

Forensic Science and Forensic Expert Activity: a View Through the Prism of Forensic Experts' Opinions

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The primary concerns of this paper are to study the phenomenon of forensic science and determine ways of optimizing forensic expert practice in Ukraine by summarizing opinions of forensic experts. Based on the survey conducted among forensic experts, issues of legal regulation of forensic science have been considered; the need to unify provisions governing conduct of forensic examination is justified; means of carrying out forensic expert activities (methods, methodologies, technologies) have been analyzed. Positions of forensic experts on certain procedural and substantive issues concerning appointment and conduct of forensic examinations have been determined. The role of the forensic expert's automated workstation and electronic registers in forensic expert practice (the Register of Certified Forensic Experts and the Register of Methodologies of Forensic Examinations) is argued. The author underlines possibilities of improving the quality of forensic examination and outlines modern trends of international cooperation in the field of forensic science. The importance of cooperation between forensic science institutions of Ukraine within the European Network of Forensic Science Institutes is stressed. The Article Purpose is conditioned by the need to outline directions for forensic science development in Ukraine in current conditions and optimize forensic expert activity, as well

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as to determine ways to improve expert practice by summarizing forensic experts' opinions. General scientific and special research methods have been used.

Keywords: forensic examination; forensic expert activity; optimization of forensic expert activity; international cooperation in forensic science field; forensic expert practice; forensic report; forensic expert.

Research Problem Formulation

Forensic science is a component of efficient justice, so the discovery of the truth, the ability to consider a case on its merits, and the achievement of justice depend on a proper reform and optimization of forensic expert activity. In various forms of court proceedings (proceedings), forensic expert activity (as a special type of cognitive activity of a forensic expert) is carried out thanks to the use of specific expertise. Lately, forensic science has been viewed at the level of doctrinal approaches ¹ and its choice of European vector of development ². In view of the necessity to determine the role of forensic science in proving and optimizing forensic expert activity, the idea has arisen to analyze opinions of subjects of such activity (i.e., forensic experts) on this issue.

The proposed research should contribute to the improvement of forensic expert activities, unification of normative-legal regulation of forensic examination, improvement of the quality of its results, optimization of expert methods and tech-

nologies. These circumstances determined relevance of selected problematics and the need for this research.

Article Purpose

To identify ways to improve forensic expert practice by summarizing opinions of forensic experts.

Research Methods

To fulfill the set goal, general scientific and special research methods have been applied: analysis, synthesis; modeling; formal logical; sociological, statistical; comparative legal; legal analysis.

Analysis of Essential Researches and Publications

Research papers by distinguished domestic and foreign scientists in the field of forensic science: L. Arotsker, V. Zhuravel, N. Klymenko, O. Kliuiev, Kh. Koletski, V. Kurapka, H. Malievski, Zh. Metenko,

- 1 Шепітько В., Шепітько М. Доктрина криміналістики та судової експертизи: формування, сучасний стан і розвиток в Україні. *Право України*. 2021. № 8. С. 12–27. DOI: 10.33498/louu-2021-08-012 (date accessed: 20.12.2022) ; Ключев О., Сімакова-Єфремян Е. Доктринальні підходи до судової експертизи в Україні. *Ibid*. С. 28–43. DOI: 10.33498/louu-2021-08-028 (date accessed: 20.12.2022).
- 2 Журавель В. А., Шепітько В. Ю. Развитие криминалистики та судової експертизи в Україні: наближення до єдиного європейського простору / Правова наука України: сучасний стан, виклики та перспективи розвитку : монографія. Харків, 2021. С. 651–669 ; Шепітько В. Ю. Формування доктрини криміналістики та судової експертизи в Україні — шлях до єдиного європейського криміналістичного простору. *Право України*. 2022. № 2. С. 76–90.

M. Sehai, E. Simakova-Yefremian, G. Yuodkaite-Granskiiene, V. Yusupov and others, as well as positions and opinions of well-versed persons (forensic experts), served as scientific basis for this research. To study the problems of forensic expert activity, issues related to forensic expert practice were generalized by interrogating forensic experts, who were asked a series of questions through a specially designed questionnaire.

Main Content Presentation

According to the research plan of the Department of Criminology of Yaroslav Mudryi National Law University for 2022 (with the purpose of determining ways to optimize forensic expert activity), a survey of forensic experts from state specialized institutions and other specialists (forensic experts) in corresponding fields of expertise was planned and conducted. 172 forensic experts took part in the survey: 32 (18.6%) had up to 1 year of expert experience, 22 (12.8%) had 1 to 3 years of experience, 15 (8.7%) had 3 to 5 years of experience, 22 (12.8%) had 5 to 10 years of experience, 17 (9.9%) had 10 to 15 years of experience, 24 (14%) had 15 to 20 years of experience, and 40 (23.2%) had over 20 years of experience.

Respondents are specialists in various fields of science, technology, arts, and crafts: natural and technical sciences: 112 people (65.1%); humanitarian sciences: 33 people (19.2%); legal sciences: 21 people (12.2%); and other areas: 6 people (3.5%).

According to the workload associated with forensic expert activities, forensic experts have been divided in the following way: 88 forensic experts (51.2%) have an extremely excessive workload, 72 forensic experts (41.9%) have an excessive workload, 9 forensic experts (5.2%) have a low workload, and 3 experts (1.7%) have indicated other reasons. Reasons for an excessive workload are considered to be: a significant amount of work: 71 forensic experts (41.28%); research complexity: 42 forensic experts (24.4%); a significant number of requests: 34 forensic experts (19.8%); the lack of an adequate number of forensic experts in the relevant specialty: 27 forensic experts (15.7%); other reasons: 3 forensic experts (1.7%).

Forensic expert activity is carried out by a forensic expert: a well-versed person who possesses specific expertise. While investigation, the forensic expert (*forensic scientist*) examines evidence (*objects of research*) and draws a conclusion (*forensic report*). A forensic scientist may be summoned to the court to testify; in this case, his/her procedural status will change (*expert witness*)³. The “specific” tinge is not in the knowledge itself, but in a person who is trained (knowledgeable).⁴ It is quite interesting that according to the ДК 003:2010 Classification of Occupations, a forensic expert belongs to other professionals in the field of legal science (subclass КП 2429)⁵.

Attempts to streamline the reliance on specific expertise lead to imposition of additional requirements for a forensic expert: mandatory higher education, inclusion in

3 Шепітько В., Шепітько М. Кримінальне право, криміналістика та судові науки : енциклопедія. Харків, 2021. С. 185.

4 Каминский М. К. Специальные знания — сила? *Криміналіст першодрукований*. 2011. № 3. С. 71.

5 Національний класифікатор України. Класифікатор професій ДК 003:2010 : затв. наказом Держспоживстандарту України від 28.07.2010 р. № 327 (зі змін та доп.). [Чинний від 01.11.2010]. URL: <https://zak.on.rada.gov.ua/rada/show/va327609-10#Text> (date accessed: 20.12.2022).

the Register of Forensic Experts, work in state specialized institutions, etc. Such requirements raise certain objections since the key ones should be a high theoretical and practical level of specific expertise and the ability to provide professional assistance in establishing circumstances (factual data) that are essential for criminal or other proceedings. Restoration of justice should presuppose the possibility to invite independent forensic experts (for example, foreign ones) as well as to conduct independent alternative forensic examinations ⁶.

Legal regulation of forensic expert activity should be intended for optimizing and improving the quality of performing forensic examinations. For this purpose, various electronic registers (electronic databases) have been introduced in Ukraine: certified forensic experts in accordance with the Law of Ukraine *On Judicial Examination* ⁷ are included in the State Register of Certified Forensic Experts, which maintenance is entrusted to the Ministry of Justice of Ukraine.

Interrogation of forensic scientists enabled to determine the attitude towards persons who are entrusted to carry out forensic activities. A substantial number of forensic experts (145 people, i.e., 84.3%) believe that only forensic experts entered in the Register should carry out forensic expert activities, an opposite view (any well-versed person can implement forensic expert activities) was expressed by 25 forensic experts (14.5%), 2 forensic experts (1.2%) noted other reasons.

During forensic examination, 48 forensic experts (27.9%) do not feel protected,

and 31 forensic experts (18%) have been influenced by other individuals. In particular, 19 forensic experts were influenced by one of the parties to the criminal proceedings (defense or prosecution); 10 forensic experts: by the expert institution head; 9 forensic experts: by an attorney or lawyer; 7 forensic experts: by a participant in civil (commercial, administrative) proceedings; and 2 forensic experts: by a criminal environment representative.

Protection of a forensic expert against external influences may vary, particularly, it can be about providing the expert conclusion from forensic science institution, and not from the forensic expert as a natural person. The following responses were received to the survey question about attitude to the procedure of providing a forensic report on behalf of a forensic science institution: this procedure should be envisaged in some cases: 98 forensic experts (57%); there is no need for such a procedure: 70 forensic experts (40.7%); other opinions: 4 forensic experts (2.3%).

In the course of the survey, forensic experts were also asked questions about their understanding of the essence of specific expertise. "Specific expertise refers to knowledge and skills in fields such as science, technology, art, and crafts, as well as specific types of activities that are essential for use in court proceedings" ⁸. As stated by respondents, specific expertise is: knowledge in the field of science, technology, art, crafts, etc.: 96 forensic experts (55.8%); knowledge in specific types of activities: 68 forensic experts (39.5%); legal knowledge: 3 forensic experts (1.7%); general

6 Шепітько В. Ю. Проблеми використання спеціальних знань крізь призму сучасного кримінального судочинства в Україні. *Судова експертиза*. 2014. № 1. С. 11–16.

7 Про судову експертизу : Закон України від 25.02.1994 р. № 4038-XII (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/4038-12#Text> (date accessed: 20.12.2022).

8 Авдеева Г. К. Знання спеціальні / Велика українська юридична енциклопедія : у 20 т. Т. 20: Криміналістика, судова експертиза, юридична психологія / редкол.: В. Ю. Шепітько (голова) та ін. Харків, 2018. С. 325.

knowledge: 2 forensic experts (1.2%); other: 3 forensic experts (1.7%).

The use of specific expertise is regulated in various court proceedings: criminal, civil, economic, administrative or constitutional, during notarization procedure or execution of enforcement proceedings. Performing forensic examination is governed by the Law of Ukraine *On Judicial Examination*⁹, Criminal Procedural Code of Ukraine¹⁰, Civil Procedure Code of Ukraine¹¹, Code of Commercial Procedure of Ukraine¹², Code of Ukraine on Administrative Offenses¹³, Law of Ukraine *On Enforcement Proceedings*¹⁴ etc., as well as by the Instructions on Appointment and Conduct of Forensic Examinations and Expert Research¹⁵ and other legal regulations. The comparative analysis demonstrates that statutory regulation do not have uniform approaches, or the law only mentions the possibility of appointing forensic examination and submitting objects for appropriate research. Such problems should be eliminated. A certain unification is also required in case of conducting forensic examinations in different forensic science institutions and departmental services. This applies to unification of expert meth-

odologies, application of expert methods or technologies. The result of forensic examination should not depend on where it is conducted¹⁶. Reforming forensic examination system is complex and involves introduction of changes to the basic legislation on expert support of justice and related institutions and improvement of procedural legislation¹⁷.

The survey of forensic experts made it possible to find out that a substantial number of forensic experts (76 forensic experts, i.e. 44.2%) are not satisfied with statutory regulation of forensic expert activity. In addition, 36 respondents (20.9%) stressed that the Law of Ukraine *On Judicial Examination* does not correspond to modern realities; while 34 forensic experts (19.8%) emphasized that certain changes are needed in Ukrainian procedural legislation regulating appointment and conduct of forensic examinations; 34 forensic experts (19.8%) responded that it is necessary to change approaches to specific expertise in adversarial proceedings; 31 forensic experts (18%) emphasized that it is essential to harmonize Ukrainian legislation in the aspect of its European integration under current conditions; 28 forensic experts (16.3%)

- 9 Про судову експертизу ... URL: <https://zakon.rada.gov.ua/laws/show/4038-12#Text> (date accessed: 20.12.2022).
- 10 Кримінальний процесуальний кодекс України від 13.04.2012 р. № 4651-VI (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text> (date accessed: 20.12.2022).
- 11 Цивільний процесуальний кодекс України від 18.03.2004 р. № 1618-IV (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/1618-15#Text> (date accessed: 20.12.2022).
- 12 Господарський процесуальний кодекс України від 06.11.1991 р. № 1798-XII (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/1798-12#Text> (date accessed: 20.12.2022).
- 13 Кодекс України про адміністративні правопорушення від 07.12.1984 р. № 8073-X (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/80731-10#Text> (date accessed: 20.12.2022).
- 14 Про виконавче провадження : Закон України від 02.06.2016 р. № 1404-VIII (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/1404-19#Text> (date accessed: 20.12.2022).
- 15 Інструкція про призначення та проведення судових експертиз та експертних досліджень : затв. наказом Мін'юсту України від 08.10.1998 р. № 53/5 (зі змін. та доп.). URL: <https://zakon.rada.gov.ua/laws/show/z0705-98#Text> (date accessed: 20.12.2022).
- 16 Шепітько В. Ю. Проблеми використання спеціальних знань ... С. 14.
- 17 Ключев О., Сімакова-Єфремян Е. Ор. cit. DOI: [10.33498/louu-2021-08-028](https://doi.org/10.33498/louu-2021-08-028) (date accessed: 20.12.2022).

highlighted that it is vital to unify by-laws of various departmental services; 11 forensic experts (6.4 %) stressed that there is a need to demonopolize forensic science in Ukraine; 6 forensic experts (3.5 %) provided other reasons.

Even the title of the Instructions on the Appointment and Conduct of Forensic Examinations and Expert Research raises certain doubts. The question is, what is the difference between forensic examination and expert research? Indeed, it is the same thing. In fact, compilers of this legal regulation (with regard to the *expert research* term) aimed to regulate the activity of a specialist (or evaluator) rather than a forensic expert. In this context, one can agree with the need to properly regulate specialists' activities, to determine the procedural essence of the specialist's conclusion or his/her written consultation.

Forensic examination is a procedural form of using specific expertise and scientific and technical achievements in legal proceedings: *"Forensic examination is research by a forensic expert based on specific expertise about material (materialized) objects (physical evidence) and various types of materials and documents containing evidentiary information, in order to establish factual data that are essential for proper case (proceedings) settlement"*¹⁸.

During the survey, forensic experts' positions as to relationship between forensic examination and forensic expert activity were clarified. The majority of forensic experts (102: 59.3 %) believe that forensic examination and forensic expert research are identical concepts; 59 forensic experts (34.3 %): that forensic examination is broader than forensic expert research;

6 forensic experts (3.5 %) emphasized that expert research is broader than forensic examination; 5 experts (2.9 %) had a different opinion.

In legal regulations attempts are made to classify forensic examinations. Such a class of forensic examinations as criminalistics expert examination deserves special attention. In particular, the Scientific and Methodological Guidelines on the Preparation and Appointment of Forensic Examinations and Expert Research¹⁹ note that criminalistics expert examinations are those raising certain doubts as to their origin: forensic linguistic examination of speech; examination of holograms; examination of materials, substances and products; forensic biological examination, etc. Thus, we have an arbitrary approach to classification of forensic examinations. Under such an approach, any forensic examination can be viewed as criminalistics expert examination. Furthermore, Art. 7 of the Law of Ukraine *On Judicial Examination* stipulates that forensic expert activities related to conduct of forensic, forensic medical and forensic psychiatric examination are performed solely by state specialized institutions.

The survey made it possible to clarify the attitude of forensic experts towards classification of forensic examinations and separation of forensic examinations. Out of the total respondents, 97 forensic experts (56.4 %) answered positively as to whether there is a need to separate forensic examinations in modern conditions; while 75 forensic experts (43.6 %) answered negatively.

Currently, national forensic science institutions must interact with forensic

18 Авдеева Г. К., Шепітько В. Ю. Експертиза судова / Велика українська юридична енциклопедія С. 256—257.

19 Науково-методичні рекомендації з питань підготовки та призначення судових експертиз та експертних досліджень : затв. наказом Мініюсту України від 08.10.1998 р. № 53/5. URL: <https://zakon.rada.gov.ua/laws/show/z0705-98#Text> (date accessed: 20.12.2022).

science institutions (organizations, laboratories, centers) of other countries. International cooperation of forensic science institutions is vital for exchange of experience, skill upgrading of specialists working in forensic science institutions, taking into account current achievements of science and technology, creation of standardized expert methods. An important focus of cooperation in the field of forensic science is creation and operation of the European Network of Forensic Science Institutes. The success of forensic expert activity is positively influenced by the development of relations within the European Network of Forensic Science Institutes (hereinafter referred to as ENFSI), which involves solving issues of standardization and unification of forensic expert activities, holding thematic conferences, seminars and symposia, exchanging expert methods, technologies and reference materials²⁰.

The majority of interrogated forensic experts (164, or 95.3 %) are inclined to think about the importance for international cooperation in implementation of forensic expert activities. In particular, according to their views, such cooperation may take form of membership in international expert organizations (for example, ENFSI): 94 forensic experts (54.7 %); in provision of software and technical support by foreign colleagues: 83 forensic experts (48.3 %); in performing joint scientific research on forensic science: 77 forensic experts (44.8 %); in joint scientific activities related to forensic science: 70 forensic experts (40.7 %); in conducting commission forensic examina-

tions with involvement of foreign experts: 63 forensic experts (36.6 %); in improving the quality of forensic examination services: 52 forensic experts (30.2 %); in inviting foreign experts to conduct forensic examinations: 47 forensic experts (27.3 %); in joint publication of research papers: 46 forensic experts (26.7 %); 3 forensic experts (1.7 %) noted other reasons.

The results of expert survey indicate the need to improve the procedure for appointing forensic experts. To the question of whether there is a need to notify a forensic expert of criminal liability for providing a misleading conclusion or to make him swear an oath every time, the following answers have been received: it is advisable to leave the existing procedure: 83 forensic experts (48.3 %); it is necessary to abandon this practice since criminal liability is provided by law: 54 forensic experts (31.4 %); it is expedient to streamline this procedure: 31 forensic experts (18 %); other reasons: 4 forensic experts (2.3 %).

Changes in legislation aim to improve the quality and optimize the processes of forensic expert activities, prevent provision of misleading (false) conclusions, and reduce errors in forensic expert practice. Currently in Ukraine, urgent measures are being taken to develop a number of draft laws related to the reform of forensic expert activities and the introduction of peer-review of forensic reports. In view of this, a few questions arise: what is the purpose of such a peer-review, who benefits from it, who evaluates the forensic report? The question concerning the procedural

20 Заковирко О. М. Європейська мережа судово-експертних установ (ENFSI): історія створення та перспективи розвитку. Актуальні питання стандартизації судово-експертного забезпечення правосуддя в Україні. Перспективи розвитку : мат-ли міжнар. наук.-практ. конф., присвяч. 105-річ. судов. експерт. в Укр. та 95-річ. з дня народж. акад. М. Я. Сегая (Київ, 04—05.07.2018). Київ, 2018. С. 114 ; Клименко Н. І., Купрієвич О. А. Міжнародне співробітництво судово-експертних установ. Вісник кримінального судочинства. 2015. № 4. С. 130—134. URL: http://nbuv.gov.ua/UJRN/vkc_2015_4_19 (date accessed: 20.12.2022) ; Лопата О. Зміст, завдання та форми міжнародного співробітництва у сфері судово-експертної діяльності. *Visegrad Journal on Human Rights*. 2016. Aug. P. 97.

essence of forensic report peer-review is of particular importance. A forensic report is a source of evidence, but what is peer-review? In current conditions, one of the peculiarities of evaluating forensic report is the need to specifically motivate grounds on which the conclusion is rejected. Additionally, if there are doubts concerning forensic examination results, it is deemed expedient to appoint and conduct a re-examination, involve experts' commission, and conduct the forensic expert's interrogation in court. The survey of forensic experts revealed a conscientious attitude of specialists to their activities and forensic examination results. Most agree on reviewing the expert conclusion by another forensic expert (group of forensic experts): 102 forensic experts (59.3%) responded positively, 56 forensic experts (32.6%) responded negatively, 14 forensic experts (8.1%) expressed a different opinion.

Efficiency of forensic expert activity is closely linked to timelines of conducting forensic examination. Based on the survey results: 118 forensic experts (68.6%) positively estimate reasonable timelines for conducting forensic examination as it enables to properly organize activities; 46 forensic experts (26.7%) have a negative attitude since such timelines do not address realities, as well as other 8 forensic experts (4.7%): since reasonable timelines for conducting forensic examination are also called those exceeding 90 days. The survey revealed the attitude of forensic experts towards the procedural action of interrogating a forensic expert in court. "Interrogation of the forensic expert in court is an independent judicial action requiring the forensic expert to provide explanations regarding the forensic examination performed and results contained in a forensic

report"²¹. Most of forensic experts (119 i.e., 69.2%) were interrogated during a trial. Among them, 74 forensic experts (43%) expressed a negative attitude towards the procedural action of interrogation in court, believing that it is unnecessary since the expert's position is already stated in a conclusion (forensic report). On the other hand, 40 forensic experts (23.3%) considered interrogation of a forensic expert to be necessary, while 5 forensic experts (2.9%) gave other reasons.

Conducting forensic examinations involves the application of various methods, methodologies and technologies. In particular, *"methodology of conducting forensic examination is a set of guidelines on organization and fulfillment by a forensic expert of her/his professional functions while forensic examination with the purpose of compiling his/her forensic report or developing expert opinion"*²².

The survey of forensic experts helped to determine principles that they follow when selecting research methods during a forensic examination. The following answers have been obtained: 88 forensic experts (51.2%) use the expert methodology available in the electronic Register of Forensic Examination Methodologies (hereinafter referred to as *the Register of Methodologies*); 80 forensic experts (46.5%) choose methods depending on their area of specific expertise and specific research subject; 3 forensic experts (1.7%) use their own expert methodology; and 1 forensic expert (0.6%) gave another response.

The Register of Methodologies was introduced in order to optimize forensic experts' work. Art. 8 of the Law of Ukraine *On Judicial Examination* states that *"the methods of conducting forensic examination (excluding forensic medical and forensic*

21 Шепітько М. В., Шепітько В. Ю. Допит експерта в суді / Велика українська юридична енциклопедія С. 194.

22 Шепітько В., Шепітько М. Кримінальне право С. 286.

psychiatric) are subject to attestation and state registration in the manner prescribed by the Cabinet of Ministers of Ukraine”²³. Survey results demonstrated how forensic experts perceive the current Register of Methodologies: needs improvement: 70 forensic experts (40.7%); has great practical importance: 64 forensic experts (37.2%); does not contain a concise overview of expert methodologies: 34 forensic experts (19.8%); 4 forensic experts (2.3%) gave other reasons.

According to the survey results, the attitude of forensic experts to the practice of preparing an exhaustive forensic report (with the provision of the research part) has been clarified: it is essential to adhere to the existing practice: 136 forensic experts (79.1%); it is vital to give up on the practice of providing exhaustive conclusions and only give answers to addressed questions: 35 forensic experts (20.3%); 1 forensic expert (0.6%) expressed another opinion.

Forensic expert activity is considered a cognitive activity. The purpose of the survey was to determine the methods of cognition used by forensic experts during the examination process. Specifically, when asked whether forensic experts put forward versions during forensic examination, 110 forensic experts (64%) answered positively, 58 forensic experts (33.7%) answered negatively, and 4 forensic experts (2.3%) expressed a different opinion.

In current conditions, forensic examinations are associated with innovative approaches and information technologies use. According to the survey results, 92 forensic experts (53.5%) use the automated expert workstation in their practice, 75 forensic experts (43.6%) do not use it, 5 forensic experts (2.9%) expressed another opinion.

Conclusions

Stemming from the results of forensic experts' survey, potential ways to optimize forensic expert activities in Ukraine have been identified. The paper addresses the following needs: making changes to legal regulations that govern forensic expert activity, unifying provisions that regulate conduct of forensic examinations, bringing expert support of justice up to modern requirements and European standards, improving the quality of forensic expert activity.

The attitude of forensic experts to a possible change in procedural and substantive issues of appointment and conduct of forensic examinations has been determined: a warning of criminal liability for providing a misleading conclusion or constantly taking the forensic expert under an oath; preparation of a peer-review for a forensic report (peer-reviewing procedure); refusal to consider an exhaustive (detailed) forensic report (with provision of the research unit); providing forensic report from a forensic science institution; interrogation of the forensic expert in court, etc.

In current conditions, international cooperation in the field of forensic activity is especially important. The performed research helped to determine the most perspective avenues of international cooperation within forensic expert activities: providing software and technical support; conducting joint researches and commission forensic examinations with participation of foreign forensic experts; carrying out joint scientific events on forensic science; improving quality of forensic examination by inviting foreign experts to perform forensic examinations; preparing joint scientific events. The importance of interaction

²³ Про судову експертизу ... URL: <https://zakon.rada.gov.ua/laws/show/4038-12#Text> (date accessed: 20.12.2022).

between forensic science institutions in Ukraine within ENFSI is substantiated.

The role of the Register of Methodologies for forensic expert activity and the need for its improvement are substantiated. The necessity of using electronic resources and automated workstations in a forensic expert's work is argued.

Судова експертиза та судово-експертна діяльність: погляд крізь призму думок експертів
Валерій Шепітько

Досліджено феномен судової експертизи та визначено шляхи оптимізації експертної практики в Україні за допомогою узагальнення думок судових експертів. За результатами опитування експертів розглянуто проблеми нормативно-правового регулювання судової експертизи; обґрунтовано необхідність уніфікувати положення, якими регламентовано проведення судової експертизи; проаналізовано засоби здійснення експертної діяльності (методи, методики, технології). Визначено позиції судових експертів із окремих процедурних і змістовних питань призначення та проведення судових експертиз. Аргументовано роль автоматизованого робочого місця судового експерта й електронних реєстрів в експертній практиці (Реєстру атестованих судових експертів і Реєстру методик проведення судових експертиз). Констатовано можливості підвищення якості судової експертизи та розглянуто сучасні тенденції міжнародної співпраці в галузі судово-експертної діяльності. Підкреслено важливість взаємодії експертних установ України в межах Європейської мережі судово-експертних установ. Мету статті обумовлено потребою окреслити напрями розвитку судової експертизи в Україні в сучасних умовах та оптимізації судово-експертної діяльності, а також визначити шляхи вдосконалення експертної практики за допомогою узагальнення думок судових експертів.

пертів. Використано загальнонаукові та спеціальні методи дослідження.

Ключові слова: *судова експертиза; судово-експертна діяльність; оптимізація судово-експертної діяльності; міжнародна співпраця в галузі судової експертизи; експертна практика; висновок експерта; судовий експерт.*

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References

- Avdieieva, H. K. (2018). Znannia spetsialni [Specific expertise]/ *Velyka ukrainska yurydychna entsyklopediia* : u 20 t. T. 20: Kryminalistyka, sudova ekspertyza, yurydychna psykholohiia / redkol.: V. Yu. Shepitko (holova) ta in. Kharkiv [in Ukrainian].
- Avdieieva, H. K., Shepitko, V. Yu. (2018). Ekspertyza sudova [Forensic science]/ *Velyka ukrainska yurydychna entsyklopediia* : u 20 t. T. 20: Kryminalistyka, sudova ekspertyza, yurydychna psykholohiia / redkol.: V. Yu. Shepitko (holova) ta in. Kharkiv [in Ukrainian].
- Kamynskyi, M. K. (2011). Spetsyalnie znanyia — syl'a? [Specific expertise: power?] *Kryminalist pershodrukovanyi*. № 3 [in Ukrainian].
- Kliuiev, O., Simakova-Yefremian, E. (2021). Doktrynalni pidkhody do sudovoi ekspertyzy v Ukraini [Doctrinal approaches to forensic

- science in Ukraine]. *Pravo Ukrainy*. DOI: [10.33498/louu-2021-08-028](https://doi.org/10.33498/louu-2021-08-028) [in Ukrainian].
- Klymenko, N. I., Kuprievych, O. A. (2015). Mizhnarodne spivrobitnytstvo sudovo-ekspertnykh ustanov [International cooperation of forensic expert institutions]. *Visnyk kryminalnoho sudochynstva*. № 4. URL: http://nbuv.gov.ua/UJRN/vkc_2015_4_19 [in Ukrainian].
- Lopata, O. (2016). Zmist, zavdannia ta formy mizhnarodnoho spivrobitnytstva u sferi sudovo-ekspertnoi diialnosti [Content, tasks and forms of international cooperation in the field of forensic science]. *Visegrad Journal on Human Rights*. Aug. [in Ukrainian].
- Shepitko, V. Yu. (2014). Problemy vykorystannia spetsialnykh znan pryzmu suchasnogo kryminalnoho sudochynstva v Ukraini [Problems of using specific expertise through the prism of modern criminal justice in Ukraine]. *Sudova ekspertyza*. № 1 [in Ukrainian].
- Shepitko, V. Yu. (2022). Formuvannia doktryny kryminalistyky ta sudovoi ekspertyzy v Ukraini — shliakh do yedynoho yevropeiskoho kryminalistychnoho prostoru [Formation of the doctrine of criminalistics and forensic science in Ukraine is the way to a unified European forensic space]. *Pravo Ukrainy*. № 2 [in Ukrainian].
- Shepitko, M. V., Shepitko, V. Yu. (2018). Dopyt eksperta v sudi [Interrogation of the expert in court] / *Velyka ukraïnska yurydychna entsyklopediia* : u 20 t. T. 20: Kryminalistyka, sudova ekspertyza, yurydychna psykhologia / redkol.: V. Yu. Shepitko (holova) ta in. Kharkiv [in Ukrainian].
- Shepitko, V., Shepitko, M. (2021). Doktryna kryminalistyky ta sudovoi ekspertyzy: formuvannia, suchasnyi stan i rozvytok v Ukraini [Doctrine of criminalistics and forensic examination: formation, current state and development in Ukraine]. *Pravo Ukrainy*. № 8. DOI: [10.33498/louu-2021-08-012](https://doi.org/10.33498/louu-2021-08-012) [in Ukrainian].
- Shepitko, V., Shepitko, M. (2021). *Kryminalne pravo, kryminalistyka ta sudovi nauky* [Criminal law, criminalistics and forensic sciences]: entsyklopediia. Kharkiv [in Ukrainian].
- Zakovyrko, O. M. (2018). Yevropeiska merezha sudovo-ekspertnykh ustanov (ENFSI): istoriia stvorennia ta perspektyvy rozvytku [The European Network of Forensic Science Institutes (ENFSI): history of creation and prospects for development]. *Aktualni pytannia standartyzatsii sudovo-ekspertnoho zabezpechennia pravosuddia v Ukraini. Perspektyvy rozvytku* : mat-ly mizhnar. nauk.-prakt. konf., prysviach. 105-rich. sudov. ekspert. v Ukr. ta 95-rich. z dnia narodzh. akad. M. Ya. Sehaia (Kyiv, 04—05.07.2018). Kyiv [in Ukrainian].
- Zhuravel, V. A., Shepitko, V. Yu. (2021). Rozvytok kryminalistyky ta sudovoi ekspertyzy v Ukraini: nablyzhennia do yedynoho yevropeiskoho prostoru [Development of criminalistics and forensic science in Ukraine: approaching a unified European space] / *Pravova nauka Ukrainy: suchasnyi stan, vyklyky ta perspektyvy rozvytku* : monohrafiia. Kharkiv [in Ukrainian].
- Shepitko, V. (2023). Forensic Science and Forensic Expert Activity: a View Through the Prism of Forensic Experts' Opinions. *Theory and Practice of Forensic Science and Criminalistics*. Issue 1 (30). P. 12—22. DOI: [10.32353/khrife.1.2023.02](https://doi.org/10.32353/khrife.1.2023.02).