (Le Fevre), July, 886

Use of circular scales in the perspective grid technique of making photographic measurements (Hyzer), Jan., 20

#### Entomology

Implications of Trombiculid mite bites: report of a case and submission of evidence in a murder trial (Prichard, Kossoris, Leibovitch, Robertson, and Lovell), Jan., 301

# Enzyme immunoassay—see Immunoassay Enzymes

Sensitivity enhancement of ninhydrin-treated latent fingerprints by enzymes and metal salts (Everse and Menzel), April, 446

Simultaneous separation of the enzymes glyoxalase I, esterase D, and phosphoglucomutase (Wraxall and Stolorow), Oct., 1439

#### **Epidemiology**

Cocaine-related deaths in Pima County, Arizona, 1982-1984 (Rogers, Henry, Jones, Froede, and Byers), Oct., 1404

Suicide in Fulton County, Georgia (1975-1984) (Gowitt and Hanzlick), July, 1029

# Erythrocyte acid phosphatase—see Phosphatases Esterase D

Population frequencies of carbonic anhydrase II (CA II), esterase D (EsD), and glyoxalase I (GLO) in the metropolitan Birmingham, Alabama area (Meighen, Smith, Angus, and McClelland), Oct., 1366

# Ethanol-see Alcohol

# **Ethics**

Code of ethics for the academy (Mills), July, 798 Ethical concerns expressed by forensic psychiatrists (Weinstock), April, 596

# Expert witnesses—see Witnesses

#### **Explosives**

Improved method for the analysis of the military explosive composition C-4 (Keto), Jan., 241

Unusual explosive, triacetonetriperoxide (TATP) (Evans, Tulleners, Sanchez, and Rasmussen), July, 1119

# Extraction—see also Drug identification

Comparison of extraction methods for methamphetamine and its metabolites in tissue (Inoue and Suzuki), July, 1102

## F

#### Fentanyl

Identification of fentanyl derivatives (Cooper, Jacob, and Allen), April, 511

# Ferrozine

Detection of iron traces on hands by ferrozine sprays: a report on the sensitivity and interference of the method and recommended proce-

#### Ferrozine—(cont.)

dure in forensic science investigation (Lee), July, 920

#### **Fibers**

Effect of garment cleaning on the recovery and redistribution of transferred fibers (Robertson and Olaniyan), Jan., 73

Fiber-plastic fusions in traffic accident reconstruction (Masakowski, Enz, Cothern, and Rowe), July, 903

Results of a study to determine the probability of chance match occurrences between fibers known to be from different sources (Fong and Inami), Jan., 65

# **Fingerprints**

Critical analysis of quantitative fingerprint individuality models (Stoney and Thornton), Oct., 1187

Improved enchancement of ninhydrin developed fingerprints by cadmium complexation using low temperature photoluminescence techniques (Stoilovic, Kobus, Margot, and Warrener), April, 432

Method for the description of minutiae pairs in epidermal ridge patterns (Stoney and Thornton), Oct., 1217

Modified Super Glue® technique—the use of polycyanoacrylate for fingerprint development (Almog and Gabay), Jan., 250

New method for softening mummified fingers (Zugibe and Costello), April, 726

Sensitivity enchancement of ninhydrin-treated latent fingerprints by enzymes and metal salts (Everse and Menzel), April, 446

# Firearms-see Ballistics

#### Fires

Postmortem examination of incinerated teeth with the scanning electron microscope (Carr, Barsley, and Davenport), Jan., 307

# Footprints

Estimating height and weight from size of footprints (Robbins), Jan., 143

#### Footwear

Manufacturing processes for athletic shoe outsoles and their significance in the examination of footwear impression evidence (Bodziak), Jan., 153

#### Forensic science

Applications of pyrolysis gas chromatography/ mass spectrometry to toner materials from photocopiers (Levy and Wampler), Jan., 258

Blood droplet dynamics—I (Pizzola, Roth, and De Forest), Jan., 36

Blood droplet dynamics—II (Pizzola, Roth, and De Forest), Jan., 50

Clay mineralogical analysis using the <0.05-mm fraction for forensic science investigation—its application to volcanic ash soils and yellowbrown forest soils (Marumo, Nagatsuka, and Oba), Jan., 92

Critical analysis of quantitative fingerprint individuality models (Stoney and Thornton), Oct., 1187

Detection of iron traces on hands by ferrozine sprays: a report on the sensitivity and interfer-

#### Forensic science—(cont.)

ence of the method and recommended procedure in forensic science investigation (Lee), July, 920

Developing a forensic science laboratory operating strategy (Fisher), Oct., 1177

Double origin electrophoretic method for the simultaneous separation of adenosine deaminase, adenylate kinase, and carbonic anhydrase II (Murch, Gambel, and Kearney), Oct., 1349

Effect of garment cleaning on the recovery and redistribution of transferred fibers (Robertson and Olaniyan), Jan., 73

Enhancement of the luminol test by means of light amplification (Thornton, Guarino, Rios, and Cashman), Jan., 254

Fiber-plastic fusions in traffic accident reconstruction (Masakowski, Enz, Cothern, and Rowe), July, 903

Fractal surfaces as models of physical matches (Thorton), Oct., 1435

Improved enchancement of ninhydrin developed fingerprints by cadmium complexation using low temperature photoluminescence techniques (Stoilovic, Kobus, Margot, and Warrener), April, 432

1mproved method for the analysis of the military explosive composition C-4 (Keto), Jan., 241

1s it a petroleum product? how do you know? (Midkiff), Jan., 231

Laser excited luminescence of inclusions and fibers in paper matches (Von Bremen), April, 455

Method for the description of minutiae pairs in epidermal ridge patterns (Stoney and Thornton), Oct., 1217

Mirror images in knots (Nute), Jan., 272

Morphological analysis of opal phytoliths for soil discrimination in forensic science investigation (Marumo and Yanai), July, 1039

Sheet or container?—forensic glass comparisons with an emphasis on source classification (Ryland), Oct., 1314

Simultaneous separation of the enzymes glyoxalase I, esterase D, and phosphoglucomutase (Wraxall and Stolorow), Oct., 1439

Subtyping phosphoglucomutase-1 in semen stains and bloodstains: a report on the method (Budowle, Murch, Davidson, Gambel, and Kearney), Oct., 1341

Three-dimensional presentation of glass density versus refractive index data (Espinoza and Thornton), April, 687

Use of microspectrophotometry to characterize microscopic amounts of blood (Kotowski and Grieve), July, 1079

Use of ultrathin-layer agarose gels for phenotyping erythrocyte acid phosphatase by isoelectric focusing (Frank and Stolorow), July, 1089

Value of microscopic features in the examination of human head hairs: analysis of comments contained in questionnaire returns (Robertson and Aitken), April, 563

Value of microscopic features in the examination of human head hairs: statistical analysis of

#### Forensic science—(cont.)

questionnarie returns (Aitken and Robertson), April, 546

Winchester Silvertip® ammunition—a study in ordnance gelatin (Ragsdale and Josselson), July, 855

#### Forgery

Facsimile signatures produced by gelatin transfer duplicator—recognition and identification (Gencavage), Jan., 106

# Fractures (materials)

Fractal surfaces as models of physical matches (Thorton), Oct., 1435

#### Freeze-dehydration

Restoration and identification of water-soaked documents: a case study (Taylor), July, 1113

Freezing

Microscopic diagnosis from frozen canine tissues (Baraibar and Schoning), Jan., 283

#### G

## Gambling

Pathological gambling and criminal responsibility (Rachlin, Halpern, and Portnow), Jan., 235

Gas chromatography—see Chromatographic analysis

Gas chromatography/mass spectrometry—see Chemical analysis

**Gel permeation chromatography**—see Chromatographic analysis

# Genetic typing

ABO typing studies on liquid urines (Chase), July,

Analysis of restriction fragment length polymorphisms in deoxyribonucleic acid (DNA) recovered from dried bloodstains (Kanter, Baird, Shaler, and Balazs), April, 403

Enzyme-linked immunosorbent assay for A and B water soluble blood group substances (Bolton and Thorpe), Jan., 27

Forensic biology—is recombinant DNA technology in its future? (Sensabaugh), April, 393

Microplate method for reverse ABO typing of bloodstains (Mudd), April, 418

Population frequencies of carbonic anhydrase II (CA II), esterase D (EsD), and glyoxalase I (GLO) in the metropolitan Birmingham, Alabama area (Meighen, Smith, Angus, and McClelland), Oct., 1366

Simultaneous separation of the enzymes glyoxalase I, esterase D, and phosphoglucomutase (Wraxall and Stolorow), Oct., 1439

Subtyping phosphoglucomutase-1 in semen stains and bloodstains: a report on the method (Budowle, Murch, Davidson, Gambel, and Kearney), Oct., 1341

Use of ultrathin-layer agarose gels for phenotyping erythrocyte acid phosphatase by isoelectric focusing (Frank and Stolorow), July, 1089

#### Glass

Breaking of tempered glass vehicle windows using broken spark plug insulators (Springer and Zeichner), April, 691

#### Glass—(cont.)

Effect of tempered glass on bullet trajectory (Thornton and Cashman), April, 743

Glass fracture mechanism—a rethinking (Thornton and Cashman), July, 818

Magnetic identification of headlight glass (Mires), July, 913

Sheet or container?—forensic glass comparisons with an emphasis on source classification (Ryland), Oct., 1314

Three-dimensional presentation of glass density versus refractive index data (Espinoza and Thornton), April, 687

#### Glyoxalase

Population frequencies of carbonic anhydrase II (CA II), esterase D (EsD), and glyoxalase I (GLO) in the metropolitan Birmingham, Alabama area (Meighen, Smith, Angus, and McClelland), Oct., 1366

#### Gunshot residues

Close proximity gunshot residues (Thornton), April, 756

Copper and nickel detection on gunshot targets by dithiooxamide test (Lekstrom and Koons), Oct., 1283

Detection of bullet residue in bone using protoninduced X-ray emission (PIXE) analysis (Fischbeck, Ryan, and Snow), Jan., 79

# H

# Hair

Detection of cocaine metabolite in perspiration stain, menstrual bloodstain, and hair (Smith and Liu), Oct., 1269

Value of microscopic features in the examination of human head hairs: analysis of comments contained in questionnaire returns (Robertson and Aitken), April, 563

Value of microscopic features in the examination of human head hairs: statistical analysis of questionnaire returns (Aitken and Robertson), April, 546

## Handedness

Bilateral asymmetry of long arm bones and jugular foramen: implications for handedness (Glassman and Bass), April, 589

# Handwriting

Alcohol: its effect on handwriting (Galbraith), April, 580

Document evidence and some other observations about the Howard R. Hughes "Mormon Will" contest (Harris), Jan., 365

# Hanging-see Asphyxia

# Hematoma

Subcapsular hematoma in fatty liver of pregnancy (Roh), Oct., 1509

# Histology

Use of bone histomorphometry in skeletal identification: the case of Francisco Pizarro (Stout), Jan., 296

#### Histomorphometry

Use of bone histomorphometry in skeletal identifi-

#### Histomorphometry—(cont.)

cation: the case of Francisco Pizarro (Stout), Jan., 296

#### Historical background

Medicolegal investigations in Hollywood (Noguchi), Jan., 376

# Hollywood stars

Medicolegal investigations in Hollywood (Noguchi), Jan., 376

# Homicide

Homicidal asphyxia by pepper aspiration (Cohle), Oct., 1475

Identification of the murder weapon by intricate patterned injury measurements (Zugibe and Costello), April, 773

Jigsaw puzzle identification of a hit-and-run automobile (Zugibe and Costello), Jan., 329

Medicolegal investigations in Hollywood (Noguchi), Jan., 376

Patterns in sharp force fatalities—a comprehensive forensic medical study (Ormstad, Karlsson, Enkler, and Rajs), April, 529

Posttraumatic stress disorder in murderers (Harry and Resnick), April, 609

#### **Howard Hughes**

Document evidence and some other observations about the Howard R. Hughes "Mormon Will" contest (Harris), Jan., 365

Howard Hughes and Melvin Dummar: forensic science fact versus film fiction (Freese), Jan., 342

Paper Match ink on the Howard Hughes "Mormon Will" (Cantu), Jan., 360

# Human identification

Bilateral asymmetry of long arm bones and jugular foramen: implications for handedness (Glassman and Bass), April, 589

Correlation of age and incremental lines in the cementum of human teeth (Lipsinic, Paunovich, Houston, and Robison), July, 982

Decision-making concepts in postmortem identification (Lorton and Langley), Jan., 190

Design and use of a computer-assisted postmortem identification system (Lorton and Langley), July, 972

Determination of age from the sternal rib in white females: a test of the phase method (İşcan and Loth), July, 990

Determination of age from the sternal rib in white males: a test of the phase method (İşcan and Loth), Jan., 122

Estimating height and weight from size of footprints (Robbins), Jan., 143

Mid-facial tissue depths of white children: an aid in facial feature reconstruction (Dumont), Oct., 1463

Race determination of fragmentary crania by analysis of the cranial base (Holland), April, 719

Sciatic notch/acetabular index as a discriminator of sex in European skeletal remains (Mac-Laughlin and Bruce), Oct., 1380

Use of bone histomorphometry in skeletal identification: the case of Francisco Pizarro (Stout), Jan., 296

#### Human identification—(cont.)

Video superimposition of skulls and photographic portraits—a new aid to identification (Bastiaan, Dalitz, and Woodward), Oct., 1373

#### Hyperthermia

Hemolysis and hyperkalemia complicate malignant hyperpyrexia during anesthetic death (Ward, Eisele, Reay, and Horton), April, 543

#### Hypothermia

Catecholamines in the vitreous fluid and urine of guinea pigs dying of cold and the effect of postmortem freezing and autolysis (Lapinlampi and Hirvonen), Oct., 1357

#### I-K

# Identification systems

Reptile leather trade: the forensic science examiner's role in litigation and wildlife law enforcement (Brazaitis), April, 621

#### **Immunoassay**

Confirmation of Syva enzyme multiple immunoassay technique (EMIT®) d.a.u. and Roche Abuscreen® radioimmunoassay by gas chromatographic/mass spectrometric (GC/MS) and bonded-phase adsorption/thin-layer chromatographic (BPA-TLC) methods (Kogan, Al Razi, Pierson, and Willson), April, 194

Enzyme-linked immunosorbent assay for A and B water soluble blood group substances (Bolton and Thorpe), Jan., 27

Screening for barbiturates in vitreous humor by the EMIT\*st\* serum enzyme immunoassay (Ojanperä, Vuori, Nieminen, and Penttilä), April, 707

#### Impressions

Identification of the murder weapon by intricate patterned injury measurements (Zugibe and Costello), April, 773

Manufacturing processes for athletic shoe outsoles and their significance in the examination of footwear impression evidence (Bodziak), Jan., 153

Patterned injury and its evidentiary value (Rao), April, 768

#### Individuality

Critical analysis of quantitative fingerprint individuality models (Stoney and Thornton), Oct., 1187

Infrared luminescence—see Luminescence

Infrared spectroscopy—see Spectroscopic analysis

# Injuries

Identification of the murder weapon by intricate patterned injury measurements (Zugibe and Costello), April, 773

Patterned injury and its evidentiary value (Rao), April, 768

Patterns in sharp force fatalities—a comprehensive forensic medical study (Ormstad, Karlsson, Enkler, and Rajs), April, 529

#### Inks

Paper Mate<sup>®</sup> ink on the Howard Hughes "Mormon Will" (Cantu), Jan., 360

#### Inks—(cont.)

Technique for transferring ink from a written line to a thin-layer chromatographic sheet (Kuranz), April, 655

#### **Insanity defense**

Pathological gambling and criminal responsibility (Rachlin, Halpern, and Portnow), Jan., 235 Schizotypal personality disorder and the insanity defense (Felthous), July, 1016

#### Insulin

Pharmaceutical error resulting in fatal diabetic ketoacidosis (Cohle, Lang, and Kosek), April, 758

#### Intoxication

Pathological intoxication and alcohol idiosyncratic intoxication—Part I: diagnostic and clinical aspects (Perr), July, 806

Pathological intoxication and alcohol idiosyncratic intoxication—Part II: legal aspects (Perr), July, 812

Tolerance at high blood alcohol concentrations: a study of 110 cases and review of the literature (Perper, Twerski, and Wienand), Jan., 212

#### Isoelectric focusing

Applications of isoelectric focusing in forensic serology (Murch and Budowle), July, 869

Use of ultrathin-layer agarose gels for phenotyping erythrocyte acid phosphatase by isoelectric focusing (Frank and Stolorow), July, 1089

#### Jurisprudence

Consultant's survey of the patients in a maximum security hospital (Heller, Ehrlich, and Lester), Oct., 1429

Dichotomy of the expert witness (Howard), Jan., 337

Domestic violence: a medicolegal review (Frazer), Oct., 1409

Howard Hughes and Melvin Dummar: forensic science fact versus film fiction (Freese), Jan., 342

Insanity defense to suicide (Massello), July, 1009 "Insanity" in civil law (Kern), July, 1159

Multiple Schedule of Affective Disorders and Schizophrenia (SADS) in the assessment of criminal defendants (Rogers and Cunnien), Ian 222

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part I (Starrs), April, 630

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part II (Starrs), July, 1050

Pathological gambling and criminal responsibility (Rachlin, Halpern, and Portnow), Jan., 235

Pathological intoxication and alcohol idiosyncratic intoxication—Part II: legal aspects (Perr), July, 812

Proof in law of suicide (Massello), July, 1000 Schizotypal personality disorder and the insanity defense (Felthous), July, 1016

#### Kawasaki disease

Sudden death in an adolescent four years after recovery from mucocutaneous lymph node syndrome (Kawasaki disease) (Quam, Edwards, Bambara, and Luzier), July, 1135

#### Knots

Mirror images in knots (Nute), Jan., 272

#### L

#### Laboratories

Developing a forensic science laboratory operating strategy (Fisher), Oct., 1177

#### Lacrimators

Spectral differentiation and gas chromatographic/mass spectrometric analysis of the lacrimators 2-chloroacetophenone and o-chlorobenzylidene malononitrile (Ferslew, Orcutt, and Hagardorn), April, 658

#### Lasers

Lasers and optical spectroscopy in questioned document examination (Sinor, Wilde, Everse, and Menzel), July, 825

#### **Last Word Society**

Dulcin: a centennial perspective (Goldsmith), Jan., 333

#### Letters to the editor

Authors' response (Bisbing and Wolner), Jan., 11 Author's response (Cain), Oct., 1185

Authors' response (Higgins and Higgins), Jan., 7 Authors' response (Koves and Wells), July, 801 Authors' response (Mirchandani and Reich), Jan., 9

Author's response (Neiburger), April, 398

Central research establishment: reports (Marriott), April, 397

Discussion of "a clandestine approach to the synthesis of phenyl-2-propanone from phenylpropenes" (Ellern), Jan., 14

Discussion of "an evaluation of fused silica capillary columns for the screening of basic drugs in postmortem blood: qualitative and quantitative analysis" (Bogusz and de Zeeuw), July, 800

Discussion of "laser and fiber optic photographic analysis of single-edge paper striations" (Mc-Kasson), Oct., 1185

Discussion of "a study of .22 caliber rimfire exploding bullets: effect in ordance gelatin" (Fackler), July, 801

Discussion of "evaluation of medicolegal investigators' suspicions and positive toxicology findings in 100 drug deaths" (Golden and Hirsch), July, 804

Discussion of "fatal malignant hyperthermia as a result of ingestion of tranylcypromine (Parnate®) combined with white wine and cheese" (Reid), Jan., 8

Discussion of "high-speed extraction of accelerants from arson debris" (Zoro and Manners), Jan., 7

Discussion of "microcomputers in forensic science" (Midkiff), April, 397

Discussion of "secreted blood group substances: distributions in semen and stabilities in dried semen stains" (Lincoln), July, 803

Doctor-patient relationship in psychiatry: a threshold issue (Goldstein), Jan., 11

MZ or DZ? not even their hairdresser knows for sure (Segal), Jan., 10

#### Letters to the editor—(cont.)

Peer review in the courtroom (Davis), July, 803 Relative intensities of selected ions of methaqualone-related isomers (Liu and Legendre), April, 401

Snowflake paradigm (Thornton), April, 399

# Lightning

Lightning damage of bearing surfaces in turboprop aircraft engines (Hart and Anderson), July, 1096

# Liver

Subcapsular hematoma in fatty liver of pregnancy (Roh), Oct., 1509

#### Luminescence

Enhancement of the luminol test by means of light amplification (Thornton, Guarino, Rios, and Cashman), Jan., 254

Improved enchancement of ninhydrin developed fingerprints by cadmium complexation using low temperature photoluminescence techniques (Stoilovic, Kobus, Margot, and Warrener), April, 432

Laser excited luminescence of inclusions and fibers in paper matches (Von Bremen), April, 455

Lasers and optical spectroscopy in questioned document examination (Sinor, Wilde, Everse, and Menzel), July, 825

#### Luminoi

Enhancement of the luminol test by means of light amplification (Thornton, Guarino, Rios, and Cashman), Jan., 254

#### M-O

# Magnetic permeability

Magnetic identification of headlight glass (Mires), July, 913

#### Marijuana

Confirmation of Syva enzyme multiple immunoassay technique (EMIT®) d.a.u. and Roche Abuscreen® radioimmunoassay (RIA) (125] urine cannabinoid immunoassay by gas chromatographic/mass spectrometric (GC/MS) and bonded-phase adsorption/thin-layer chromatographic (BPA-TLC) methods (Kogan, Al Razi, Pierson, and Willson), April, 494

Detection of cannabinoids in homicide victims and motor vehicle fatalities (Garriott, Di Maio, and Rodriquez), Oct., 1274

Profiles of Δ<sup>9</sup>-tetrahydrocannabinol metabolites in urine of marijuana users: preliminary observations by high performance liquid chromatography-radioimmunoassay (Alburges and Peat), April, 695

# Mass disasters—see Human identification Matches

Laser excited luminescence of inclusions and fibers in paper matches (Von Bremen), April, 455

Paper match comparisons by submersion (Gerhart and Ward), Oct., 1450

#### Matching

Fractal surfaces as models of physical matches (Thorton), Oct., 1435

#### Mental illness

Consultant's survey of the patients in a maximum security hospital (Heller, Ehrlich, and Lester), Oct., 1429

Insanity defense to suicide (Massello), July, 1009 "Insanity" in civil law (Kern), July, 1159

# Methamphetamine

Comparison of extraction methods for methamphetamine and its metabolites in tissue (Inoue and Suzuki), July, 1102

#### Methyl ethyl ketone peroxide

Suicide by ingestion of methyl ethyl ketone peroxide (Mittlemen, Romig, and Gressmann), Jan., 312

#### Microscopy

Adjunctive use of scanning electron microscopy in bite mark analysis: a three-dimensional study (David), July, 1129

Lightning damage of bearing surfaces in turboprop aircraft engines (Hart and Anderson), July, 1096

Postmortem examination of incinerated teeth with the scanning electron microscope (Carr, Barsley, and Davenport), Jan., 307

Results of a study to determine the probability of chance match occurrences between fibers known to be from different sources (Fong and Inami), Jan., 65

Trace evidence—the invisible witness (Petraco), Jan., 321

Value of microscopic features in the examination of human head hairs: analysis of comments contained in questionnaire returns (Robertson and Aitken), April, 563

Value of microscopic features in the examination of human head hairs: statistical analysis of questionnaire returns (Aitken and Robertson), April, 546

**Microspectrophotometry**—see Spectroscopic analysis

#### Morphine

Distribution of morphine in body fluids and tissues in fatal overdoses (Chan, Chan, and Kaliciak), Oct., 1487

# Motor vehicle accidents

Collision marks on plastic materials on motor vehicles (Ponnuswamy and Kuppuswamy), April,

Fiber-plastic fusions in traffic accident reconstruction (Masakowski, Enz, Cothern, and Rowe), July, 903

Speed analysis of passenger cars in free-fall launch motions (Le Fevre), July, 886

#### Multiple sclerosis

Investigation of alleged insecticide toxicity: a case involving chlordane exposure, multiple sclerosis, and peripheral neuropathy (Blisard, Kornfeld, McFeeley, and Smialek), Oct., 1499

#### Mummification

New method for softening mummified fingers (Zugibe and Costello), April, 726

#### Musculoskeletal system

Determination of age from the sternal rib in white females: a test of the phase method (Iscan and Loth), July, 990

Determination of age from the sternal rib in white males: a test of the phase method (Işcan and Loth), Jan., 122

Race determination of fragmentary crania by analysis of the cranial base (Holland), April, 719

Reassembling scattered and mixed human bones by trace element ratios (Fulton, Meloan, and Finnegan), Oct., 1455

Sciatic notch/acetabular index as a discriminator of sex in European skeletal remains (Mac-Laughlin and Bruce), Oct., 1380

#### Nalidixic acid

Death as a result of an adverse reaction from nalidixic acid (Frazer and Gault), July, 1145

# Ninhydrin

Improved enchancement in ninhydrin developed fingerprints by cadmium complexation using low temperature photoluminescence techniques (Stoilovic, Kobus, Margot, and Warrener), April, 432

#### N, N-diethyl-m-toluamide (DEET)

Analysis of N.N-diethyl-m-toluamide (DEET) in human postmortem specimens (Crowley, Geyer, and Muir), Jan., 280

#### Norverapamil

Toxicological findings in a fatal overdose of verapamil (Crouch, Crompton, Rollins, Peat, and Francom), Oct., 1505

#### Odontology

Adjunctive use of scanning electron microscopy in bite mark analysis: a three-dimensional study (David), July, 1129

Analysis of photographic distortion in bite marks: a report of the bite mark guidelines committee (Rawson, Vale, Herschaft, Sperber, and Dowell), Oct., 1261

Correlation of age and incremental lines in the cementum of human teeth (Lipsinic, Paunovich, Houston, and Robison), July, 982

Decision-making concepts in postmortem identification (Lorton and Langley), Jan., 190

Design and use of a computer-assisted postmortem identification system (Lorton and Langley), July, 972

Postmortem examination of incinerated teeth with the scanning electron microscope (Carr, Barsley, and Davenport), Jan., 307

Reliability of the scoring system of the American Board of Forensic Odontology for human bite marks (Rawson, Vale, Sperber, Herschaft, and Yfantis), Oct., 1235

#### p

#### **Paints**

Examination of U.S. automotive paints: 1. make and model determination of hit-and-run vehicles by reflectance microspectrophotometry (Nowicki and Patten), April, 464

# Palatal rugae

Palatal ruga pattern in possible paternity determination (Thomas, Kotze, and Nash), Jan., 288

#### **Papers**

Paper match comparisons by submersion (Gerhart and Ward), Oct., 1450

#### Paraquat

Multicenter evaluation of ultrafiltration, dialysis, and thermal coagulation as sample pretreatment methods for the colorimetric determination of paraquat in blood and tissues (De Zeeuw, Wijsbeek, Franke, Bogusz, and Klys), April, 504

# Paternity

Palatal ruga pattern in possible paternity determination (Thomas, Kotze, and Nash), Jan., 288

# Pathology and biology

ABO typing studies on liquid urines (Chase), July, 881

Amylase levels in semen and saliva stains (Auvdel), April, 426

Analysis of restriction fragment length polymorphisms in deoxyribonucleic acid (DNA) recovered from dried bloodstains (Kanter, Baird, Shaler, and Balazs), April, 403

Application of deoxyribonucleic acid (DNA) polymorphisms to the analysis of DNA recovered from sperm (Giusti, Baird, Pasquale, Balazs, and Glassberg), April, 409

Applications of isoelectric focusing in forensic serology (Murch and Budowle), July, 869

Bullet or bite—a contribution to the morphogenesis of gunshot dermal injury (Adelson), Oct., 1479

Case of fatal rotenone poisoning in a child (De Wilde, Heyndrickx, and Carton), Oct., 1492

Catecholamines in the vitreous fluid and urine of guinea pigs dying of cold and the effect of postmortem freezing and autolysis (Lapinlampi and Hirvonen), Oct., 1357

Cocaine-related deaths in Pima County, Arizona, 1982-1984 (Rogers, Henry, Jones, Froede, and Byers), Oct., 1404

Decision-making concepts in postmortem identification (Lorton and Langley), Jan., 190

Dicyclomine in the sudden infant death syndome (SIDS)—a cause of death or an incidental finding? (Randall, Gerry, and Rance), Oct., 1470

Dispensing error causing fatal chlorpropamide intoxication in a nondiabetic (Scala-Barnett and Donoghue), Jan., 293

Distribution of morphine in body fluids and tissues in fatal overdoses (Chan, Chan, and Kaliciak), Oct., 1487

Enzyme-linked immunosorbent assay for A and B water soluble blood group substances (Bolton and Thorpe), Jan., 27

Experimental study of postmortem change under field conditions: effects of freezing, thawing, and mechanical injury (Micozzi), July, 953

Fatal intravenous drug abuse secondary to streptomycin overdose (Rance and Randall), July, 1150

#### Pathology and biology—(cont.)

Hemolysis and hyperkalemia complicate malignant hyperpyrexia during anesthetic death (Ward, Eisele, Reay, and Horton), April, 543

Homicidal asphyxia by pepper aspiration (Cohle), Oct., 1475

Impact of psychological autopsies on medical examiners' determination of manner of death (Jobes, Berman, and Josselson), Jan., 177

Implications of Trombiculid mite bites: report of a case and submission of evidence in a murder trial (Prichard, Kossoris, Leibovitch, Robertson, and Lovell), Jan., 301

Investigation of alleged insecticide toxicity: a case involving chlordane exposure, multiple sclerosis, and peripheral neuropathy (Blisard, Kornfeld, McFeeley, and Smialek), Oct., 1499

Medicolegal investigations in Hollywood (Noguchi), Jan., 376

3-Methoxytyramine in the putamen as a gauge of the postmortem interval (Sparks, Slevin, and Hunsaker), July, 962

Microscopic diagnosis from frozen canine tissues (Baraibar and Schoning), Jan., 283

New method for softening mummified fingers (Zugibe and Costello), April, 726

Palatal ruga pattern in possible paternity determination (Thomas, Kotze, and Nash), Jan., 288 Patterned injury and its evidentiary value (Rao), April, 768

Patterns in sharp force fatalities—a comprehensive forensic medical study (Ormstad, Karlsson, Enkler, and Rajs), April, 529

Pharmaceutical error resulting in fatal diabetic ketoacidosis (Cohle, Lang, and Kosek), April, 758

Population frequencies of carbonic anhydrase II (CA II), esterase D (EsD), and glyoxalase I (GLO) in the metropolitan Birmingham, Alabama area (Meighen, Smith, Angus, and McClelland), Oct., 1366

Sex identification of white-tailed deer using frozen venison (Kerr), July, 1108

Subcapsular hematoma in fatty liver of pregnancy (Roh), Oct., 1509

Sudden death associated with contrast medium, Sinografin® (Edelstein), July, 1142

Sudden death in an adolescent four years after recovery from mucocutaneous lymph node syndrome (Kawasaki disease) (Quam, Edwards, Bambara, and Luzier), July, 1135

Suicide by exposure to sulfuryl fluoride (Scheuerman), July, 1154

Suicide in Fulton County, Georgia (1975-1984) (Gowitt and Hanzlick), July, 1029

Tolerance at high blood alcohol concentrations: a study of 110 cases and review of the literature (Perper, Twerski, and Wienand), Jan., 212

Unusual hanging deaths (Clark and Kerr), April, 747

#### Pepper

Homicidal asphyxia by pepper aspiration (Cohle), Oct., 1475

#### Petroleum products

Is it a petroleum product? how do you know? (Midkiff), Jan., 231

# Phenotyping—see Genetic typing

#### **Phosphatases**

Use of ultrathin-layer agarose gels for phenotyping erythrocyte acid phosphatase by isoelectric focusing (Frank and Stolorow), July, 1089

Subtyping phosphoglucomutase-1 in semen stains and bloodstains: a report on the method (Budowle, Murch, Davidson, Gambel, and Kearney), Oct., 1341

#### **Photocopiers**

Applications of pyrolysis gas chromatography/ mass spectrometry to toner materials from photocopiers (Levy and Wampler), Jan., 258

Preliminary examination of machine copier toners by infrared spectrophotometry and pyrolysis gas chromatography (Zimmerman, Mooney, and Kimmett), April, 489

#### Photography

Analysis of photographic distortion in bite marks: a report of the bite mark guidelines committee (Rawson, Vale, Herschaft, Sperber, and Dowell), Oct., 1261

Use of circular scales in the perspective grid technique of making photographic measurements (Hyzer), Jan. 20

Video superimposition of skulls and photographic portraits—a new aid to identification (Bastiaan, Dalitz, and Woodward), Oct., 1373

# Photoluminescence—see Luminescence

# Physical anthropology

Appraisal of plastic reconstruction of the external nose (Macho), Oct., 1391

Bilateral asymmetry of long arm bones and jugular foramen: implications for handedness (Glassman and Bass), April, 589

Detection of bullet residue in bone using protoninduced X-ray emission (PIXE) analysis (Fischbeck, Ryan, and Snow), Jan., 79

Determination of age from the sternal rib in white females: a test of the phase method (İşcan and Loth), July, 990

Determination of age from the sternal rib in white males: a test of the phase method (İşcan and Loth), Jan., 122

Estimating height and weight from size of footprints (Robbins), Jan., 143

Mid-facial tissue depths of white children: an aid in facial feature reconstruction (Dumont), Oct., 1463

Race determination of fragmentary crania by analysis of the cranial base (Holland), April, 719

Reassembling scattered and mixed human bones by trace element ratios (Fulton, Meloan, and Finnegan), Oct., 1455

Sciatic notch/acetabular index as a discriminator of sex in European skeletal remains (MacLaughlin and Bruce), Oct., 1380

Use of bone histomorphometry in skeletal identifi-

# Physical anthropology—(cont.)

cation: the case of Francisco Pizarro (Stout), Jan., 296

#### Physical evidence

Ensembles of subclass characteristics in physical evidence examination (Thornton), April, 501

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part I (Starrs), April, 630

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part II (Starrs), July, 1050

#### Plastic reconstruction

Appraisal of plastic reconstruction of the external nose (Macho), Oct., 1391

#### Plastics

Collision marks on plastic materials on motor vehicles (Ponnuswamy and Kuppuswamy), April, 778

Fiber-plastic fusions in traffic accident reconstruction (Masakowski, Enz, Cothern, and Rowe), July, 903

#### Plenary session

Dichotomy of the expert witness (Howard), Jan., 337

Document evidence and some other observations about the Howard R. Hughes "Mormon Will" contest (Harris), Jan., 365

Howard Hughes and Melvin Dummar: forensic science fact versus film fiction (Freese), Jan., 342

Paper Mate<sup>®</sup> ink on the Howard Hughes "Mormon Will" (Cantu), Jan., 360

#### Poisons

Accidental poisonings involving carbon monoxide, heating systems, and confined spaces (Caplan, Thompson, Levine, and Masemore), Jan., 117

Case of fatal rotenone poisoning in a child (De Wilde, Heyndrickx, and Carton), Oct., 1492

#### Polycyanoacrylate

Modified Super Glue® technique—the use of polycyanoacrylate for fingerprint development (Almog and Gabay), Jan., 250

#### Polyvinylchloride

Analysis of polyvinylchloride wire insulation by gel permeation chromatography (Baer, Rudolph, and Bender), April, 471

# Postmortem examinations

Impact of psychological autopsies on medical examiners' determination of manner of death (Jobes, Berman, and Josselson), Jan., 177

3-Methoxytyramine in the putamen as a gauge of the postmortem interval (Sparks, Slevin, and Hunsaker), July, 962

Decision-making concepts in postmortem identification (Lorton and Langley), Jan., 190

#### Posttraumatic reaction

Posttraumatic stress disorder in murderers (Harry and Resnick), April, 609

#### Pregnancy

Subcapsular hematoma in fatty liver of pregnancy (Roh), Oct., 1509

#### **Prisons**

Relationship security: the dynamics of keepers and kept (Maier), April, 603

#### **Probability**

Results of a study to determine the probability of chance match occurrences between fibers known to be from different sources (Fong and Inami), Jan., 65

#### **Protocols**

Infrared quantitative evidential breath-alcohol analyzers: in vitro accuracy and precision studies (Goldberger and Caplan), Jan., 16

Value of microscopic features in the examination of human head hairs: analysis of comments contained in questionnaire returns (Robertson and Aitken), April, 563

Proton-induced X-ray emission—see X-ray analysis

#### Psychiatry

Consultant's survey of the patients in a maximum security hospital (Heller, Ehrlich, and Lester), Oct., 1429

Detective magazines: pornography for the sexual sadist? (Dietz, Harry, and Hazelwood), Jan., 197

Diagnostic study of the criminal alias (Harry), July, 1023

Domestic violence: a medicolegal review (Frazer), Oct., 1409

Ethical concerns expressed by forensic psychiatrists (Weinstock), April, 596

Impact of psychological autopsies on medical examiners' determination of manner of death (Jobes, Berman, and Josselson), Jan., 177

"Insanity" in civil law (Kern), July, 1159

Multiple Schedule of Affective Disorders and Schizophrenia (SADS) in the assessment of criminal defendants (Rogers and Cunnien), Jan., 222

Pathological gambling and criminal responsibility (Rachlin, Halpern, and Portnow), Jan., 235

Pathological intoxication and alcohol idiosyncratic intoxication—Part I: diagnostic and clinical aspects (Perr), July, 806

Pathological intoxication and alcohol idiosyncratic intoxication—Part II: legal aspects (Perr), July, 812

Pedophile types and treatment perspectives (Travin, Bluestone, Colemen, Cullen, and Melella), April, 614

Posttraumatic stress disorder in murders (Harry and Resnick), April, 609

Pseudoabuse—the misdiagnosis of child abuse (Kaplan), Oct., 1420

Relationship security: the dynamics of keepers and kept (Maier), April, 603

Schizotypal personality disorder and the insanity defense (Felthous), July, 1016

# Putrefaction

Experimental study of postmortem change under field conditions: effects of freezing, thawing, and mechanical injury (Micozzi), July, 953

Pyrolysis gas chromatography—see Chromatographic analysis

#### Q-R

#### **Ouestioned documents**

Alcohol: its effect on handwriting (Galbraith), April, 580

Color comparison in questioned document examination using microspectrophotometry (Olson), Oct., 1330

Comparison of modern typestyles (Anthony), April, 710

Document evidence and some other observations about the Howard R. Hughes "Mormon Will" contest (Harris), Jan., 365

Facsimile signatures produced by gelatin transfer duplicator—recognition and identification (Gencavage), Jan., 106

Howard Hughes and Melvin Dummar: forensic science fact versus film fiction (Freese), Jan., 342

Lasers and optical spectroscopy in questioned document examination (Sinor, Wilde, Everse, and Menzel), July, 825

Paper match comparisons by submersion (Gerhart and Ward), Oct., 1450

Paper Mate<sup>®</sup> ink on the Howard Hughes "Mormon Will" (Cantu), Jan., 360

Preliminary examination of machine copier toners by infrared spectrophotometry and pyrolysis gas chromatography (Zimmerman, Mooney, and Kimmett), April, 489

Restoration and identification of water-soaked documents: a case study (Taylor), July, 1113

Technique for transferring ink from a written line to a thin-layer chromatographic sheet (Kuranz), April, 655

#### Race determination-see Human identification

#### Radioimmunoassay

Detection of cocaine metabolite in perspiration stain, menstrual bloodstain, and hair (Smith and Liu), Oct., 1269

#### Radiopaque agents

Sudden death associated with contrast medium, Sinografin® (Edelstein), July, 1142

# Reflectance

Forensic science applications of diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS): I. principles, sampling methods, and advantages (Suzuki and Gresham), July, 931

Forensic science applications of diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS): II. direct analysis of some tablets, capsule powders, and powders (Suzuki and Gresham), Oct., 1292

# Refractive index

Three-dimensional presentation of glass density versus refractive index data (Espinoza and Thornton), April, 687

#### Rotenone

Case of fatal rotenone poisoning in a child (De Wilde, Heyndrickx, and Carton), Oct., 1492

S

#### Sacco and Vanzetti case

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part I (Starrs), April, 630

Once more unto the breech: the firearms evidence in the Sacco and Vanzetti case revisited: Part II (Starrs), July, 1050

#### Saliva

Amylase levels in semen and saliva stains (Auvdel), April, 426

#### Scale (ratio)

Projectile entry angle determination (Cashman), Jan., 86

Use of circular scales in the perspective grid technique of making photographic measurements (Hyzer), Jan. 20

Scanning electron microscopy—see Microscopy Schedule of Affective Disorders and Schizophrenia

Multiple Schedule of Affective Disorders and Schizophrenia (SADS) in the assessment of criminal defendants (Rogers and Cunnien), Jan., 222

# Security

Relationship security: the dynamics of keepers and kept (Maier), April, 603

#### Semen

Amylase levels in semen and saliva stains (Auvdel), April, 426

Subtyping phosphoglucomutase-1 in semen stains and bloodstains: a report on the method (Budowle, Murch, Davidson, Gambel, and Kearney), Oct., 1341

Sex determination—see Human identification Sex determination (animals)

Sex identification of white-tailed deer using frozen venison (Kerr), July, 1108

#### Shotguns

Regression analysis applied to shotgun range-offire estimations: results of a blind study (Fann, Ritter, Watts, and Rowe), July, 840

#### Signature

Facsimile signatures produced by gelatin transfer duplicator—recognition and identification (Gencavage), Jan., 106

#### Skin cleansers

Effect of skin cleansing agents on ethanol results measured with the Du Pont automatic clincial analyzer (Ryder and Glick), April, 574

#### Soils

Clay mineralogical analysis using the <0.05-mm fraction for forensic science investigation—its application to volcanic ash soils and yellow-brown forest soils (Marumo, Nagatsuka, and Oba), Jan., 92

Morphological analysis of opal phytoliths for soil

Soils—(cont.)

discrimination in forensic science investigation (Marumo and Yanai), July, 1039

Spectrophotometry—see Spectroscopic analysis Spectroscopic analysis—see also Chemical analysis

Clay mineralogical analysis using the <0.05-mm fraction for forensic science investigation—its application to volcanic ash soils and yellowbrown forest soils (Marumo, Nagatsuka, and Oba), Jan., 92

Color comparison in questioned document examination using microspectrophotometry (Olson), Oct..

Examination of U.S. automotive paints: 1. make and model determination of hit-and-run vehicles by reflectance microspectrophotometry (Nowicki and Patten), April, 464

Forensic science applications of diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS): I. principles, sampling methods, and advantages (Suzuki and Gresham), July, 931

Forensic science applications of diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS): II. direct analysis of some tablets, capsule powders, and powders (Suzuki and Gresham), Oct., 1292

Identification of fentanyl derivatives (Cooper, Jacob, and Allen), April, 511

Improved method for the analysis of the military explosive composition C-4 (Keto), Jan., 241

Preliminary examination of machine copier toners by infrared spectrophotometry and pyrolysis gas chromatography (Zimmerman, Mooney, and Kimmett), April, 489

Use of microspectrophotometry to characterize microscopic amounts of blood (Kotowski and Grieve), July, 1079

#### Spermatozoa

Application of deoxyribonucleic acid (DNA) polymorphisms to the analysis of DNA recovered from sperm (Giusti, Baird, Pasquale, Balazs, and Glassberg), April, 409

#### Spouse abuse

Domestic violence: a medicolegal review (Frazer), Oct., 1409

#### Stab wounds

Patterns in sharp force fatalities—a comprehensive forensic medical study (Ormstad, Karlsson, Enkler, and Rajs), April, 529

Stamping devices—see Cachets

Stature determination - see Human identifica-

# Streptomycin

Fatal intravenous drug abuse secondary to streptomycin overdose (Rance and Randall), July, 1150

# Sudden infant death syndrome

Dicyclomine in the sudden infant death syndrome (SIDS)—a cause of death of an incidental finding? (Randall, Gerry, and Rance), Oct., 1470

#### Suicide

Insanity defense to suicide (Massello), July, 1009 "Insanity" in civil law (Kern), July, 1159

Proof in law of suicide (Massello), July, 1000 Suicide by exposure to sulfuryl fluoride (Scheuer-

man), July, 1154 Suicide by ingestion of methyl ethyl ketone peroxide (Mittlemen, Romig, and Gressmann), Jan.,

Suicide in Fulton Country, Georgia (1975-1984) (Gowitt and Hanzlick), July, 1029

Toxicological findings in a fatal overdose of verapamil (Crouch, Crompton, Rollins, Peat, and Francom), Oct., 1505

Unusual hanging deaths (Clark and Kerr), April 747

#### Sulfuryl fluoride

Suicide by exposure to sulfuryl fluoride (Scheuerman), July, 1154

# Superimposition

Video superimposition of skulls and photographic portraits—a new aid to identification (Bastiaan, Dalitz, and Woodward), Oct., 1373

#### Surveys

Consultant's survey of the patients in a maximum security hospital (Heller, Ehrlich, and Lester), Oct., 1429

Diagnostic study of the criminal alias (Harry), July, 1023

Mirror images in knots (Nute), Jan., 272

T

# Tear gases

Spectral differentiation and gas chromatographic/mass spectrometric analysis of the lacrimators 2-chloroacetophenone and o-chlorobenzylidene malononitrile (Ferslew, Orcutt, and Hagardorn), April, 658

# Teeth-see Dentition

#### Testimony

Dichotomy of the expert witness (Howard), Jan., 337

# Tetrahydrocannabinol

Profiles of Δ<sup>9</sup>-tetrahydrocannabinol metabolites in urine of marijuana users: preliminary observations by high performance liquid chromatography-radioimmunoassay (Alburges and Peat), April, 695

# Thermal coagulation

Multicenter evaluation of ultrafiltration, dialysis, and thermal coagulation as sample pretreatment methods for the colorimetric determination of paraquat in blood and tissues (De Zeeuw, Wijsbeek, Franke, Bogusz, and Klys), April, 504

**Thin-layer chromatography—** see Chromatographic analysis

#### Tissues (biology)

Analysis of N, N-diethyl-m-toluamide (DEET) in human postmortem specimens (Crowley, Geyer, and Muir), Jan., 280

Appraisal of plastic reconstruction of the external nose (Macho), Oct., 1391

#### Tissues (biology)—(cont.)

Microscopic diagnosis from frozen canine tissues (Baraibar and Schoning), Jan., 283

Sex identification of white-tailed deer using frozen venison (Kerr), July, 1108

#### Toolmarks

Patterned injury and its evidentiary value (Rao), April, 768

# Toxicology

Accidental poisonings involving carbon monoxide, heating systems, and confined spaces (Caplan, Thompson, Levine, and Masemore), Jan., 117

Analysis of N,N-diethyl-m-toluamide (DEET) in human postmortem specimens (Crowley, Geyer, and Muir), Jan., 280

Cocaine-related deaths in Pima County, Arizona, 1982-1984 (Rogers, Henry, Jones, Froede, and Byers), Oct., 1404

Comparison of extraction methods for methamphetamine and its metabolites in tissue (Inoue and Suzuki), July, 1102

Confirmation of Syva enzyme multiple immunoassay technique (EMIT®) d.a.u. and Roche Abuscreen® radioimmunoassay (RIA) (125]) urine cannabinoid immunoassay by gas chromatographic/mass spectrometric (GC/MS) and bonded-phase adsorption/thin-layer chromatographic (BPA/TLC) methods (Kogan, Al Razi, Pierson, and Willson), April, 494

Death as a result of an adverse reaction from nalidixic acid (Frazer and Gault), July, 1145

Detection of cannabinoids in homicide victims and motor vehicle fatalities (Garriott, De Maio, and Rodriquez), Oct., 1274

Determination of carbon monoxide in blood by gas chromatography using a thermal conductivity detector (Goldbaum, Chace, and Lappas), Jan. 133

Distribution of morphine in body fluids and tissues in fatal overdoses (Chan, Chan, and Kaliciak), Oct., 1487

Dulcin: a centennial perspective (Goldsmith), Jan., 333

Fatality involving clomipramine (Fraser, Isner, and Moss), April, 762

Identification of fentanyl derivatives (Copper, Jacob, and Allen), April, 511

Infrared quantitative evidential breath-alcohol analyzers: in vitro accuracy and precision studies (Goldberger and Caplan), Jan., 16

Multicenter evaluation of ultrafiltration, dialysis, and thermal coagulation as sample pretreatment methods for the colorimetric determination of paraquat in blood and tissues (De Zeeuw, Wijsbeek, Franke, Bogusz, and Klys), April, 504

Profiles of Δ<sup>9</sup>-tetrahydrocannabinol metabolites in urine of marijuana users: preliminary observations by high performance liquid chromatography-radioimmunoassay (Alburges and Peat), April, 695

Resolution of some enantiomeric amines of foren-

#### Toxicology—(cont.)

sic interest by high-performance liquid chromatography (Noggle and Clark), April, 732

Screening for barbiturates in vitreous humor by the EMIT\*-st\* serum enzyme immunoassay (Ojanperä, Vuori, Nieminen, and Penttilä), April, 707

Spectral differentiation and gas chromatographic/mass spectrometic analysis of the lacrimators 2-chloroacetophenone and o-chlorobenzylidene malononitrile (Ferslew, Orcutt, and Hagardorn), April, 658

Suicide by ingestion of methyl ethyl ketone peroxide (Mittlemen, Romig, and Gressmann), Jan., 312

Toxicological findings in a fatal overdose of verapamil (Crouch, Crompton, Rollins, Peat, and Francom), Oct., 1505

#### Trace elements

Reassembling scattered and mixed human bones by trace element ratios (Fulton, Meloan, and Finnegan), Oct., 1455

#### Trace evidence

Collision marks on plastic materials on motor vehicles (Ponnuswamy and Kuppuswamy), April, 778

Detection of iron traces on hands by ferrozine sprays: a report on the sensitivity and interference of the method and recommended procedure in forensic science investigation (Lee), July, 920

Fiber-plastic fusions in traffic accident reconstruction (Masakowski, Enz. Cothern, and Rowe), July, 903

Sheet or container?—forensic glass comparisons with an emphasis on source classification (Ryland), Oct., 1314

Trace evidence—the invisible witness (Petraco), Jan., 321

# Triacetonetriperoxide (TATP)

Unusual explosive, triacetonetriperoxide (TATP) (Evans, Tulleners, Sanchez, and Rasmussen), July, 1119

# **Typewriters**

Comparison of modern typestyles (Anthony), April, 710

U-X

#### Ultrafiltration

Multicenter evaluation of ultrafiltration, dialysis, and thermal coagulation as sample pretreat-

## Ultrafiltration—(cont.)

ment methods for the colorimetric determination of paraquat in blood and tissues (De Zeeuw, Wijsbeek, Franke, Bogusz, and Klys), April, 504

#### Urine

ABO typing studies on liquid urines (Chase), July, 881

Catecholamines in the vitreous fluid and urine of guinea pigs dying of cold and the effect of postmortem freezing and autolysis (Lapinlampi and Hirvonen), Oct., 1357

Profiles of Δ<sup>9</sup>-tetrahydrocannabinol metabolites in urine of marijuana users: preliminary observations by high performance liquid chromatography-radioimmunoassay (Alburges and Peat), April, 695

# Verapamil

Toxicological findings in a fatal overdose of verapamil (Crouch, Crompton, Rollins, Peat, and Francom), Oct., 1505

#### Vitreous humor

Catecholamines in the vitreous fluid and urine of guinea pigs dying of cold and the effect of postmortem freezing and autolysis (Lapinlampi and Hirvonen), Oct., 1357

Screening for barbiturates in vitreous humor by the EMIT®-st® serum enzyme immunoassay (Ojanperä, Vuori, Nieminen, and Penttilä), April, 707

# Water-soaked material

Restoration and identification of water-soaked documents: a case study (Taylor), July, 1113

#### Wildlife

Reptile leather trade: the forensic science examiner's role in litigation and wildlife law enforcement (Brazaitis), April, 621

#### Witnesses

Dichotomy of the expert witness (Howard), Jan., 337

#### Wound ballistics

Bullet or bite—a contribution to the morphogenesis of gunshot dermal injury (Adelson), Oct., 1479

Winchester Silvertip® ammunition—a study in ordnance gelatin (Ragsdale and Josselson), July, 855

# X-ray analysis

Detection of bullet residue in bone using protoninduced X-ray emission (PIXE) analysis (Fischbeck, Ryan, and Snow), Jan., 79