

# The Theory and Practice of Forensic Science and Criminalistics Collection: Honoring the Past, Working Today, Stepping Into the Future

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*The article explores the evolution of the professional journal Theory and Practice of Forensic Science and Criminalistics and the broader mission of forensic expertise in today's world. Amid the war, the author stresses, forensic findings carry not only evidential but also historical weight — they record the truth about war crimes and preserve evidence of Russia's aggression against Ukraine. The text reflects on the resilience and integrity of experts who continue their work despite constant danger and destruction. It also notes the growing international standing of Ukrainian forensic science, its deepening collaboration with European partners, and the steady integration of digital tools and innovative research methods. Ultimately, the author presents the journal as more than an academic platform — it is a living chronicle of a professional community that honors its heritage while shaping the future of forensic science.*

**Keywords:** forensic science; criminalistics; academic journal; war crimes; international collaboration; pre-trial investigation; methodology.

At a time when our country remains steadfast in its opposition to Russia's persistent aggression, expert research is gaining significance. Each expert's conclusion, along with every source of evidence obtained during the research process, becomes not

only an element of justice but also a part of the historical truth about this war.

Conducting forensic examinations under martial law is a highly challenging undertaking that requires not only high professionalism from forensic experts but also incredible

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devotion and courage. The constant threat of shelling, fractured infrastructure, complicated or at all impossible access to the places of committing or concealing crimes, and mined areas: all this poses unprecedented challenges. However, despite all the difficulties, Ukrainian forensic experts continue to carry out their duties diligently, performing impartial and objective investigations into facts, which are critical for restoring justice and investigating crimes.

The 39th edition of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection is devoted to both topical issues of expert and forensic activities and renowned figures who have made significant contributions to the theory and practice of jurisprudence, forensic science in general, and forensic medicine in Ukraine in particular.

Thus, **Vasyl Olkhovskyi**, Doctor of Medicine, Professor, Professor at the Department of Forensic Medicine, Medical law named after prof. M. S. Bocarius, Kharkiv National Medical University, has celebrated his 70th birthday and 45th year of scientific and pedagogical activity this year, on April 30th.

Vasyl Olkhovskyi is a graduate of Kharkiv Anatomical and Forensic Medical School. This school has laid a solid foundation for the development of forensic medicine within Ukraine. The researcher's scientific and teaching activities have stood as a timeless model for many generations of specialists. Not only has he passed on knowledge and skills, but he has also shaped worldviews and instilled principles of academic integrity and uncompromising objectivity: fundamental to the work of a forensic expert. Vasyl Olkhovskyi's contribution to forensic medicine cannot be overstated. The scientist's scientific papers and research have become a reliable basis for practical activities and subsequent scientific development of the entire industry.

We should also mention **Violetta Omelianivna Konovalova**, an outstanding re-

searcher and lecturer, Doctor of Law, Academician of the National Academy of Legal Sciences of Ukraine, Professor, Honored Professor of Yaroslav Mudryi National Law University (hereinafter referred to as *Yaroslav Mudryi NLU*) and National Scientific Center "Hon. Prof. M. S. Bokarius Forensic Science Institute" (hereinafter referred to as *NSC "Hon. Prof. M. S. Bokarius FSI"*), Honored Worker of Science and Technology of Ukraine, who greatly contributed to the development of legal science, forensic tactics, legal psychology, and legal education. Violetta Omelianivna's primary research areas are the principles of the general theory of forensics, forensic tactics, and legal psychology. It was she who introduced a new approach to the application of the achievements of logic and psychology in forensic tactics, which paved the way for investigative and judicial practice. Without exaggeration, she can be called the founder of the psychological and legal school in Ukraine. Violetta Omelianivna was a true leader whose input to the formation and development of forensics in Ukraine is unconditional. The staff of National Scientific Center "Hon. Prof. M. S. Bokarius Forensic Science Institute" is proud to acknowledge that Violetta Omelianivna's articles were published in many issues of the *Theory and Practice of Forensic Science and Criminalistics* Professional Research Paper Collection. She was a member of the editorial board of this collection for more than 20 years, which is co-edited by National Scientific Center "Hon. Prof. M. S. Bokarius Forensic Science Institute" of the Ministry of Justice of Ukraine and Yaroslav Mudryi National Law University of the Ministry of Education and Science of Ukraine. Violetta Omelianivna's articles were published in this collection.

The Editorial Board of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection honors the founders who have shaped Ukraine's forensic industry. Despite the challenges of mar-

tial law, the Board is confidently stepping into the European future alongside the rest of the country. Currently, the Edition is indexed in *Google Scholar* and international online databases: *Index Copernicus International* (ICV 2021: 100), *Bielefeld Academic Search Engine* (BASE), *Crossref*, *Central and Eastern European online library* (CEEOL), *ERIH PLUS*, *Europub*, *RefSeek*, *ResearchBib*, *WorldCat*, as well as in the Register of Scientific Publications of Ukraine and DOI Foundation. The Research Paper Collection's electronic versions are posted on the Internet on sites such as the V. I. Vernadsky National Library of Ukraine, libraries of forensic institutions under the Ministry of Justice of Ukraine, institutions of higher education under the Ministry of Internal Affairs of Ukraine, etc.

The research papers in this edition are traditionally divided into two groups: *Research Papers* and *Case Notes*.

The *Research Papers* Section is introduced by the *Role of M. M. Bokarius in Development and Establishment of Criminalistics and Forensic Science in Ukraine* research paper authored by **Valerii Shepitko** (Ukraine), Doctor of Law, Professor, Academician of the National Academy of Legal Sciences of Ukraine. The purpose of this article is twofold: to determine the role of Professor M. M. Bokarius in the development of forensic science and criminalistics in Ukraine and to popularize forensic knowledge and its practical applications. The researcher analyzes the medical, pedagogical, scientific, and expert activity of M. M. Bokarius during 1920–1960. Attention is drawn to his performance of forensic medical activities in difficult political and economic conditions, in particular during the Holodomor in Ukraine in 1932–1933, World War II, and mass famine of 1946–1947. Teaching activities of M. M. Bokarius for law students (forensic medicine, crime investigation techniques (criminalistics), and other related disciplines) are considered. He was an organizer of the educational process and the

head of higher educational institutions and forensic institutions. The professor's scientific legacy is considered; his main works are analyzed; The subject of scientific research is systematized (forensic and forensic methods: forensic traumatology and thanatology, cadaver phenomena and the statute of limitations of death, corpse examination at the crime scene, mechanical asphyxiation, traces of firearms and gunshot wounds, material evidence). The role of M. M. Bokarius in application of forensic methods for the investigation of crimes, the establishment of the forensic direction in forensic medicine and the formation of medical forensics is argued. The peculiarities of emergence and existence in our time of the Bokarius Scientific and Pedagogical Forensic School are substantiated.

**Vlada Husieva**, Doctor of Law, and **Yevhen Sup**, PhD in Law, both from Ukraine, are the authors of the following paper: *Typical Characteristics of Person who Commits Criminal Offenses against Justice*. The paper aims to clarify the meaning of the forensic characterization of criminal offenses committed by professional participants in the judicial process, to determine the substantive elements of its structure. A number of theoretical and applied provisions were formed that allow expanding the understanding of forensic characterization of criminal offenses against justice, in particular those committed by professional participants in the judicial process. The researchers analyze scientific approaches to structuring knowledge about identity of the offender within the framework of forensics. Feasibility of a comprehensive analysis of the socio-demographic, moral, and psychological characteristics of the offender was confirmed, the results of which make it possible to more accurately predict the behavior of the offender, substantiate investigative versions, and plan tactical actions. It was substantiated that the motive and purpose of criminal behavior are of fundamental

importance for establishing the subjective side of the composition of the crime, in particular for distinguishing intentional abuse of authority from official error. It has been established that criminal offenses against justice committed by officials are often latent in nature, hidden behind formal compliance with procedural norms, and require special investigative tactics aimed at identifying hidden mechanisms of abuse. It has been generalized that effectiveness of the investigation of such criminal offenses directly depends on the level of awareness of the investigator with the peculiarities of the law enforcement activities of professional participants in the judicial process, which requires in-depth training and systematic analysis of the offender's personality. It has been stated that a comprehensive forensic characterization of criminal offenses against justice, adapted to the professional specifics of the subjects of such crimes, is an important condition for creating an effective methodology for their investigation, as well as for developing mechanisms for preventing offenses.

The section continues with the *Role of the Ministry of Justice of Ukraine in the Formation of a System of Forensic Science Support for Justice* review article by **Nataliia Filipenko** (Ukraine), Doctor of Law, Professor, and **Aleksandar Ivanović** (Montenegro), Doctor of Law, Professor. The scholars analyzed the leading role of the Ministry of Justice of Ukraine in forensic science management, with emphasis on the features of coordination, subordination, planning and information mechanisms, as well as ability to respond to pressing issues and challenges of the present time. The researchers have determined that this activity has a scientific and practical orientation and depends on the departmental affiliation of forensic expertise institutions of Ukraine. A wide range of functional capabilities of the Ministry of Justice of Ukraine, which vary in form and content, is outlined, in particu-

lar, it is noted that expert support of justice is one of its main legislatively enshrined tasks. The main challenges and prospects for improving forensic support of justice in the context of reforming the judicial system and ensuring compliance with international standards in this area are outlined. The main areas of activity of the Ministry of Justice of Ukraine as a management and coordination body in the field of criminal activity of forensic institutions were identified, in particular: development and implementation of effective state policy in the field of management of forensic activities; optimization of management methods of state forensic institutions and non-state expert organizations; increasing the requirements for judicial activity and its organization; increasing efficiency of activities of judicial institutions of Ukraine, etc.

In the *Peculiarities of Using DNA Research Results From Mobile Laboratories in Criminal Proceedings* article, **Kateryna Latysh**, PhD in Law, Docent, and **Danylo Zhydkov**, both from Ukraine, analyze the procedural status of rapid DNA test results obtained in mobile and stationary DNA laboratories. The paper identifies the benefits and restrictions of such studies. Emphasis is placed on the relevance of utilizing mobile technologies under martial law in Ukraine and the need to improve the legal regulation of their use. The authors explore the procedural status of rapid DNA test results obtained in both mobile and stationary DNA laboratories. The article discusses the differences between mobile and stationary laboratories, identifies peculiarities in the collection and processing of biosamples, and outlines problematic aspects of admitting such results as evidence. Emphasis is placed on the relevance of utilizing mobile technologies under martial law in Ukraine and the need to improve the legal regulation of their use. The latest legislative changes and case law regarding the evaluation of rapid studies are also carefully analyzed.

The *Determining the Market Value of Completely Destroyed Property through the Russian Federation's Armed Aggression* article authored by **Olena Usenko** (Ukraine), PhD in Law, examines the methodology and practical aspects of assessing the market value of assets that have been completely destroyed, and identifies the legal and methodological principles that govern this process. Existing methodologies for determining the market value of destroyed real and movable property, including damaged land parcels, have been analyzed. Special attention is paid to the legal and regulatory environment in Ukraine, which fails to meet the requirements arising from large-scale destruction during armed conflicts. It is argued that merely compensating direct losses is insufficient; it is equally essential to ensure the full restoration of enterprise operations and infrastructure, and to account for potential economic losses arising from destroyed assets. In addition to evaluating current methodologies and legal provisions, specific recommendations for improving legislation and practical valuation procedures in an armed-conflict context are offered.

The *Pricing Aspects of Amber: Consumer Characteristics and How They Determine the Value of Raw Materials* research paper by **Petro Baranov**, Doctor of Geology, Professor, **Olena Slyvna**, PhD in Geology, and **Liudmyla Chernysh**, all from Ukraine, aims to conduct an integrated analysis of the amber market and determine the aesthetic and economic relationship between the characteristics of raw amber, such as shape, color, clarity, impurities, cracks, and inclusions, as well as the characteristics of amber products as perceived by consumers. The topic is relevant since expert studies on determining the cost of raw amber have failed to consider its pricing consumer characteristics. This poses a risk of not complying with the basic principles of forensic examination: objectivity and completeness of research. The authors consider the mechanism for

assessing the quality of raw amber and its cost, taking into account the active price lists of Ukraine, and also identify consumer characteristics affecting the cost of amber products. The authors emphasize that the characteristics of amber establish an aesthetic and economic connection with each type of product, enhancing the perceived value of each individual item. The qualitative characteristics of amber determine its cost in the market and become the main factors influencing pricing.

The *Case Notes Section* begins with the *Types and Specifics of Investigation of Traces of Unlawful Interference in the Activities of Public Authorities* research paper authored by **Volodymyr Popov** (Ukraine), PhD in Law, seeks to identify typical traces of criminal and illegal activities related to interference in the activities of representatives of state authorities, to outline their features and methods of research. The researcher identifies typical sources (carriers) of trace information in criminal offenses related to interference in the activities of representatives of state authorities: 1) documents, in particular electronic ones (summons, protocols of procedural actions, photographs, sound and video recordings of the event of a criminal offense or related to it); 2) digital traces displayed (stored) in messengers, information systems, e-mail servers and other information systems, video recordings, etc.; 3) other things of the material world that were discovered at the crime scene (at the scene of incident) and that retained traces of criminal illegal activity; 4) tools and/or means used by the perpetrators to carry out the criminal act; 5) participants in relevant social relations who, by chance or in connection with their official activities, became participants in the event of a criminal offense related to interference in the activities of representatives of state authorities. Prospects for further research within the framework of researched issues are outlined.



The *Guarantees of Professional Activity of Defense Attorney in Criminal Proceedings* research paper by **Mykola Kolomoitsev** (Ukraine), PhD in Law, determines legal status content of the defense attorney of the suspect (accused) in criminal proceedings, to characterize the guarantees of his professional activity. It was investigated that the guarantees of the professional activity of the lawyer (defense attorney) in criminal proceedings are represented by a set of international legal and national provisions that determine his rights and obligations in the event of his defense of the suspect (accused / defendant / convicted). The sources of the aforementioned guarantees are the Constitution, the Criminal Procedure Code, the Law of Ukraine: *On the Bar and Legal Practice*, and subordinate regulatory legal acts of Ukraine. The researcher argues that the outlined legal guarantees determine the powers of the defense attorney in ensuring the right to defense and fair justice, they are used when obtaining evidence, to substantiate the legal position, to appeal procedural decisions, etc.

The *Peculiarities of Forensic Examination During Pre-Trial Investigation of High Treason Cases* article by **Inna Bosak** (Ukraine), Post-graduate student, comprehensively examines the specific peculiarities of appointing and conducting forensic examinations as one of the procedural forms of applying specific expertise in the investigation of criminal offenses that may be qualified as high treason. It further analyzes and substantiates the appropriateness of appointing forensic examinations that are essential in revealing the truth in criminal proceedings concerning high treason. In particular, the article outlines the most relevant and commonly applied types of forensic examinations, such as computer, video and sound recording analysis, linguistic (semantic-textual), forensic examinations related to state secrets, and forensic portrait examinations, which are typically appointed and conduc-

ted at the stage of pre-trial investigation of criminal offenses classified as high treason. The author emphasizes that this list of the most in-demand forensic examinations conducted during investigations of criminal offenses, outlined in Art. 111 of the Criminal Code of Ukraine, is not exhaustive.

The *Activity Nature of Counteracting Investigation of Criminal Offenses* research paper by **Oleksandr Tarkan** (Ukraine), PhD in Law, determines components of activity that consists in counteracting the investigation of criminal offenses. It was determined that counteracting investigation is a complex, dynamic and multifaceted phenomenon that is formed in the conditions of a criminal conflict and manifests itself through the purposeful behavior of persons interested in concealing the actual circumstances of a criminal offense. It was substantiated that the structural components of forensic characteristic of counteraction are: 1) subjects of counteraction, their motives and objects of influence; 2) typical forms and methods, their impact on sources of evidence; 3) signs of use of specific methods that are manifested both in objective environment and in the behavior of subjects. The need to study the external manifestations of counteraction (material, digital, ideal traces) as a key source for modeling mechanisms of criminal counteraction and creating effective tactical solutions is proven. It was found that counteracting investigation has a conflicting nature, in which opposing goals of the parties to the criminal proceedings collide. This is not only a conflict between the investigator and the suspect, but also interaction with other participants in the process: prosecutor, witnesses, witnesses, experts, etc. It is substantiated that the forensic characteristic of opposition to investigation should be integrated as a separate component into the structure of investigation methodology for those criminal offenses that are characterized by active opposition.

The section continues with the research paper: *The Art Forensics in Investigating and Proving Smuggling of Cultural Property* authored by **Yurii Kovalov** (Ukraine), PhD in Law. The work determines the specifics of appointment of art forensics during investigation of the smuggling of cultural values, to reveal the significance of the expert's conclusion for the process of proof. It was established that during the investigation, investigators quite often address the question of whether an object belongs to the category of cultural values to forensic expert, however, the solution of this issue is already the competence of lawyers. The competence of forensic expert consists in determining artistic level, historical significance, cultural value and condition of the work. In view of this, it is emphasized that before making a decision to appoint an art expert, it is advisable to consult with a specialist in the field of art history; this allows to properly formulate expert tasks, clarify the research topic of and ensure quality of subsequent conclusion and the collected evidence. It is justified that during investigation of the smuggling of cultural values, it is prudent to appoint an art historical examination, and not to resort to other forms of specific expertise application, because only the conduct of the examination will guarantee the receipt of evidence that meets the criteria of admissibility, relevance and reliability and therefore can be used as the basis for proof.

The *Proving Property Damage in Economic Criminal Offenses* research paper by **Vitalii Usatii** (Ukraine), PhD in Law, defines peculiarities of proving property damage in the course of pre-trial investigation into economic criminal offenses. The researcher proves that it is also vital to introduce a set of compensation (indemnification) measures both at the pre-trial stage and during the criminal trial. The author outlines some aspects of proving property damage in economic criminal offenses, for

most of which it is of decisive importance in the context of criminal law context. The subsequent research will focus on the legal, organizational, and tactical principles involved in collecting evidence of property damage during the pre-trial investigation of economic crimes.

The *Corruption in Environment Field: Problems and Ways to Their Solving* article by **Vadym Babakin** (Ukraine), Doctor of Law, Docent, and **Jozef Zatko** (Slovak Republic), Full Doctor in Law, Honorary Doctor, Honorary Professor, LL/MBA, aims to investigate corruption state in environmental field, analyze the main problems that arise as a result of such corruption, and propose ways to solve them. Particular attention is paid to finding effective ways to overcome corruption, improving legislation, strengthening control by officials and increasing transparency, openness and publicity in the decision-making procedure in this area. It is proved that close cooperation of the state with international organizations studying this problem should become the basis for improving national legislation and practice of its implementation. Ways of solving problems of minimizing the impact of corruption in environmental field are proposed (strengthening control over compliance with environmental legislation, increasing transparency of decision-making in the environmental field and ensuring inevitability of punishment for corruption offenses, raising environmental awareness of citizens and involving them in active participation in monitoring compliance by authorities with environmental legislation, etc.). Prospects for further research within the framework of raised issues are outlined.

The section ends with the *Legal and Regulatory Framework for Thermal Modernization in Construction* research paper by **Nataliia Matsak** (Ukraine). This article aims to present the key rules and requirements for building energy efficiency during thermal modernization works and to strengthen

regulations on upgrading thermal insulation of external envelopes and on replacing window, exterior-door and balcony assemblies. The author also addresses broader themes—energy conservation, energy-saving policy, building energy passports, efficient use of fuel and power resources, etc.

The final pages of the 39th issue include the *Scientific News* traditional section. This part introduces readers to scientific events in forensic science that took place over the past quarter.

The Editorial Board of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection would like to thank the authors who have contributed to this edition! Your insightful contributions have significantly enhanced the content of this edition and promote the sharing of valuable knowledge within the academic community. We greatly appreciate your work, dedication to science, and willingness to present your research findings.

We are pleased to invite scholars, researchers, and practitioners and welcome the opportunity for further cooperation. If you are interested in publishing your original research, review articles in the *Theory and Practice of Forensic Science and Criminalistics* Professional Research Paper Collection, we will gladly consider your materials for the next issues of our collection. We believe that, by working together, we can play a major role in developing various fields of science!

Together to the Victory!  
Glory to Ukraine!

## **Збірник “Теорія та практика судової експертизи і криміналістики”:**

**шануємо минуле,  
працюємо сьогодні,  
крокуємо в майбутнє**

**Елла Сімакова-Єфремян**

Стаття присвячена розвитку фахового наукового збірника «Теорія та практика судової експертизи і криміналістики» та ролі судово-експертної діяльності в умовах сьогодення. Наголошується, що під час війни результати експертних досліджень набувають не лише доказового, а й історичного значення, адже формують правду про воєнні злочини та документують наслідки російської агресії проти України. Підкреслено стійкість і професійну мужність експертів, які продовжують роботу попри небезпеку, обстріли та руйнування інфраструктури. Окрему увагу приділено зростанню міжнародного авторитету української судової експертизи, розширенню співпраці з європейськими інституціями, впровадженню цифрових технологій і нових наукових методів. На підставі аналізу статей видання підсумовано, що збірник є не лише науковою платформою, а й своєрідним літописом професійного поступу спільноти, що поєднує традиції минулого та інновації майбутнього.

**Ключові слова:** судова експертиза; криміналістика; фахове видання; воєнні злочини; міжнародна співпраця, досудове розслідування, методика.

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