

Encyclopedia Of Forensic Science

This new dictionary covers a wide range of terms used in the field of forensic science, touching on related disciplines such as chemistry, biology, and anthropology. Case examples, figures, and photographs make it the ideal reference for students and practitioners of forensic science, as well as those with an interest in forensic science.

While one would hope that forensic scientists, investigators, and experts are intrinsically ethical by nature, the reality is that these individuals have morality as varied as the general population. These professionals confront ethical dilemmas every day, some with clear-cut protocols and others that frequently have no definitive answers. Since the publication of the first edition of *Ethics and the Practice of Forensic Science*, the field of forensic science has continued to see its share of controversy. This runs the gamut of news stories from investigators, lab personnel, or even lab directors falsifying results, committing perjury, admitting to fraud, to overturned convictions, questions about bias, ethics, and what constitutes an "expert" on the witness stand. This fully updated edition tackles all these issues—including some specific instances and cases of unethical behavior—and addresses such salient issues as accreditation requirements, standardization of ethical codes, examiner certification, and standards for education and training. The new edition provides: A new chapter on the "Ferguson Effect" faced by the criminal justice system The context of forensic science ethics in relation to general scientific ethics, measurement uncertainty, and ethics in criminal justice Ethical conundrums and real-world examples that forensic scientists confront every day The ethics and conduct codes of 20 different forensic and scientific professional organizations An outline of

the National Academies of Science (NAS) recommendations and progress made on ethics in forensic science since the release of the NAS report *Ethics and the Practice of Forensic Science, Second Edition* explores the range of ethical issues facing those who work in the forensic sciences—highlights the complicated nature of ethics and decision-making at the crime scene, in the lab, and in the courts. The book serves both as an essential resource for laboratories to train their employees and as an invaluable textbook for the growing number of courses on ethics in criminal justice and forensic science curricula. Accompanying PowerPoint® slides and an Instructor's Manual with Test Bank are available to professors upon qualifying course adoption.

Equal parts true crime, twentieth-century history, and science thriller, *The Poisoner's Handbook* is "a vicious, page-turning story that reads more like Raymond Chandler than Madame Curie." —The New York Observer "The Poisoner's Handbook breathes deadly life into the Roaring Twenties." —Financial Times "Reads like science fiction, complete with suspense, mystery and foolhardy guys in lab coats tipping test tubes of mysterious chemicals into their own mouths." —NPR: What We're Reading A fascinating Jazz Age tale of chemistry and detection, poison and murder, *The Poisoner's Handbook* is a page-turning account of a forgotten era. In early twentieth-century New York, poisons offered an easy path to the perfect crime. Science had no place in the Tammany Hall-controlled coroner's office, and corruption ran rampant. However, with the appointment of chief medical examiner Charles Norris in 1918, the poison game changed forever. Together with toxicologist Alexander Gettler, the duo set the justice system on fire with their trailblazing scientific detective work, triumphing over seemingly unbeatable odds to become the pioneers of forensic chemistry and the gatekeepers of justice. In 2014, PBS's *AMERICAN EXPERIENCE* released a

film based on The Poisoner's Handbook.

Forensic DNA Typing, Second Edition, is the only book available that specifically covers detailed information on mitochondrial DNA and the Y chromosome. It examines the science of current forensic DNA typing methods by focusing on the biology, technology, and genetic interpretation of short tandem repeat (STR) markers, which encompass the most common forensic DNA analysis methods used today. The book covers topics from introductory level right up to cutting edge research. High-profile cases are addressed throughout the text, near the sections dealing with the science or issues behind these cases. Ten new chapters have been added to accommodate the explosion of new information since the turn of the century. These additional chapters cover statistical genetic analysis of DNA data, an emerging field of interest to DNA research. Several chapters on statistical analysis of short tandem repeat (STR) typing data have been contributed by Dr. George Carmody, a well-respected professor in forensic genetics. Specific examples make the concepts of population genetics more understandable. This book will be of interest to researchers and practitioners in forensic DNA analysis, forensic scientists, population geneticists, military and private and public forensic laboratories (for identifying individuals through remains), and students of forensic science. *The only book available that specifically covers detailed information on mitochondrial DNA and the Y chromosome *Chapters cover the topic from introductory level right up to "cutting edge" research *High-profile cases are addressed throughout the book, near the sections dealing with the science or issues behind these cases *NEW TO THIS EDITION: D.N.A. Boxes--boxed "Data, Notes & Applications" sections throughout the book offer higher levels of detail on specific questions

In the wake of the phenomenal success of crime shows like

CSI, forensic science has never been so popular. The obsessive attention that Grissom and his crew afford seemingly insignificant details, such as particles of dirt in a bullet wound and the presence of pollen in tyre tracks, have left audiences eager to know more about this field of study. In this fully revised and updated edition, real-life examples come under the scalpel as forensic scientist Jay Siegel follows the course of evidence all the way from the crime scene to the court judgement. In *Forensic Science: A Beginner's Guide*, all major areas are covered, including drugs, trace evidence, pathology, entomology, odontology, anthropology, crime scene investigation and the law.

A gripping historical true crime narrative that "reads like the best of Conan Doyle himself" (Karen Abbott, author of *The Ghosts of Eden Park*), *American Sherlock* recounts the riveting true story of the birth of modern criminal investigation. Berkeley, California, 1933. In a lab filled with curiosities--beakers, microscopes, Bunsen burners, and hundreds upon hundreds of books--sat an investigator who would go on to crack at least two thousand cases in his forty-year career. Known as the "American Sherlock Holmes," Edward Oscar Heinrich was one of America's greatest--and first--forensic scientists, with an uncanny knack for finding clues, establishing evidence, and deducing answers with a skill that seemed almost supernatural. Heinrich was one of the nation's first expert witnesses, working in a time when the turmoil of Prohibition led to sensationalized crime reporting and only a small, systematic study of evidence. However with his brilliance, and commanding presence in both the courtroom and at crime scenes, Heinrich spearheaded the invention of a myriad of new forensic tools that police still use today, including blood spatter analysis, ballistics, lie-detector tests, and the use of fingerprints as courtroom evidence. His work, though not without its serious--some would say

fatal--flaws, changed the course of American criminal investigation. Based on years of research and thousands of never-before-published primary source materials, American Sherlock captures the life of the man who pioneered the science our legal system now relies upon--as well as the limits of those techniques and the very human experts who wield them.

Looks at the role of forensic science in criminal investigations and examines forty high-profile cases and the diverse technologies used to solve them, including fingerprinting, handwriting analysis, DNA testing, and toxicology.

Simultaneous.

As forensic science continues to play a wider role in the investigation of crimes and apprehension of criminals, those without crime scene or crime lab training must now become familiar with the techniques and language of the forensic scientist. Avoiding the complicated science and graphic violence typical of most forensic references, this book is written specifically for those without forensic science experience. While it provides a professional reference for those not steeped in the details of forensic science, the wealth of instructor material available for teachers and its pedagogical approach make this an ideal textbook for high school and introductory level courses. Following up on the tremendously popular first edition, *Forensic Science: The Basics, Second Edition* now adds the insight of a new co-author who is known nationally for training instructors how to teach forensic science at all levels of education. The book takes readers from the initial evidence collection process, through the evaluation procedures, right up to and including the courtroom presentation. Packed with case

studies, photographs, and exercises, this book provides everything the non-scientist needs to be able to understand and utilize the vital research approaches that forensic science can offer. "Test Yourself" questions at the end of each chapter familiarize you with the language and approaches needed to understand and communicate with experienced crime scene investigators and laboratory personnel. Offering the forensic sciences at their most accessible, *Forensic Science: The Basics, Second Edition* is a valuable resource for detectives, journalists, prosecutors, defense attorneys, and other non-science professionals who need to understand, interpret, and report on the newest advances in crime scene investigation. PowerPoint® lecture slides, test bank, and other ancillary material on CD-ROM is available with qualifying course adoption

Criminalistics is that sub-field of Forensic Science dealing with the collection, preservation, examination, and interpretation of physical evidence. *Introduction to Criminalistics: The Foundation of Forensic Science* covers the basics of Criminalistics in a textbook for a one or two semester course with the intention of preparing the student for a future in forensic science. The role of the Criminalist is to analyze, compare, identify, and interpret physical evidence in the crime lab. These crime labs, or forensic labs, have two primary functions: identifying evidence, and linking suspect, victim, and crime scene through physical evidence. This new primer introduces the learner to the structure and organization of the crime lab and to the role of the Criminalist. Topics covered include how to process a crime scene and

preserve evidence, the basic principles of firearm examination, latent fingerprints, and rudimentary toxicology, or how to determine the presence or absence of drugs and poisons. Well organized and methodical, this colorful textbook, written by an eminent professional, has the potential to become the standard text for applying techniques of the physical and natural sciences to examining physical evidence. * Uses real cases – recent and historic – to illustrate concepts * Colorful pedagogy clearly defines chapter elements and sets this text apart from next best * Presents the basics of forensic sciences in a one-semester or one-year course * Offers excellent preparation for professional examinations * Delivers the latest in laboratory technique while acknowledging the limits of technology

Forensic science evidence plays a pivotal role in modern criminal proceedings. Yet such evidence poses intense practical and theoretical challenges. It can be unreliable or misleading and has been associated with miscarriages of justice. In this original and insightful book, a global team of prominent scholars and practitioners explore the contemporary challenges of forensic science evidence and expert witness testimony from a variety of theoretical, practical and jurisdictional perspectives. Chapters encompass the institutional organisation of forensic science, its procedural regulation, evaluation and reform, and brim with comparative insight.

This book summarizes and explains the main approaches to age estimation in the living, defining when a parameter may be of use and raising awareness of its

limitations. This text ensures that practitioners recognize when an assessment is beyond their area of expertise or beyond verification depending upon the clinical data available. Each key approach to age evaluation has been allotted a single chapter, written by an international leader in the particular field. The book also includes summary chapters that relay readily accessible data for use by the practitioner, and includes important "ageing milestones." This book is indispensable where problems of immigration and legal standing, juvenile vs. adult criminal status, and responsibilities of law enforcement to protect vulnerable persons are key issues on a daily basis. Medical practitioners, forensic practitioners such as pathology, odontology, anthropology and nursing, lawyers, and police would find this book incredibly useful. Forensic science includes all aspects of investigating a crime, including: chemistry, biology and physics, and also incorporates countless other specialties. Today, the service offered under the guise of "forensic science" includes specialties from virtually all aspects of modern science, medicine, engineering, mathematics and technology. The Encyclopedia of Forensic Sciences, Second Edition is a reference source that will inform both the crime scene worker and the laboratory worker of each other's protocols, procedures and limitations. Written by leading scientists in each area, every article is peer reviewed to establish clarity, accuracy, and comprehensiveness. As reflected in the specialties of its Editorial Board, the contents covers the core theories, methods and techniques employed by forensic scientists - and applications of these that are used in forensic

analysis. This 4-volume set represents a 30% growth in articles from the first edition, with a particular increase in coverage of DNA and digital forensics. Includes an international collection of contributors. The second edition features a new 21-member editorial board, half of which are internationally based. Includes over 300 articles, approximately 10pp on average. Each article features a) suggested readings which point readers to additional sources for more information, b) a list of related Web sites, c) a 5-10 word glossary and definition paragraph, and d) cross-references to related articles in the encyclopedia. Available online via SciVerse ScienceDirect. Please visit www.info.sciencedirect.com for more information. This new edition continues the reputation of the first edition, which was awarded an Honorable Mention in the prestigious Dartmouth Medal competition for 2001. This award honors the creation of reference works of outstanding quality and significance, and is sponsored by the RUSA Committee of the American Library Association.

This new edition of *Forensic Science: The Basics* provides a fundamental background in forensic science as well as criminal investigation and court testimony. It describes how various forms of data are collected, preserved, and analyzed, and also explains how expert testimony based on the analysis of forensic evidence is presented in court. The book

Forensic science includes all aspects of investigating a crime, including: chemistry, biology and physics, and also incorporates countless other specialties. Today, the service offered under the guise of "forensic science"

includes specialties from virtually all aspects of modern science, medicine, engineering, mathematics and technology. The Encyclopedia of Forensic Sciences, Second Edition is a reference source that will inform both the crime scene worker and the laboratory worker of each other's protocols, procedures and limitations. Written by leading scientists in each area, every article is peer reviewed to establish clarity, accuracy, and comprehensiveness. As reflected in the specialties of its Editorial Board, the contents covers the core theories, methods and techniques employed by forensic scientists – and applications of these that are used in forensic analysis. This 4-volume set represents a 30% growth in articles from the first edition, with a particular increase in coverage of DNA and digital forensics Includes an international collection of contributors The second edition features a new 21-member editorial board, half of which are internationally based Includes over 300 articles, approximately 10pp on average Each article features a) suggested readings which point readers to additional sources for more information, b) a list of related Web sites, c) a 5-10 word glossary and definition paragraph, and d) cross-references to related articles in the encyclopedia Available online via SciVerse ScienceDirect. Please visit www.info.sciencedirect.com for more information This new edition continues the reputation of the first edition, which was awarded an Honorable Mention in the prestigious Dartmouth Medal competition for 2001. This award honors the creation of reference works of outstanding quality and significance, and is sponsored by the RUSA Committee of the

American Library Association

Investigators, prosecutors, defense attorneys, professionals within the field of law enforcement, and other criminal justice personnel need to understand forensic terms when communicating with forensic scientists or interpreting forensic lab results. *Forensic Science-An Illustrated Dictionary* introduces commonly-used forensic terms, many of which are essential for the identification of unknown individuals and the determination of their age, race, and sex is one of the most important functions of forensic dentistry. Throughout history, this procedure has been used to establish difficult identifications, including Adolph Hitler, Eva Braun, Lee Harvey Oswald, and actor William Holden. Other essential applications of forensic dentistry include mass disaster investigations, evaluating bite marks and bitemark evidence in death investigations, child abuse investigations, and in civil litigation for evaluating oral or temporomandibular injuries related to accidents. This book explains these procedures in a comprehensive way that takes you step-by-step through the world of forensic dental investigations. The areas of forensic dentistry have come a long way in recent years. New and unique discussions offer information that will benefit professionals faced with many of the current aspects of the science. Topics include how to deal with a trial or an aggressive attorney and how to assess buried crime scene evidence (the application of forensic geotaphonomy in forensic archaeology). *Forensic Dentistry* illustrates the proper handling and evaluation of dental evidence. Its broad coverage also includes important information for legal and police science professionals who must properly evaluate and present dental findings. This book covers all standard examination practices of dental evidence, including identification of unknown individuals (age, race, sex). Whether you are a medical examiner or a pathologist

who needs to know about the proper handling and evaluation of dental evidence, a legal or police science professional who needs to know how to deal with the proper presentation of dental findings in a court of law, or a dentist who wants to use your training and experience in a unique, interesting, and challenging way, this book is for you!

The Encyclopedia of RESEARCH METHODS IN CRIMINOLOGY & CRIMINAL JUSTICE The most comprehensive reference work on research designs and methods in criminology and criminal justice This Encyclopedia of Research Methods in Criminology and Criminal Justice offers a comprehensive survey of research methodologies and statistical techniques that are popular in criminology and criminal justice systems across the globe. With contributions from leading scholars and practitioners in the field, it offers a clear insight into the techniques that are currently in use to answer the pressing questions in criminology and criminal justice. The Encyclopedia contains essential information from a diverse pool of authors about research designs grounded in both qualitative and quantitative approaches. It includes information on popular datasets and leading resources of government statistics. In addition, the contributors cover a wide range of topics such as: the most current research on the link between guns and crime, rational choice theory, and the use of technology like geospatial mapping as a crime reduction tool. This invaluable reference work: Offers a comprehensive survey of international research designs, methods, and statistical techniques Includes contributions from leading figures in the field Contains data on criminology and criminal justice from Cambridge to Chicago Presents information on capital punishment, domestic violence, crime science, and much more Helps us to better understand, explain, and prevent crime Written for undergraduate students, graduate students, and researchers, The

Encyclopedia of Research Methods in Criminology and Criminal Justice is the first reference work of its kind to offer a comprehensive review of this important topic.

Viva-Facts On File Encyclopedia of Forensic Science is an indispensable resource that will meet the specific demands of students, interested laypeople, and working professionals who need accurate and straightforward information. As a recognized scientific field, forensic science is a relative newcomer that represents an expansion of existing disciplines, including chemistry, biology, geology, medicine, and anthropology. The scope and depth of forensic science grow daily, as new technologies are discovered and as society becomes more dependent on the judicial system to solve disputes. There is a significant concern that media coverage and fictional portrayals of forensic science may lead people to exaggerate or misunderstand the role, capabilities and limitations of forensic science. Encyclopedia of Forensic Science is a major contribution toward linking public perception of forensic science to its reality. Featuring more than 600 cross-referenced entries (most with their own further reading sources) that detail a topic's significance and development in forensic science and its relation to other topics, the encyclopedia also includes 14 essays interspersed throughout the text that explain how forensic science relates to areas such as drug testing in sports, privacy concerns and the interface of forensic science and forensic engineering. Enhanced by nearly 200 black-and-white illustrations, photographs, charts as well as a full-colour insert.

The Advanced Forensic Science Series grew out of the recommendations from the 2009 NAS Report: "Strengthening Forensic Science: A Path Forward." This volume, Firearm and Toolmark Examination and Identification, will serve as a graduate-level text for those studying and teaching firearm and toolmark examination and identification. It will also prove

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an excellent reference for forensic practitioner's libraries or use in their casework. Coverage includes a wide variety of tools and toolmarks, analysis of gunshots, ammunition, gunshot wounds and professional issues they may encounter. Provides basic principles of forensic science and an overview of firearms and toolmarks Contains information on a wide variety of tools and toolmarks Covers the analysis and interpretation of gunshots, ammunition and gunshot wounds Includes a section on professional issues, such as: from crime scene to court, lab reports, and health and safety Incorporates effective pedagogy, key terms, review questions, discussion question and additional reading suggestions Presents an alphabetical encyclopedia of the forensic science principles used in investigating crime scenes and suspects. Do you want forensics to play a starring role in your fiction, but you find that you're not quite sure what it's all about? Forensic Science for Writers reveals the secrets behind forensic science technology. You'll explore how investigators analyze blood, DNA, fingerprints, hair, documents, ammunition, corpses, and other physical evidence. From the code-breaking tricks of the cyber-sleuth to the traditional procedures of the autopsy room, you'll investigate the strengths and weaknesses of forensic science. Forensic Science for Writers is not just about science. You'll learn how to use forensics to create plot twists. And you'll see how best-selling authors successfully incorporated forensic science in their stories. You'll also learn common misconceptions about forensic analysis that plague films and novels – the types of errors that you'll want to avoid in your own writing. This book is based upon an online course that was offered through colleges and other organizations. More than 800 students took the course, including writers, schoolteachers, law enforcement personnel, and attorneys. “As an already successful writer,” one student said, “I am sure I will refer to

these lessons over the coming years as I continue to write novels.”

The Advanced Forensic Science Series grew out of the recommendations from the 2009 NAS Report: Strengthening Forensic Science: A Path Forward.

This volume, Materials Analysis in Forensic Science will serve as a graduate level text for those studying and teaching materials analysis in forensic science.

It will also prove an excellent reference for forensic practitioner’s libraries or use in their casework.

Coverage includes methods, textiles, explosives, glass, coatings, geo-and bio-materials, marks and impressions, as well as various other materials and professional issues the reader may encounter.

Edited by a world-renowned leading forensic expert, the Advanced Forensic Science Series is a long overdue solution for the forensic science community.

Provides basic principles of forensic science and an overview of materials analysis Contains information on a wide variety of trace evidence Covers methods,

textiles, explosives, glass, coatings, geo-and bio-materials, marks and impressions, as well as various other materials Includes a section on professional

issues, such as: from crime scene to court, lab reports, health and safety, and field deployable

devices Incorporates effective pedagogy, key terms, review questions, discussion question and additional reading suggestions

Encyclopedia of Forensic and Legal Medicine,

Volumes 1-4, Second Edition is a pioneering four volume encyclopedia compiled by an international team of forensic specialists who explore the relationship between law, medicine, and science in the study of forensics. This important work includes over three hundred state-of-the-art chapters, with articles covering crime-solving techniques such as autopsies, ballistics, fingerprinting, hair and fiber analysis, and the sophisticated procedures associated with terrorism investigations, forensic chemistry, DNA, and immunoassays. Available online, and in four printed volumes, the encyclopedia is an essential reference for any practitioner in a forensic, medical, healthcare, legal, judicial, or investigative field looking for easily accessible and authoritative overviews on a wide range of topics. Chapters have been arranged in alphabetical order, and are written in a clear-and-concise manner, with definitions provided in the case of obscure terms and information supplemented with pictures, tables, and diagrams. Each topic includes cross-referencing to related articles and case studies where further explanation is required, along with references to external sources for further reading. Brings together all appropriate aspects of forensic medicine and legal medicine Contains color figures, sample forms, and other materials that the reader can adapt for their own practice Also available in an on-line version which provides numerous additional

reference and research tools, additional multimedia, and powerful search functions Each topic includes cross-referencing to related articles and case studies where further explanation is required, along with references to external sources for further reading

Countless facial images are generated everyday through digital and cell phone cameras, surveillance video systems, webcams, and traditional film and broadcast video. As a result, law enforcement and intelligence agencies have numerous opportunities to acquire and analyze images that depict persons of interest.

Computer-Aided Forensic Facial Comparison Offers a vivid and entertaining history of the evolution of forensic science and its use in the criminal justice system

Covers all aspects of forensic science past and present, from types of crime and evidence, to forensic scientists and officials, to the criminals they seek.

The Encyclopedia of Forensic Sciences provides a comprehensive, definitive, and up to date reference of the main areas of specialist and expert knowledge and skills used by those involved in all aspects of the forensic process, including, but not limited to forensic scientists, doctors, practicing and academic lawyers, para-legals, police, crime scene investigators, analytical chemists, toxicologists, etc. The Encyclopedia of Forensic Sciences covers all areas of specialist and expert knowledge and skill which,

either as part of an established forensic discipline or as a potentially useful emerging discipline, are of interest to those involved in the forensic process. This includes both the scientific methodology and the admissibility of evidence. The encyclopedia also includes case studies of landmark cases in the definition and practice of forensic science. The Encyclopedia of Forensic Sciences presents all material on a level and in a style that makes it accessible to a wide range of readers. Lawyers will be able to understand the science behind scientific evidence, scientists will understand the legal aspects, physical scientists will have access to biological and social sciences aspects and vice versa.

Written by experts for the general audience, this A-Z presentation covers all aspects of forensic science from its beginning to its central place in modern law enforcement.

Forensic Science: The Basics, Fourth Edition is fully updated, building on the popularity of the prior editions. The book provides a fundamental background in forensic science, criminal investigation and court testimony. It describes how various forms of evidence are collected, preserved and analyzed scientifically, and then presented in court based on the analysis of the forensic expert. The book addresses knowledge of the natural and physical sciences, including biology and chemistry, while introducing readers to the application of science to the justice system. New topics added to this edition include coverage of the formation and work of

the NIST Organization of Scientific Area Committees (OSACs), new sections on forensic palynology (pollen), forensic taphonomy, the opioid crisis, forensic genetics and genealogy, recent COVID-19 fraud schemes perpetrated by cybercriminals, and a wholly new chapter on forensic psychology. Each chapter presents a set of learning objectives, a mini glossary, and acronyms. While chapter topics and coverage flow logically, each chapter can stand on its own, allowing for continuous or selected classroom reading and study. Forensic Science, Fourth Edition is an ideal introductory textbook to present forensic science principles and practices to students, including those with a basic science background without requiring prior forensic science coursework.

This book is specifically designed for non-pathologists who normally interact with forensic pathologists. It covers topics within forensic pathology, including the forensic autopsy, postmortem changes and time of death and body identification.

This A to Z encyclopedia provides a comprehensive, definitive, and up-to-date reference of the main areas of specialist and expert knowledge and skills used by those involved in all aspects of the forensic process, including, but not limited to, forensic scientists, doctors, practicing and academic lawyers, paralegals, police, crime scene investigators, analytical chemists, behavioral scientists and toxicologists. This five-volume set covers all topics which, either as part of an established forensic discipline or as a potentially useful emerging discipline, are of interest to those involved in the forensic process. This includes both the scientific methodology and the admissibility of evidence. The encyclopedia also provides case studies of landmark cases in the definition and practice of forensic science. Wiley Encyclopedia of Forensic Science presents all material on a

level and in a style that makes it accessible to a wide range of readers. In particular, lawyers needing to better understand the key aspects of the science, and scientists who require a deeper insight into legal issues will find the encyclopedia an important resource, as will physical, biological and behavioral scientists who require background information on the most important aspects of each other's areas of expertise.

Forensic Chemistry is a comprehensive overview of the subject aimed at those students who have a basic understanding of the underlying principles and are looking for a more detailed reference text. This book is aimed at advanced students who are studying forensic science or analytical chemistry, faculty and researchers, and practitioners such as crime laboratory bench scientists. The authors will assume that the reader will have an introductory knowledge of forensic science and forensic chemistry and will have had analytical, organic and instrumental chemistry.

None of the major analytical chemical techniques will have separate treatments in the book, with the exception of forensic microscopy, which will have a chapter because many students in chemistry and forensic science do not get dedicated classes in this area. The book will have separate chapters on all of the major areas of forensic chemistry and, in addition, will have a chapter devoted to chemometrics, which is the statistical treatment of large amounts of data to discover groupings, similarities and differences among the data. Each chapter will be written by an acknowledged international expert in that area. Each author will be given detailed instructions as to the intended audience, as well as expected breadth and depth of coverage of the material in the hopes that this will minimize the problem of uneven coverage of topics and chapters that often occurs in edited books.

Although each of the types of evidence covered in the book use methods of analysis that lie outside chemistry, these will

be mentioned only for completeness in passing. The emphasis will be on the use of chemical tools in evidence analysis. This book is designed to be either a text book for an advanced forensic chemistry course, or a treatise in forensic chemistry for the scientist who wants to learn the subject in some depth. It is not designed to be a survey of the current literature in the field or a reference manual.

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