Scientific Research is the Guarantee to Sustainable Development of Forensic Science in Ukraine

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The implementation of innovations is a crucial tool for stimulating the development of any process or phenomenon. This is particularly important for developing countries, to which Ukraine belongs, as innovative developments and new knowledge empower a state to enhance the productivity of its economy, thereby providing its competitiveness in global markets. It is precisely this stimulation that fosters economic growth while simultaneously ensuring employment for the population. In turn, the development and implementation of innovations effectively contribute to future scientific research and technical explorations.

To overcome urgent challenges faced by forensic experts in their work, it is only possible through transparent disclosure and productive discussion these issue among leading researchers, forensic experts from state specialized institutions of forensic examinations, and private forensic experts. International experience in forensic science attests that the guarantee of any advancement is, among other things, the stimulation of scientific research and technical developments.

The generalization of expert practice eloquently demonstrates the direct connection between modern forensic science and the education of future specialists. As an integral part of the justice system, forensic science ensures a high level of professionalism and responsibility among experts and guarantees
citizens the right to qualified and independent conclusions. These conclusions are oriented towards the utilization of the latest advancements in science and technology. The enormous potential of forensic scientific research institutions in Ukraine is embodied not only in scientific events taking place at the highest level but also in the implementation and successful realization of scientific work, as well as the development of methodologies in practice.

Like any other field, forensic science in each country is characterized by national peculiarities, although in countries of the European Union, the law is maximally harmonized: in recent decades, there has been a trend in Europe towards converging legal systems. The basis for this convergence is universal legal values: ideas of human rights, social justice, the rule of law, the legal state, and others, which are gaining increasing prevalence in the modern world. At the same time, not only are the unique and distinctive features of national legal systems preserved, but they are also deepened, largely due to historical ethnical peculiarities.

The most important aspect of this activity is to establish cooperation and exchange of acquired experience and advanced technologies, to explore new ways and approaches to cooperation because science is the guarantee to harmonious development, cooperation, and the exchange of experience. Furthermore, the science unites a powerful community of like-minded individuals capable of actively advancing forensic science and criminalistics in Ukraine.

National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» constantly contributes to the development of scientific knowledge, exchange of experience, and establishment of relations with foreign forensic expert institutions and international associations of such institutions.

One of the ways to interact with the international scientific community is the Research Paper Collection “Theory and Practice of Forensic Science and Criminalistics” which is indexed in well-known international science-metric databases: Academic Scientific Journals Indexing, Bielefeld Academic Search Engine (BASE), CORE, Crossref, Directory of Open Access Journals (DOAJ), Directory of Open Access Scholarly Resources (ROAD), Directory of Research Journals Indexing (DRJI), ERIH PLUS, Eurasian Scientific Journal Index (ESJI), Europub, Index Copernicus International, MIAR, Polska Bibliografia Naukowa, RefSeek, ResearchBib, Ulrich’s, WorldCat, Google Scholar, as well as in the Register of Scientific Publications of Ukraine and on the website of DOI (digital object identifiers). Full-text online versions of the collection are available on the Internet on the platforms of the V. I. Vernadskyi National Library of Ukraine, libraries of forensic science institutions of the Ministry of Justice of Ukraine, higher education institutions of the Ministry of Internal Affairs of Ukraine, etc.

Let us proceed to the content presented in the 33rd issue of the “Theory and Practice of Forensic Science and Criminalistics”. All scientific papers in the Research Paper Collection are traditionally divided into two main groups: Research Papers and Case Notes.

The section with research papers begins with an article by Candidates of Law, Associate Professors Larysa Bielik and Antonina Cheremnova (both from Ukraine) on the topic: “Forensic Disinformation as a Tactical and Forensic Means of Detecting and Solving Corruption Criminal Offenses”. It has been known that Article 45 of the Criminal Code of Ukraine distin-
guishes two groups of corruption criminal offenses, during the detection and disclosure of which suspects (accused) provide false information about the method of preparation, and commission of their criminal activity. The researchers compared the essence of criminal and forensic disinformation and examined the practice of the US Supreme Court regarding the legality of using disinformation by police officers in identifying racketeers and corrupt organizations.

The authors’ criteria for the use of forensic disinformation by law enforcement officers, as well as its rules, are quite intriguing: 1) focus on the task; 2) validity, timeliness, mobility, efficiency, and flexibility; 3) compliance with the plan and the approved plan; 4) personnel, financial and logistical support; 5) situational validity, taking into account the personality of the offender; 6) creative approach with due regard for possible changes in the situation; 7) visualization.

Authors of the following research paper on “Identification of Person Suspected of Committing a Cybercrime Using Wi-Fi Technologies” are Yuriy Nizovtsev, Candidate of Law; Oleg Parfylo, Candidate of Law; Oleh Plakhotnik, Candidate of Law, Docent (all from Ukraine). They thoroughly examined various methodological recommendations for using Wi-Fi routers to identify a mobile device through forensic examination. The article emphasized that in case of committing cybercrime using a Wi-Fi router, a professional and forensic expert can use technical information from the Wi-Fi router to identify the suspect’s mobile device by MAC address. Researchers considered problematic issues of identifying signs of hiding digital traces during cybercrime commission and outlined a detailed procedural procedure for obtaining access to Wi-Fi routers to identify suspects during inspection, search, and investigation of cybercrimes. It should be noted that data from Wi-Fi will not only help identify criminal suspects in cybercrime investigations: this method can be universal for identifying criminal suspects with incomplete data. The provisions and conclusions of the author’s research will be useful in investigative, investigative and forensic activities.

In the following research paper of this section, Alexei Horlachuk, Candidate of Economics (Ukraine) explores “The Establishment and Development of Forensic Economic Examination in Ukraine”. Forensic science is considered as an important state institution that indirectly reflects the state of economic relations, as a forensic expert investigates them within the procedural field, using the methodological foundation of economic sciences. The author examines stages of forensic economic examination development using the criterion of the transformation of economic relations. Due attention has been given to issues of economic property as the driving force behind economic relations. Since economic relations are directly linked to the issues of property rights, the consequences of violations of these rights in the economic sphere are the subject of an investigation by forensic economic examination appointed by judicial investigative authorities. The stages of the development of forensic accounting examination are analyzed, and the transformation of economic relations on a global and national scale is considered as a criterion for periodization, the role of the state in the development of economic sciences and forensic accounting examination is revealed.

One more significant research in this Collection is the research paper “Forensic Veterinary Medicine Methods for
Determining Defects in Veterinary Care” by Ivan Yatsenko, Doctor of Veterinary Medicine (Ukraine). The author presents an original methodology of forensic veterinary examination of defects in veterinary care which is divided into five stages: familiarization and training one, managerial and informational ones, research and analytical ones, generalization and evaluation ones and final one. Forensic veterinary examination should determine the defect existence and provide conclusion on availability or lack of a cause-effect relation between the lack of veterinary care and a negative consequence for the animal and the main cause of such a consequence. Attention is focused on the fact that the forensic veterinary commission should assess timeliness, volume and validity of performed diagnostic and medical and tactical veterinary measures, correctness of surgical interventions or veterinary manipulations and their compliance with current regulatory documents. The proposed author’s methods unify approaches to forensic research, minimizes subjectivity of forensic assessment of actions of veterinarians; expands the cognitive capabilities of pre-trial investigation bodies and the court; contributes to improvement of criminal and administrative legislation of Ukraine in terms of legal responsibility of veterinary workers for professional offenses. The key issues arising due to improper performance of professional duties by veterinarians are highlighted and ways to their solving are proposed.

Case Note Section begins with the article by Mykhaylo Shepitko, Doctor of Law, Professor (Ukraine), and Kateryna Latysh, Candidate of Law, Docent (Republic of Lithuania) who have researched criminal policy in the field of digital counterpropaganda during the war. With the aim of shaping an effective criminal policy, the authors consider it expedient not only to take into account the rapid technological development and the expansion of the digital space but also to comprehensively utilize them to counteract hostile digital propaganda during wartime. The scientists propose a set of measures aimed at preventing propaganda, its identification, prosecution, and punishment—activities that aim to spread misinformation, manipulate public opinion, and fuel hostility during a period of armed conflict.

The article by Kateryna Dziubak, Candidate of Economic (Ukraine) on the topic “Legal Responsibility Issue of Forensic Expert in the Field of Law” deals with the changes to procedural legislation of Ukraine in 2017 added a new participant in lawsuit, namely: legal expert. Such an expert can be a person who has an academic degree and is a specialist in the field of law. Legislator did not put forward any other requirements for the new participant in lawsuit, that caused lively discussions, in particular, on the question of whether an expert in the field of law bears legal responsibility in general and what exactly. In view of the above, the purpose of this article is to determine the legal responsibility of forensic expert in the field of law. The author describes the rights and duties of an expert in the field of law, provided for by procedural legislation of Ukraine, compared of the procedural status of a forensic expert conclusion in the field of law with the conclusion of forensic research. Possible types of offenses by an expert in the field of law are proposed to be systematized into three groups: civil, organizational, and procedural ones. Four types of legal responsibility of forensic expert in the field of law are characterized: disciplinary, civil, administrative and criminal ones.
The article by **Iryna Okunevych** (Ukraine), considers the procedure for calculating and paying financial support and extra compensation for military personnel in Ukraine during martial law. The legal regulation of financial support and extra compensation for military personnel in Ukraine is dedicated to numerous legislative and by-law norms. The author systematized the grounds, procedure, and conditions for accrual and financial compensation, as well as extra compensation for military personnel during martial law; provided her own vision regarding the definition of the concept of “financial support for military personnel”; highlighted a circle of controversial issues related to financial support and extra compensation, for the resolution of which the military personnel turns to the court. The conclusions of the scientific research are based on an in-depth analysis of the current Ukrainian legislation, court practice and scientific literature, which reveal the issue on financial support and extra compensation for military personnel.

In the article by **Kateryna Osypenko** (Ukraine), titled “Selection of Similar Objects While Valuation and Forensic Structural Engineering to Determine Market Value of Civil Buildings”, problematic issues faced forensic experts specializing in “Determination of the Appraisal Value of Buildings and Structures” are addressed. The author emphasizes that experts most often apply market and non-market valuation methods, provides characteristics of the consumer and exchange value forms of real estate, as well as the current National Property Valuation Standards, which are mandatory for compliance by entities engaged in valuation activities when assessing real estate objects of all ownership forms in any circumstances. The researcher lists the main types of values and methodological approaches to the valuation of civil buildings with premises of various functional purposes, outlines the main types of individual buildings, and highlights the features of selection when determining their market value as analogs of buildings for sale, including premises of various functional purposes. Peculiarities of the application of the method of building identification according to the state classifier of buildings and structures: ДК 018-2000 and the algorithm of actions of forensic experts for selecting similar objects are highlighted with an illustrative example of its application.

The next article is authored by our foreign colleague **Teodore Giorgobiani**, titled “Assessing the Russian-Chechen Wars and Their Impact on Regional Stability”. The author systematically examines the Russian-Chechen wars from diverse perspectives that occurred in the 1990s and lasted for almost a decade. The goal is to identify issues related to the behavioral dynamics of conflict participants and the negative consequences of war for regional stability. The article emphasizes the need for awareness of these issues and the formulation of informed models of behavior for the Russian Federation. The conflicts between the Russian Federation and Chechen rebellions can be viewed as evidence of Russia’s disregard for international law and as a basis for understanding Russia’s behavior in the contemporary political situation. A comprehensive understanding of the impact these conflicts have had on the region is crucial for grasping Russia’s current political course, analyzing the country’s actions post-Chechen wars, and anticipating its future involvement in conflicts. For a thorough analysis that reveals the complexities of the conflict and its
consequences for political stability, relevant journal articles, research papers, and publications have been carefully examined, and legal and historical documents have been analyzed. Forensic examinations in cases related to the North Caucasus conflict contribute to uncovering the truth. The conclusions of forensic experts document frequent violations of humanitarian laws and human rights by both sides, indicating war crimes and crimes against humanity. The researcher thoroughly examines the legal aspects, emphasizes the potential rights of the Chechens to self-determination, questions the legality of Russian military intervention, explores wars from various perspectives, and highlights the comprehensive significance of their consequences.

This section continues with the article by the team of authors: Sertan Alibekiroğlu (Turkey), Tetiana Droshchenko, and Natalia Serdiuk (both from Ukraine) titled “Particularities of Forensic Study of Criminal Personality”. The authors studied the criminal personality in the light of psychological methods during the detection and solving of crimes, provided information on psychological methods that an investigator should employ, as well as the professional qualities that the investigator should have to directly study the criminal personality. Researchers considered the issue of determining the criminal personality within the field of criminology by examining, during interrogation and other investigative measures, their individual qualities and characteristics reflected in the traces of crimes (in particular, disclosure of personal characteristics of the criminal with the help of psychological techniques and formation of evidence in investigative and operational practice). The authors expounded the boundaries and principles of admissibility of psychological influence on the criminal’s consciousness; outlined morality as a tactical approach to such influence; and proved that properly analyzed biographical data about the suspect provides the investigator with the opportunity to effectively influence the criminal’s value system.

The section of case notes concludes with the manuscript by Yevhen Pivnov (Ukraine) titled “Forensic Road Technical Examination: State and Changes in Accordance with New Tasks of Expert Support of Justice”. It includes detailed analyses of statistical data from expert practice which clearly demonstrates the growth in the number and complexity of road technical examinations performed over the past 8 years. The author outlines factors influencing the results of expert research, and based on this, formulates proposals aimed at the more efficient use of specific expertise to ensure the detection and investigation of crimes, as well as to improve the results of the work of forensic experts in the context of developing a scientific and methodological framework for enhancing the primary form of application of specific expertise - forensic examination.

At the end of the 33rd issue of “Theory and Practice of Forensic Science and Criminalistics”: Research Paper Collection, you will find the Scientific News traditional section. This section provides information about events that have recently occurred in the scientific and forensic-expert spheres.

Editorial Board of “Theory and Practice of Forensic Science and Criminalistics”: Research Paper Collection invites renowned scientists and young scientists from Ukraine and foreign countries, graduate students from higher education institutions and research establishments,
as well as experienced forensic experts and debutantes who have an interest and inclination towards both scientific and practical research in the field of forensic support for justice, to publish their works in our journal.

Together, only together, we will overcome the aggressor, rebuild our state, actively contribute to its prosperity in all spheres, and elevate the expert support of justice in Ukraine to a new level!

Together we will win! Glory to Ukraine!