

Unshakable Science: A History of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection and its Adaptation to War Challenges

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The Research Paper Purpose is to shed light on the academic development of the “Theory and Practice of Forensic Science and Criminalistics” Research Paper Collection: a professional research paper journal. The previous issues of the Collection elaborate on existing barriers in adapting forensic and criminalistics practices to the challenges of wartime following the outbreak of full-scale military aggression against Ukraine. This article showcases the traditional section-by-section overview of the current journal, with its content organised under the headings “Research Papers”, “Case Notes” and “Scientific News”.

Keywords: print edition; research paper collection; forensic science; pre-trial investigation; judicial proceedings; special knowledge; forensic examination; workplace bullying; digital forensics; DNA identification; papillary ridge patterns.

In the year marking the 25th anniversary of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection (hereinafter referred to as the *Collection*), we continue to acquaint readers with the history of the journal's creation: a brief overview of its first twenty-five issues (up

to and including 2021) was provided in the preceding issue. The preceding issue recalled the launch and early days of this academic journal, topics covered in the first issues, changes in the journal's publishing schedule, and the release of parallel issues in Ukrainian and English from

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2014 onwards ¹. Especially noteworthy is the sixth Collection issue, which included 69 scientific and practical papers devoted to pertinent issues concerning criminalistics, forensic science, and methodological framework for individual types of forensic examinations. The issue was prepared by over 100 authors, including 15 Doctors of Science and 23 Candidates of Science. The Collection has been officially recognised: the journal has been included in an international periodicals database (ISSN 1993-0917) ². Since its seventh issue, the edition has attained the status of a research paper collection. Among the salient issues are urgent issues of criminalistics and forensic science, cutting-edge methodologies of criminal investigation, etc. A particular practical value of this Collection lies in the *Forensic Expert Practice: Methodological Approaches to Addressing Challenges* Section. This section covers content on various types of research and forensic analyses. A separate section focuses on the first *Arotsker Readings*. This event was hosted at Hon. Prof. M. S. Bokarius Kharkiv Research Institute of Forensic Examinations of the Ministry of Justice of Ukraine (hereinafter referred to as *KhRIFE*; currently National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» — NSC FSI) on 30 May 2007 to mark the 80th birthday of L. Yu. Arotsker. In their papers, participants in the scientific and practical event elaborated on

the contribution to science made by Lev Yukhymovych Arotsker, Doctor of Legal Sciences, Professor and Founder of Kharkiv School of Experimental Research into Altered Handwritten Documents (Signatures): the scientists, who held positions ranging from Head of Museum to Deputy Director for Academic Affairs at the Kharkiv Scientific Research Institute of Experimental Studies over the course of 33 years. The attendees also touched upon students' and colleagues' memories of him. This collection comprises nearly 100 articles written by over 140 authors (of whom 16 hold a Doctor of Sciences degree and 34 hold a Candidate of Sciences degree) ³. On the occasion of the 85th anniversary of the *KhRIFE*'s founding, the eighth volume of the Collection has been published, featuring over 100 papers, with a special section devoted to historical development and the scientific and expert legacy of Kharkiv School of Criminalistics ⁴. The ninth issue took as its focus specific types of forensic analysis, including newly introduced ones, along with challenges concerning forensic expert practice, papers from academic conferences, and the academic legacy of Honoured Professor M. S. Bokarius, in commemoration of the 140th anniversary of his birth ⁵. The Editorial Board introduced the practice of labelling each article with a copyright notice (©) in the 2010 anniversary issue ⁶. As set forth in Art. 9 of the Law of Ukraine:

- 1 Сімакова-Єфремян Е. Від теорії до практики: 25 років науковому виданню «Теорія та практика судової експертизи і криміналістики». *Теорія та практика судової експертизи і криміналістики*. 2026. Вип. 1 (42). С. 5–14. DOI: [10.32353/khrife.1.2026.01](https://doi.org/10.32353/khrife.1.2026.01) (date accessed: 20.06.2026).
- 2 Теорія та практика судової експертизи і криміналістики : зб. наук.-практ. мат-лів. Вип. 6 Харків, 2006. 448 с.
- 3 Теорія та практика судової експертизи і криміналістики : зб. наук. пр. Вип. 7. Харків, 2007. 576 с.
- 4 Там само. Вип. 8. Харків, 2008. 656 с.
- 5 Там само. Вип. 9. Харків, 2009. 624 с.
- 6 Там само. Вип. 10. Харків, 2010. 672 с.

On Copyright and Related Rights, this symbol indicates that a scientific publication is protected by copyright ⁷. The following issues continued to further expand the Collection's traditional subject matter, presenting up-to-date trends in criminalistics and updated approaches to forensic science.

The first (26th) issue of the Collection published in 2022 was a remarkable one. The Editorial Board worked on it under unfavourable circumstances as Russia's aggression against Ukraine unfolded. Despite martial law and the constant shelling of Kharkiv, the Editorial Team proceeded to accept and edit manuscripts from both Ukrainian and international authors. Strong evidence that science cannot be suppressed by any war is our colleagues' perseverance and devotion to the pursuit of knowledge ⁸. Since 24 February 2022, the decisive factor in activities of the journal's co-founders has been the situation in which both researchers and expert practitioners—just like other people in Ukraine—are striving to uphold their professional responsibilities amidst the war with the Russian aggressor. Kharkiv, a Hero City on the front line, is operating at full capacity. Frontline city-hero Kharkiv functions under extreme strain: its residents are enduring all hardships of war, as air alerts wail across Ukraine and people are forced to spend time in shelters, hiding from a potential and often very real threat; the border regions are being shelled nearly on a regular basis. The diabolical enemy makes active use of weapons prohibited by international treaties. Our country has been living through the years of intense hostilities, which have resulted in the loss

of life due to artillery shelling, missile strikes and aerial bombardments. Many of those who survive lose their homes and possessions. Regardless of the incredibly challenging circumstances of martial law, the Editorial Board of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection, similarly to many Ukrainian people, has been steadfastly fulfilling the tasks and duties entrusted to it since the start of the full-scale invasion. Not only does this promote the development of the professional edition, but also advances the country's scientific life.

The Armed Forces of Ukraine and other military units succeeded in almost completely liberating the territory of the Kharkiv region in September 2022. As of today, Kharkiv is a Hero City, and Kharkiv citizens take pride in this title. From the very first days of the full-scale invasion, our city has become a shield for many regions of the country, whereas the rest of the country has served as a buffer against Russian aggression protecting the peaceful nations of Europe. Founders of the *Theory and Practice of Forensic Science and Criminalistics* Journal have made their choice (as reflected in their diligent work): keep working and continue to do their utmost to bring about peace.

After reviewing the content of previous issues, particular emphasis should be placed on the journal's publishing activity during a defining period for our country: from the start of the full-scale war in 2022 to this day. This period has been a time of profound challenges and adaptation for the journal. In times of war, one of the main guiding principles of Ukrainian science is innovation to bring victory

7 Про авторське право і суміжні права : Закон України від 01.12.2022 р. № 2811-IX (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/2811-20#Text> (date accessed: 20.06.2026).

8 Теорія та практика судової експертизи і криміналістики. 2022. Вип. 1 (26). 159 с. DOI: [10.32353/khrife.1.2022](https://doi.org/10.32353/khrife.1.2022) (date accessed: 20.06.2026).

closer and rebuild the country. Academic community is doing an excellent job of adjusting to the realities of war, confidently handling challenges of the current situation, and promptly tackling pressing tasks facing the country in its fight against the Russian aggressor.

Throughout this period, the Editorial Team has reviewed nearly 200 manuscripts prepared by Ukrainian and international researchers (from the Baltic states, Israel, Turkey, Armenia, the Czech Republic, Montenegro, Poland, Moldova and others). Academic community, both in Ukraine and beyond its borders, enthusiastically supports advances in Ukrainian science, forensic science and criminalistics. With the introduction of the DOI, the journal's digitalisation rate stands at 29 per cent (this is a share of the journal's scientific papers which were cited in editions indexed in the *Web of Science Core Collection* and/or *Scopus* databases over the past two years) and 34 per cent (a share of active DOIs in sources cited by authors of the Collection's articles following the analysis of the past two years' data). These indicators demonstrate the journal's solid scholarly standing and its international recognition. Peer review of articles, open access policy, principles of academic integrity, publication ethics and editorial transparency, and the Collection's quality assurance: all of them adhere to European guidelines (standards) for scientific journals.

Scientists who meet the requirements set out in Order No. 56 of the Ministry of Education and Science of Ukraine: *On Approval of the Procedure for Forming the List of Scientific Professional Publications of Ukraine* dated 19 January 2026 have been appointed to the Collection's Editorial

Board. The essential inclusion criteria are: a specific percentage of foreign citizens; academic degree; research in the *Law* cluster and publication of results in journals indexed in scientometric databases such as *Web of Science Core Collection* and/or *Scopus*, etc.⁹. To that end, the Editorial Board has been expanded and now includes scientists from Slovenia (**Gorazd Meško**, PhD, Professor, and Head of Criminology Chair, Faculty of Criminal Justice and Security, University of Maribor), Latvia (**Inga Kudeikina**, PhD, Associate Professor of the Faculty of Social Sciences, Riga Stradiņš University; **Sandra Kaija**, PhD, Professor of Faculty of Social Sciences, Riga Stradiņš University). The geographical scope of academics working on this scientific edition is steadily growing.

The Collection is indexed in *Google Scholar*, international abstract and citation databases *Academic Research Index* (*ResearchBib*), *Bielefeld Academic Search Engine* (*BASE*), *Directory of Research Journals Indexing* (*DRJI*), *ERIH PLUS*, *EuroPub*, *Index Copernicus International*, *RefSeek*, *WorldCat*, as well as in the Register of Scientific Publications of Ukraine and on the site of the registrar of digital identifiers DOI. Full text electronic versions of the edition are freely available on the *Internet* on the platforms of Vernadsky National Library of Ukraine, in the repository of National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute», libraries of forensic institutions of the Ministry of Justice of Ukraine, higher education institutions of the Ministry of Internal Affairs of Ukraine, etc.

The Collection has retained its established sectional structure: *Research Papers* and *Case Notes*. The final pages of the 43rd is-

9 Про внесення змін до Порядку формування Переліку наукових фахових видань України : наказ Міносвіти і науки України від 19.01.2026 р. № 56. URL: <https://zakon.rada.gov.ua/laws/show/z0129-26#Text> (date accessed: 20.06.2026).

sue address scientific events that have taken place over the past three months.

The *Research Papers* Section opens with the *Practice of the European Court of Human Rights in Shaping Standards for the Ordering and Conduct of Forensic Examinations in Criminal Proceedings* scientific paper by **Valerii Sokurenko**, Doctor of Legal Sciences, Professor, Corresponding Member of the National Academy of Legal Sciences of Ukraine, and **Volodymyr Tverdokhlib**, Doctor of Philosophy in Law. The authors single out standards governing the ordering and conduct of forensic examinations in criminal proceedings, shaped by the practice of the European Court of Human Rights, and contextualize their significance for ensuring the right to a fair trial and streamlining the national practice of applying special knowledge.

The section continues with a research paper by **Nataliia Filipenko**, Doctor of Legal Sciences, Professor, where the author examines mobbing as one of the most harmful forms of psychological pressure within workplace collectives, undermining employee well-being and organizational stability. In this context, the collective bargaining agreement assumes particular importance as a preventive tool, enabling the institutionalization of corporate ethics, the establishment of clear grievance procedures, guarantees of protection against unfounded sanctions, and a precise definition of the parties' liability. At the same time, the role of forensic expertise as a crucial evidentiary mechanism in mobbing cases is underscored. The researcher pinpoints that forensic examinations provide objective substantiation of psychological pressure, facilitate the analysis of workplace communications, and assess their impact on employees' mental health. The synergy between the preventive function of collective bargaining agreements and the evidentiary strength of foren-

sic expert studies creates a comprehensive system of protection against mobbing.

The research paper: *The Court's Role in Verifying Expert Evidence: From Presumptive Competence to Reliability Assessment* by **Mykhailo Shcherbakovskiy**, Doctor of Legal Sciences, Professor, and **Yurii Myroshnychenko**, Doctor of Legal Science, aims to define judicial oversight limits when it comes to evaluating the scientific validity of expert evidence in criminal proceedings, given the rapid development of special knowledge (such as digital and algorithmic research methods). The academics reveal conceptual differences between the Anglo-American and continental models for judicial verification of expert evidence, determine their impact on the scope of judicial oversight, and justify feasibility of transitioning to a procedural scientific validity review of expert methodologies used in criminal proceedings. Integrating components of *reliability inquiry* and institutionalising the *overriding duty* concept have been recognised as promising approaches, as they complement each other and guarantee the scientific validity of expert evidence; these will help enhance the quality of proof and minimise the risk of judicial errors.

Next in the section is the *Conducting Forensic Examination as Part of Measures to Secure Evidence Prior to Filing Lawsuit in Administrative Proceedings* paper by **Viktoria Bila**, Doctor of Legal Sciences, Docent, and **Stanislav Sheptukhovskiy**, Candidate of Legal Sciences. The authors develop the idea of the appointment of forensic examination as a way of securing evidence before commencement of proceedings in administrative case. In particular, there are no clear comments on forensic research on issues that will only be the subject of judicial consideration. Conclusions were drawn according to which satisfaction of

the evidentiary needs of potential plaintiff by the courts of first instance does not overlap with the concept of topical or territorial jurisdiction and is a unique phenomenon that is only formally, but not substantively, covered by instance jurisdiction.

The research paper: *Signs of Errors Made by Forensic Experts: How They Differ From Errors in Other Areas of Human Activity* by **Iryna Petrova**, Doctor of Legal Sciences, Professor, **Tetiana Kipusheva** and **Daryna Dukhnenko**, Researchers, highlights the pressing need to identify specific signs of expert errors that are distinct from errors in other areas of human activity, and the urgent necessity for defining these signs. It has been pointed out that error is always unintentional, which distinguishes it from falsehood (lying/misrepresentation) and disinformation (false information disseminated as true in order to mislead). The researchers emphasise that causes of errors can be either objective (measurement instrument errors, unrecorded environmental influences on objects under study, etc.) or subjective (overconfidence, negligence of a forensic expert, his/her over-reliance on erroneous expert opinions, etc.).

The article: *Forensic Classification of Criminal Offences against Justice Administration* by **Tetiana Bobko**, Candidate of Legal Sciences, discloses theoretical and applied aspects of forensic classification of criminal offences against justice. Prospects for further research related to development of forensic recommendations and methods for individual types of criminal offenses against justice are outlined.

The research paper: *Use of Special Knowledge in Investigations Into Criminal Offences Involving Provision of Professional Legal Aid* by **Kristina Romanauskas**, Doctor of Philosophy in Law, is worthy of note. The author concludes that application of special knowledge serves as a foundation-

al component of the proof procedure and is an essential element of forensic support for investigations into criminal offences involving provision of professional legal aid.

The section concludes with the *Restrictions on Application of Causal Modeling Methods in Forensic Mining and Technical Examination and Ways to their Overcoming* research paper by **Ivan Puhach**, Candidate of Technical Sciences, Docent, **Yurii Cheberiachko**, Doctor of Technical Sciences, Professor, **Vadym Kharchenko** and **Inna Puhach**. The article underscores the scientific issue of methodological gap between modern causal models of analysis of complex accidents and the procedural requirements of forensic mining and technical examination, within the limits of which forensic expert is obliged to rely only on the materials provided, his competence and substantiation procedures that are subject to verification. The academics stress that phase-modular decomposition makes it possible to localize causality in technically homogeneous fragments of the event, establish an evidentiary basis for each module, procedurally correctly respond to the lack of initial data and form a logical, transparent expert conclusion. The suitability of the approach for analyzing events in open-pit and underground mining operations is confirmed by practical testing.

The *Case Notes* Section begins with a scientific paper by **Galina Avdeeva**, Candidate of Legal Sciences, Senior Researcher (by academic rank), and Leading Researcher at Academician V. V. Stashis Scientific Research for the Study of Crime Problems. It acquaints readers with the global practice of prioritization which is viewed as an innovative tool for enhancing the effectiveness of forensic support in criminal investigations.

Viktor Kvashyn, Candidate of Legal Sciences, Doctoral Candidate at Yaroslav

Mudryi National Law University, examines the statutory construction of the right of an administrative body to administrative assistance, identifies the conditions for exercising this right and the possibilities of its application in the activities of public financial control bodies. The scholar emphasizes the need to introduce safeguards against abuse of the right to administrative mutual assistance.

An article by **Dmytro Nesterov**, Crypto Analytics Consultant (NDA), reveals peculiarities of forensic characteristics of crimes related to illegal circulation of virtual assets, as well as determines the main elements of their commission mechanism.

Oleksii Lozovyi, Postgraduate Student, Yaroslav Mudryi National Law University, analyses emergence history, formation and content peculiarities of existing forensic DNA registries in the world and in Ukraine, outlines possible development prospects. Formation analysis of Ukrainian DNA identification system indicates gradual transition from separate forensic examinations to centralized system creation, that in its structure and principles is close to European models of average completeness.

The section continues with an article by **Volodymyr Lezhnin**, Postgraduate Student, which addresses the administrative and legal aspects of reducing corruption risks when customers apply non-price criteria in public procurement and summarises the theoretical provisions regarding the role and place of judicial economic expertise as a means of reducing corruption risks in Ukraine.

Oleh Haiduk focuses on methodological aspects of detecting traces of papillary patterns on paper surfaces by the method of electrostatic reproduction of images with visual examples of the results of using the ESDA 2/B device. Difference between this method of research and exist-

ing methods of detecting traces of papillary patterns is analyzed.

The *Case Notes* Section ends with a research paper by **Mykhailo Kuzmenko** and **Serhii Ostapov**. The researchers elaborate on forensic examinations involving violation of health and work safety requirements and define signs of employees' non-compliance with personal safety requirements that have led to accidents.

The final pages of the 43rd issue address scientific events that have taken place over the past three months.

The Editorial Board would like to extend its profound gratitude to all the authors for placing their trust in us and for submitting noteworthy papers that make up this issue. Your research contributions help advance academic thought. We also welcome new collaborations and invite authors, researchers, and practitioners to contribute to the development of forthcoming issues. Publishing in our Journal is an exceptional opportunity to showcase your research, discuss ideas with counterparts and make an important contribution to the progress of science.

The team is looking forward to reading your manuscripts in our upcoming issue! Let's shape the future of science together!

**Наука, яку не зупинити:
до історії збірника наукових праць
«Теорія та практика
судової експертизи і криміналістики»
та його адаптації до викликів війни**

Елла Сімакова-Єфремян

Мета статті полягає у висвітленні наукового поступу фахового збірника наукових праць «Теорія та практика судової експертизи і криміналістики» на основі аналізу його попередніх випусків, зокрема, у контексті адаптації судово-експертної та

криміналістичної думки до викликів воєнного часу після початку повномасштабної агресії проти України. Наведено традиційний постатейний огляд поточного часопису, матеріали якого об'єднано в рубрики «Дослідницькі роботи» (*Research Papers*), «Наукові нотатки» (*Case Notes*) і «Новини наукового життя» (*Scientific News*).

Ключові слова: видання друком; збірник наукових праць; криміналістика; судове розслідування; судове провадження; спеціальні знання; експертиза; мобілізація; цифрові дослідження; ДНК-ідентифікація; сліди популярних узорів.

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Participants

The author has contributed solely to intellectual discussion underlying this document, case law research, writing and editing, and assumes responsibility for its content and interpretation.

Declaration of Competing Interest

The author declares no conflict of interest; although Ella Simakova-Yefremian

is an editor-in-chief of the collection, she did not participate in the decision to publish, and this article has undergone a full peer review and editing.

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