



# International Scientific and Practical Conference "Modern trends in the development of forensic expertise: theory and practice"

September 28-29, 2023, Yerevan



## Organizers:

National Bureau of Expertises  
of the National Academy of Sciences of  
the Republic of Armenia

Association of chemical toxicological and  
forensic chemical analysis specialists  
(ACTFCAS)

## Venue:

Presidium of the National Academy of  
Sciences of the Republic of Armenia  
Yerevan, Marshal Baghramyan Ave., 24.

National Bureau of Expertises of the  
National Academy of Sciences of the  
Republic of Armenia. 0004, Republic of  
Armenia, Yerevan city, Admiral Isakov  
Ave. 24

## Dear Colleagues!

National Bureau of Expertises of the National Academy of Sciences of the Republic of Armenia and the Association of chemical toxicological and forensic chemical analysis specialists invite you to participate in the International Scientific and Practical Conference "Modern trends in the development of forensic expertise: theory and practice".

Conference date: September 28-29, 2023.

Conference venue: National Bureau of Expertises of the National Academy of Sciences of the Republic of Armenia.

### REGISTRATION FORM\*

First name and surname	
E-mail	
Place of work (name of the organization without abbreviation), position, academic degree, academic title	
Contact phone number (mobile/city)	
Participation Form:	
1. Online (remotely)	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Offline (in person)	Yes <input type="checkbox"/> No <input type="checkbox"/>

\*- registration until 10.09.2023.

REGISTRATION FORMS SHOULD BE SENT TO:

[p.voskanyan@nbe.am](mailto:p.voskanyan@nbe.am) Patvakan S. Voskanyan  
[nky@interanalyt.ru](mailto:nky@interanalyt.ru) Kira Novikova

Organizing Committee:

Co-Chairs : Argam N. Hovsepian (+37410777710)  
Sergey A. Savchuk (+79037409390)

Information at <https://actfcas.ru/> and [www.nbe.am](http://www.nbe.am)

Registration and opening of the conference: from 09 to 10 am on September 28, 2023. at the Presidium of the National Academy of Sciences of the Republic of Armenia, Yerevan, Marshal Baghramyan Ave., 24. The link to the online broadcast will be sent out on September 26-27, 2023. We will be glad to see you among the participants of our conference. The organizing committee is ready to assist in hotel bookings.

## SCIENTIFIC DIRECTIONS OF THE CONFERENCE:

The Conference will include a plenary session and sections in the following areas:

**Section No. 1.** Modern requirements of legal, organizational and methodological support of forensic activity.

**Section No. 2.** Current trends in the development of forensic chemical examinations, including:

- Theoretical and practical aspects of application of liquid chromatography with mass spectrometric detection for analysis of biological objects in chemical-toxicological and forensic chemical analysis;
- Algorithms of joint application of gas and liquid mass spectrometry in the study of biological objects and alcohol-containing liquids;
- Identification and establishment of the structure of new psychoactive substances, their metabolites and improvement of the legal framework for the intersection of their trafficking;
- Determination of volatile poisons in biological objects;
- Quality control of alcoholic beverages and detection of toxic alcohol-containing liquids in illicit traffic;
- New approaches to forensic biochemical investigations;
- Anti-doping analysis ;
- destructive and nondestructive methods of chemical and ballistic expertise;
- Complex forensic-chemical expert studies.

**Section No. 3.** Current trends in the development of forensic medical, forensic biological, forensic genetic, ballistic and trace examination, including:

- Modern aspects of forensic examination of mechanical injuries;
- Modern aspects of forensic biological examination;
- Modern aspects of forensic genetic examination;
- Modern aspects of ballistic expertise;
- Modern aspects of trasological expertise;

- Modern aspects of complex forensic-medical, forensic-biological, forensic-genetic, ballistic and trace examinations.

**Section No. 4.** Current trends in forensic psychiatric and forensic psychological examinations, including:

- Modern aspects of forensic psychiatric evaluation;
- Modern aspects of forensic psychological examination;
- Modern aspects of complex forensic psychiatric and forensic psychological examinations.

**Section No. 5.** Current trends in engineering expertise, including:

- Modern aspects of automobile technical expertise;
- Modern aspects of construction-technical expertise;
- Modern aspects of computer-technical expertise;
- Modern aspects of audio-, video-, photo-technical expertise.
- Modern aspects of complex auto-technical, computer-technical and audio-, video-, photo-technical examinations.

**Section No. 6.** Current trends in soil and biological forensics, including:

- Modern aspects of dendroindication as a basis for detecting the age of harvesting and the vital state of trees;
- Modern aspects of soil examination;
- Modern aspects of material science expertise (fibers, fabrics, etc.).

**Section No. 7.** Modern trends in the development of art, handwriting and document examination, including:

- Modern aspects of art expertise;
- Modern aspects of handwriting examination;
- Modern aspects of document examination;
- Modern aspects of complex art, handwriting and document examinations.

Time	Speaker	Position, place of work	Title of the report
<b>09:00-10:00</b>	<b>28.09.2023 Registration: Presidium of the National Academy of Sciences of the Republic of Armenia Yerevan, Marshal Baghramyan Ave., 24</b>		
<b>Opening of the conference 10:00-10:40</b>			
	<b>Ashot S. Saghyan</b>	The President of the National Academy of Sciences of Armenia	opening of the conference, words of greeting
	<b>Alexey K. Buryak</b>	Director of the Institute of Physical Chemistry and Electrochemistry named after. A.N. Frumkin RAS (IPHE RAS)	words of greeting
	<b>Argam N. Hovsepyan</b>	Director of the "National Bureau of Expertise" of the National Academy of Sciences of the Republic of Armenia	welcome speech
	<b>Vadim S. Poznyak</b>	Head of the State Institution "Scientific and Practical Center" State Committee for Forensic Examinations of the Republic of Belarus "	words of greeting
	<b>Sergey A. Savchuk</b>	Association of chemical toxicological and forensic chemical analysis specialists (ACTFCAS)	words of greeting
<b>28.09.2023 First day of the conference, plenary session. Presidium of the National Academy of Sciences of the Republic of Armenia</b>			
<b>10:40-11:00</b>	<b>Argam N. Hovsepyan</b>	Director of the "National Bureau of Expertise" of the National Academy of Sciences of the Republic of Armenia	National Bureau of Expertise of the Republic of Armenia, objectives, international aspects of activities
<b>11:00-11:20</b>	<b>Vadim S. Poznyak</b>	Head of the State Institution "Scientific and Practical Center" State Committee for Forensic Examinations of the Republic of Belarus "	Development of modern methods of forensic examination in the Republic of Belarus
<b>10:40-11:00</b>	<b>Yuri G. Pokhodnya</b>	Director of the National Anti-Doping Laboratory of the Republic of Belarus, Minsk	Professional testing of laboratories in chemical and toxicological analysis in the Republic of Belarus

Time	Speaker	Position, place of work	Title of the report
<b>28.09.2023 First day of the conference, plenary session. Presidium of the National Academy of Sciences of the Republic of Armenia</b>			
11:00-11:20	<b>Franco Tagliaro</b>	Full professor of Forensic Medicine and Toxicology University of Verona Verona, Italy	Rational collection of biological specimens for rational interpretation of toxicological data in forensic contexts
11:20-11:40	<b>Sergey A. Savchuk</b>	Association of chemical toxicological and forensic chemical analysis specialists (ACTFCAS)	ACTFCAS Multicentre Comparison Trials: confirmed statistics and improving of screening methods.
11:40-12:00	<b>Maya B. Botezatu</b>	Head of the Department of Forensic Toxicology Center for Forensic Medicine Republic of Moldova	Development of new research methods in the Center for Forensic Medicine Republic of Moldova
<b>Coffee break</b>			
<b>28.09.2023 First day of the conference, section 2: "Modern trends in the development of forensic chemical examinations"</b>			
<b>Moderators:</b> Patvakan S. Voskanyan, Deputy Director for Scientific Work National Bureau of Expertise RA, Sergey A. Savchuk ACTFCAS Association.			
12:40-13:00	<b>Anatoly V. Kind</b>	Senior QA Engineer, Quantori, Yerevan	Application of artificial intelligence-based language models to optimize information retrieval in toxicological analysis
13:00-13:20	<b>Nadia Maria Porpiglia</b>	Forensic Medicine and Toxicology department of University of Verona, Italy	CDT, MCV and GGT as potential indicators of the risk of occurrence of alcohol-associated traffic accidents
13:20-13:40	<b>Oleg P. Kadochnikov</b>  <b>Sergey A. Savchuk</b>	Center for Forensic Medical Examination of the Ministry of Health of the Republic of Moldova, Chisinau  Association ACTFCAS	Development and translation of GC-MS and HPLC-MS/MS methods with locked retention times and semi-quantitative assessment

<b>Time</b>	<b>Speaker</b>	<b>Position, place of work</b>	<b>Title of the report</b>
<b>13:40-14:00</b>	<b>Maria A. Gofenberg</b>	Head of the toxicology laboratory at the I Narcological Hospital, Yekaterinburg.	New psychoactive substances identified in 2022-2023 and their implementation in routine methods. Complex cases of toxicological examinations (case reports)
<b>14:00-14:20</b>	<b>Daniil V. Kuznetsov</b>	Head of the toxicology laboratory at the Regional Narcological Hospital, Volgograd.	Monitoring of new psychoactive substances using Internet resources
<b>14:20-14:40</b>	<b>Alexey V. Smirnov</b>	Scientific and Practical Center for Narcology, Moscow	Monitoring the consumption of psychoactive substances based on the results of chemical testing, correlation with the results of information searches
<b>15:00-15:20</b>	<b>Magomed Sh. Aigumov</b> <b>Anastasia P. Yudina</b>	Head of the toxicology laboratory at the Narcological Hospital, Noyabrsk Bureau of Medical Examiners of the Penza Region	Algorithm for confirming trace levels of psychoactive substances during screening analysis of biological objects using HPLC-MS/MS
<b>14:40-15:00</b>	<b>Ruslan A. Yurchenko</b>	Head of Expert Systems Department (AIPSIN), BelHard Group, Minsk	Creation of software and hardware systems based on information systems for identifying new psychoactive substances
<b>15:20-17:30</b>	<b>Round table: "Development of instrumental analysis methods for chemical-toxicological and forensic chemical examinations"</b>		
<b>18:30</b>	<b>Conference dinner</b>		

Time	Speaker	Position, place of work	Title of the report
<b>29.09.2023 Second day of the conference, section 2: "Modern trends in the development of forensic chemical examinations"</b>			
<b>Moderators:</b> Patvakan S. Voskanyan, Deputy Director for Scientific Work of the National Bureau of Expertise of the Republic of Armenia, Yuri G. Pokhodnya, Director of the National Anti-Doping Laboratory of the Republic of Belarus.			
10:00-11:00	<b>Mikhail V. Vishnevsky</b>	CEO Fungilife LLC	Mushrooms and doping. Poisonous mushrooms of Armenia.
11:00-12:00	<b>Magomed Sh. Aigumov</b>	Head of the toxicology laboratory at the I Narcological Hospital, Noyabrsk	Determination of toxins of Amanita phalloides, Amanita muscaria and psilocybin mushrooms by chromatography mass spectrometry
	<b>Yuri G. Pokhodnya</b>	Director of the National Anti-Doping Laboratory of the Republic of Belarus, Minsk	
	<b>Daniil V. Kuznetsov</b>	Head of the toxicology laboratory at the INarcological Hospital, Volgograd	
12:00-12:40	<b>Coffee break</b>		
12:40-13:00	<b>Andrey B. Mezinov,</b>	CEO Femteko LLC	Modernization and development of compact robots for laboratory analysis
	<b>Andrey S. Savchuk</b>	student of the National Research University Higher School of Economics Faculty of Computer Science	
13:00-13:40	<b>Inna V. Sukhova</b>	Head of the testing laboratory, Stavropol	The role of cognac and whiskey collections in establishing their authenticity. Assessment of the quality of raw materials for the production of alcoholic beverages
13:40-14:00	<b>Oleg P. Kadochnikov</b>	Center of Forensic Medical Examination of the Ministry of Health of the Republic of Moldova, Chisinau	Comparative study of cognacs from Moldova and Armenia
14:00-14:40	<b>Liliya N. Rizvanova</b>	Head of Toxicology Laboratory Nizhnevartovsk Psychoneurological Hospital	Determination of ethanol, volatile poisons and glycols using gas chromatography-mass spectrometry



<b>Time</b>	<b>Speaker</b>	<b>Position, place of work</b>	<b>Title of the report</b>
<b>14:40-15:00</b>	<b>Alexander V. Kirichek</b> <b>Liana A. Sargsyan</b>	Mendeleev Chemical-Technological University .	Study of the postmortem formation of ethanol and aliphatic alcohols in biological objects and study of the dynamics of their concentrations changing
<b>15:00-15:20</b>	<b>Anastasia P. Yudina</b>	Bureau of Medical Examiners of the Penza Region	Development and upgrade of HPLC-MS/MS methods for non-routine cases of forensic research
<b>15:20-15:40</b>	<b>Samvel S. Barseghyan</b>	Head of the Department of Forensic Chemical and Chemical-Toxicological Expertise at the Russian Center for Forensic Medical Expertise	Experience in using high-resolution mass spectrometry with orbitrap technology to solve problems in analytical forensic toxicology
<b>15:40-16:00</b>	<b>Inna O. Chizhikova</b>	Moscow Bureau forensic medical examination, head of department, forensic expert	Analysis of death cases during the xenon therapy procedure for alcoholic illness treatment
<b>16:00-16:20</b>	<b>Alexander A. Osipov</b>	Forensic expert of Moscow Bureau forensic medical examination	Features of fatal intra-car traumatic brain injury as a result of road traffic accidents in Moscow
<b>16:20-17:00</b>	<b>Discussion of reports, closing of the conference</b>		