# Academy of Sciences of the Republic of Uzbekistan



S.Yu. Yunusov Institute of the Chemistry of Plant Substances AS RUz

## INTERNATIONAL SCIENTIFIC AND TECHNICAL CONFERENCE

Actual Problems of the Chemistry of Natural Compounds

# PROGRAMME

September 19–20, 2024 Tashkent

#### **CONFERENCE TOPICS**

- 1. Chemistry, biology, pharmacology, and technology of natural compounds and their derivatives.
- 2. Successes and problems of creation of new drugs.

#### **ORGANIZING COMMITTEE**

#### Chairman: Acad. Sagdullaev Sh.Sh.

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Acad. S.Yu.Yunusov Institute of the Chemistry of Plant Substances, 77, Mirzo-Ulugbek Str., Tashkent, 100170, Uzbekistan

#### **19 SEPTEMBER**

8.00–9.00 **Registration of the participants of the International Conference** (Acad. S.Yu. Yunusov Institute of the Chemistry of Plant Substances, Tashkent, M. Ulugbek st., 77)

#### 9.00–9.20 WELCOME SPEECH OF CHAIRMEN

**SH.SH. SAGDULLAEV** – Member of the Senate of the Oliy Majlis, Academician of the Academy of Sciences of the Republic of Uzbekistan, Director of the S.Y. Yunusov Institute of the Chemistry of Plant Substances.

#### **GREETING ADDRESSES**

**SH.U. TURDIKULOVA** – Vice President of the Academy of Sciences of the Republic of Uzbekistan.

**HAN DEMIN** – President of China International Exchange and Promotive Association for Medical and Health Care, Academician at the Chinese Academy of Engineering.

#### PLENARY PRESENTATIONS

#### Chairmen: Prof. A.A. Ustyugov

#### Secretary: Ph.D. M.A. Mamatkhanova

- 9.20–9.40 **R.Z. Sabirov.** ANION AND CATION CHANNELS AS PHARMACOLOGICAL TARGETS.
- 9.40–10.00 **P. Nazarov**. ANTIBACTERIAL DRUGS OF PLANT ORIGIN: PROMISING ANTIBACTERIAL THERAPEUTIC AGENTS AND VECTORS FOR THE DELIVERY OF ACTIVE DRUGS.
- 10.00–10.20 **Yuanfeng Wu**. RESEARCHES ON THE ACTIVITIES AND PREPARATION OF SULFORAPHANE FROM BROCCOLI (Online).
- 10.20–10.40 **Sh.S. Azimova.** BIOLOGICAL EFFECTS OF SOME 1-ALKYL AND 1-ARIL TETRAHYDROIZOQUINOLINES AND MECHANISMS OF THEIR ACTION.
- 10.40–11.00 **Thiruventhan Karunakaran.** THE CHEMISTRY OF KRATOM (*MITRAGYNA SPECIOSA* KORTH.) LEAVES: DISPELLING MYTHS ON THIS MALAYSIAN INDIGENOUS MEDICINAL PLANT (Online).
- 11.00–11.20 Coffee break

#### PLENARY PRESENTATIONS

#### Chairmen: Prof. S.F. Aripova

#### Secretary: Ph.D. R.F. Mukhamatkhanova

- 11.20–11.40 **E.A. Garaev.** SYNTHESIS, IDENTIFICATION AND *IN SILICO* STUDY OF THE TRINITRO DERIVATIVE OF TROPIC ACID FROM THE ATROPIN ALKALOID.
  - 11.40–12.00 **Sh.Sh. Sagdullaev.** EFFECTIVENESS OF TRADITIONAL AND MODERN METHODS FOR EXTRACTING ACTIVE COMPOUNDS FROM MEDICINAL PLANTS.
- 12.00–12.20 Octavio Calvo-Gomez. BRASSICAS: HEALING VOLATILES.

- 12.20–12.40 **F.M. Tursunkhodzhaeva.** PHARMACOLOGICAL SCREENING OF PLANT DERIVED AND SYNTHETIC MOLECULES POSSESSING ANTIARRHYTHMIC AND NEUROPROTECTIVE PROPERTIES.
- 12.40–13.00 **N.Z. Mamadalieva.** METABOLOMIC DETERMINATION OF SPECIALIZEDMETABOLITES USING LIQUID CHROMATOGRAPHY– TANDEM MASS SPECTROMETRY IN SILENE SPECIES.
- 13.00–14.00 Lunch
- 14.00–15.00 **POSTER PRESENTATIONS AND EXCURSION OF GMP**

#### PLENARY PRESENTATIONS

#### Chairmen: Sh.S. Azimova Secretary: E.R. Kurbanova

- 15.00–15.20 Samiullah Khan. COLLECTION AND CHARACTERIZATION OF METABOLITES OF MUSHROOMS FROM AZAD JAMMU AND KASHMIR, PAKISTAN (Online).
- 15.20–15.40 **N.A. Tagayalieva.** THERAPEUTIC INDEX IMPROVEMENT OF DOXORUBICIN-POLYGALACTURONANS CONJUGATE.

#### **ORAL PRESENTATIONS**

- 15.40–15.55 **Yergazy Shybyray**. THE CHEMICAL CONSTITUENTS AND BIOLOGICAL ACTIVITIES OF THE LEPIDIUM SATIVUM SEEDS.
- 15.55–16.10 **O.N. Ashirov.** PREPARATION OF LIPOSOMES FROM SOYBEAN PHOSPHOLIPIDS.
- 16.10–16.25 **D.A. Narbutaeva.** THE HYPOLYPIDEMIC EFFECT OF THE FLAVONOIDS SUM FROM CROCUS SATIVUS.
- 16.25–16.40 **Xue Wenjuan.** STUDY ON THE DITERPENOID ALKALOIDS FROM *Aconitum barbatum var puberulum* AND *Aconitum sinomontanum.*
- 16.40–17.00 Break

#### **ORAL PRESENTATIONS**

#### Chairmen: Dr. R.K. Rakhmanberdieva

#### Secretary: PhD. B.S. Okhundedaev

- 17.00–17.15 **K.A. Eshbakova**. FERLAPIOSIDE, NEW IRIDOID GLYCOSIDE FROM *Ferula lapidosa*.
- 17.15–17.30 **D.I. Kosimov**. MICROBIAL DEGRADATION OF THE PESTICIDE CHLORPYRIFOS.
- 17.30–17.45 **G.E.Saidova.** QUANTITATIVE DETERMINATION OF POLYSACCHARIDES FROM THE AERIAL PARTS OF *Capparis spinosa*
- 17.45–18.00 **A.U. Ubaydullaev.** EFFECT OF NITRATING COMPOUNDS ON THE QUINOLINE ALKALOID ACETYLHAPLOPHYLIDINE

#### **20 SEPTEMBER**

#### PLENARY PRESENTATIONS

#### Chairmen: Prof. S.A. Sasmakov Secretary: PhD. J.M. Abdurakhmanov

09.00-09.30 E.Kh. Botirov. PLANTS OF THE GENUS PEROVSKIA ARE A PROMISING SOURCE OF BIOLOGICALLY ACTIVE COMPOUNDS. 09.30-10.00 Sh.N. Zhurakulov. SYNTHESIS OF DERIVATIVES OF 1-ARYLTETRAHYDROISOOUINOLINE **ALKALOIDS** AND THEIR **BIOLOGICAL ACTIVITY** 

#### **ORAL PRESENTATIONS**

- 10.00–10.15 **Gou Guanghui.** DISCOVERY AND NETWORK PHARMACOLOGY OF NOVEL DRUG SOURCE MOLECULES IN *Piper longum L.*
- 10.15–10.30 U.M. Omanova. FLAVONOIDS FROM Oxytropis qmacrodonta PLANT
- 10.30–10.45 **L.N. Ashurova.** SECONDARY METABOLITES OF *Saponaria officinalis* AND THEIR BIOLOGICAL ACTIVITY
- 10.45–11.0 Break
- 11.00–12.00 **DISCUSSION** will be managed by **Prof. A.A. Ustyugov** Director of the Institute of Physiologically Active Compounds at the Federal Research Center of Problems of Chemical Physics and Medicinal Chemistry, Russian Academy of Sciences.
- 12.00–13.00 CONCLUSION AND CLOSING CEREMONY

## **POSTER PRESENTATIONS**

1		
1.	D.R. Siddikov	Chemical components of Tribulus terrestris meal
2.	U.Yu. Yusupova	Phytoecdysteroids of the plant of Stachys byzantina
3.	D.E. Dusmatova	Amination of lactone igalan with alkaloid cytisine
4.	D.Sh. Tojiboeva	Components of hexane extract of <i>Chrysanthemum koreanum</i>
т.		leaves cultivated in Uzbekistan
~		
5.	D.Sh. Tojiboeva	Components of essential oils of flowers and leaves Handelia
		trichophylla
6.	S.S. Omonova	Flavonoid content in two types plants of the genus <i>heliotropium</i>
		of the flora of Uzbekistan
7.	S.I. Atqiyayeva	Volatile components of the root of Perovskia scrophulariifolia
8.	D.E. Dusmatova	Modification of sesquiterpene lactone igalan
9.	M.U. Zhuraev	Study of <i>Perovskia angustifolia</i> root components
). 10.	S.Kh. Mullabaeva	Volatile components of <i>Perovskia botschantzevii</i> roots
11.	B.S. Okhundedaev	Components of flowers Achillea filipendulina
12.	B.S. Okhundedaev	Aminomethylation of centaureidine
13.	B.S. Okhundedaev	Metabolites of Artemisia juncea aerial part
14.	D.R. Siddikov	Volatile compounds of Crataegus songarica
15.	D.R. Siddikov	Phenolic compounds Crataegus songarica
16.	O. Alimuhammedova	Internal control systems for per diagnostics
17.	N.A. Tosheva	Study of cytotoxic activity of compounds based on bicyclic
		quinazoline sulphonylureas
18.	J.M. Abdurakhmanov	New anti-hsv nucleoside analogues of 1,2,4-triazole-3-thione
19.	J.M. Abdurakhmanov	Purification of recombinant escherichia coli uridine
		phosphorylase by ion exchange
		media
20.	D.B. Kadirova	Alkaloids of plants of the genus <i>Convolvulus</i> growing in
20.	D.D. Kadilova	Uzbekistan
21.	B.J. Komilov	Sterols from <i>Centaurea belangeriana</i>
21.	B.J. Komilov	
		Flavonoids of <i>Centaurea ugamica</i>
23.	K.S. Juraev	Coumarins from Ferula tadshikorum
24.	D. T. Asilbekova	Fatty acid isomers and essential oils of <i>Ferula</i> species growing
		in Uzbekistan
	F.A. Kengesbaeva	Triterpene glycoside from the Astragalus atrovinosus
26.	T.N. Kaypnazarov	Triterpene glycoside of Astragalus macronyx
27.	S.M. Turaeva	Means for protecting winter wheat from Schizaphis graminum
		rondani
28.	A.A. Ziyaev	Modifications of 2-phenacylthio-5-aryl-1,3,4-oxadiazoles and
		3-phenacylthio-5-(4H)- aryl-1,2,4-triazoles
29.	A.U. Ubaydullaev	Effect of nitrating compounds on the quinoline alkaloid
		acetylhaplophylidine
30.	A.U. Ubaydullaev	Reaction of the quinoline alkaloid haplophylidine with
		hydrochloride of monochloroacetic acid under different
		conditions
21	V D Minner	
31.	Yu.R. Mirzaev	About the pharmacolgical properties of veralosinine
32.	R.P. Zakirova	HPLC analysis of flavonoids in wild and cultivated species of
<i>.</i> -		Astragalus babatagi
33.	F.A. Zulpanov	Synthesis and butylation of benzopyrimidine-4-thione
34.	A.A. Siddikova	Carbohydrates of the aerial parts of plants Capparis spinose
35.	A.F. Hamidov	Sterols of cousinia maracandica
36.	D.E. Dusmatova	Chemotypic difference of sesquiterpenoids of the aerial part of
		Inula helenium flora

37.	D.E. Duamatava	of Uzbekistan
57.	D.E. Dusmatova	Sesquiterpene lactones of flowers <i>Inula britannica</i> of flora of Uzbekistan
38.	Sh.Kh. Rakhimova	Amino acid composition of bean protein <i>Psoralea drupacea</i>
<u>39</u> .	N.K. Yuldasheva	Fatty acid composition of <i>Psoralea drupacea</i> bean oil of
57.	IV.IX. I uldusile vu	Uzbekistan flora
40.	E.O. Rakhmatov	Obtaining a highly effective herbicide
41.	A.Sh. Abdurazakov	Physico-chemical analysis of 5-chloro-2-methyl-1h-
		benzo[d]imidazole-1-ium (phosphonomethyl)glycinate
42.	Alimujiang Abuliz	Determination of the amount of flavonoids quercetin-3-o-
		sophoroside and kaempferol-3-o-sophoroside in the dry extract
		of wrinkled rose petals by high performance liquid
		chromatography
43.	E.A. Baynazarov	Chemical modification of lappaconitine alkaloid
44.	Sh.Kh. Kubayev	Synthesis and optimal technology for the production of
		biologically active amides in the series of benzimidazoles
45.	Sh.Kh. Kubayev	Synthesis of biologically active diamides of benzimidazole
16	G. N. Kudratov	series
46.	O. N. Kuulatov	Synthesis of n-propargyl derivatives of 1,3-unsymmetrical ureas
47.	Sh.R. Makhmudova	Components of stamens and petals of <i>Crocus sativus</i> introduced
		in the Jizzakh region of Uzbekistan
48.	S.A. Safarova	Reactions of the diterpene alkaloid n-deacetyllappaconitine
		with isocyanates
49.	Sh.A. Sulaymonov	New flavonoid glycoside from Oxytropis rosea
50.	D. R. Siddikov	Phenolic compounds of <i>Cistanche salsa</i> roots
51.	R.A. Botirov	Biological activity polysaccharides from Capparis spinosa
52.	J.F. Umaraliev	Flavonoids from Artemisia persica
53. 54.	J.F. Umaraliev M.A. Kuronbayeva	Phenolic compounds from Artemisia persica
54. 55.	M.A. Kutolloayeva M.I. Olimova	Glucogalactan from the leaves of <i>Ficus carica L</i> . Interaction of o-phenylenediamine with aldehydes
55. 56.	M.A. Karlybaeva	Proteins and amino acid composition of <i>Xylosalsola richteri</i>
50.	101.1 I. ILuity out vu	(Moq.) Akhani & Roalson
57.	I.S. Ortikov	Synthesis of novel 1,4-isomeric 1,2,3-triazoles
58.	R.Z. Khudoykulova	Synthesis of "amino-bridged" benzyl-quinazoline conjugates in
	, , , , , , , , , , , , , , , , , , ,	the presence of 6h(bromo)-2,4-dichloroquinazoline and
		benzylamines
59.	Sh.Kh. Kubayev	Anthelmintic activity of 2-propidamizole
60.	N.B. Akhmedova	Synthesis of 5-amino-3-aryl-4-carbonitrilpyrazole derivatives
61.	A.A. Azamatov	Local anesthetic effect of the 1-(2-hydroxyphenyl)-6,7-
		dimethoxy-1,2,3,3,4- tetrahydroisoqinoline hydrochloride
62.	N.B. Bekmurzayeva	Acute toxicity of the collection of biologically active
		polysaccharides from the root of Capparis spinose
63.	Sh.Kh. Ibotov	Lipids of Atriplex tatarica leaves
64.	S.N. Shomuratova	Polar lipids of Ammodendron conollyi seeds
65. 66	D.Sh. Ibragimova	Polar lipids of the aerial parts of <i>Datisca cannabina</i>
66.	S. D. Gusakova	Lipids of <i>Climacoptera aralensis</i> seeds and their stress- protective activity
67.	Q. S. Jurayev	A new furocoumarin from <i>Ferula lehmannii</i>
68.	O.U. Rajabova	Preparation of dry extract of the aerial part of <i>Pulicaria</i>
	-	gnaphalodes and its antioxidant activity
69.	Sh.M. Adizov	Obtaining carbohydratealdimines based on pectins
70.	N.M. Yuldasheva	Flavonoids of the aerial part of Inula salicina
71.	U.Kh. Kurbanov	Isolation of the alkaloid songorine from technical waste of the

		plant Aconitum soongoricum
72.	D.A. Narbutaeva	Pharmacological properties of <i>Melilotus officinalis</i> components
73.	Kh. I. Khasanova	Chemical components of <i>Ferula</i> species growing in the flora of
		uzbekistan and Kirgiziston, their citotocsic, antibacterial,
		antioxidant, inhibitor activity
74.	M.U. Negmatova	Comparative evaluation of the effectiveness of the anti-
	-	inflammatory effect of the sum of vitasteroids from plants
		Datura stramonium and diclofenac sodium
75.	M.U. Zhuraev	Component composition of essential oil of Salvia
		sarawschanica aerial part
76.	F.R. Egamova	Study of the toxicity and sedative effect of a dry extract isolated
	U	from Melissa officinalis
77.	A.E. Egamberdiev	Eco-phytocenotic description tsenopopoulos of <i>Ajuga</i>
	<i>B</i> .	<i>turkestanica</i> (Regel) Briq
78.	A.E. Egamberdiev	Trends in the transformation of <i>Ajuga turkestanica</i>
70.	The Equiliberate	tsenopopulations under different eco-phytocenotic conditions
79.	S.M. Allaberganova	Novel sulfonamides in the series of bicyclic quinazolines
80.	A.M. Nigmatullaev	Raw material reserves of yarrow inflorescences ( <i>Achillea</i>
00.		<i>filipendulina</i> LAM.) in the
		Tashkent region
81.	Alimujiang Abulizi	Type selection and influencing parameters of drying the leaves
01.	Annuglang Abunzi	of <i>Rosa rugosa</i> during the procurement of raw materials
82.	M.R. Umarova	
62.	WI.K. UIIIaIUva	Cytotoxicity of new 2-hydrazones based on hydrazinylbenzoxazole <i>in vitro</i>
83.	M.R. Tursunova	Determination of the content of carotenoids in the root part of
65.	wi.it. i uisunova	Curcuma longa L cultivated in the Republic of Uzbekistan
84.	Z.M. Enikeeva	Immunomodulatory effects of colchiprit-neo
84. 85.	Kh.T. Saydullaeva	
05.	KII. I. Sayuullaeva	Effect of glycyrrhizic acid complex with 6-benzylaminopurine
		on shoot development and microtuber formation in <i>in vitro</i>
06	N.T. Khuzhaeva	potato reproduction
86.	N.I. KIIUZIIaeva	Quantitative determination of vitamins from the plant
07	D.D. Artilthe area	<i>Fritillaria severzovii</i> by HPLC
87. 88.	B.R. Artikbaeva G.M. Ikromova	Flavonoids from Astragalus bakaliensis
00.	G.M. IKIOIIIOVa	Chemical composition of the essential oil of the above-ground
00	D.C. Frances	parts of <i>Haplophyllum acutifolium</i>
89.	R.S. Esanov	Application of the pm6 semi-empirical method to model the
00	NT 171 N7 1 1	dimer form of glycyrrhizic acid
90.	N.Kh. Yakubova	The effect of some gossipol derivatives with masga complexes
0.1	0.0.41.1.11	on blood serum biochemical indicators
91.	S.S. Abdurakhmanova	Synthesis of acetylene alcohol using ZnBr2/ <i>i</i> -Pr2NEt/TGF
		complex characlytic system
92.	B.Sh. Ganiev	Synthesis and spectral analysis of bis (n-salicylidene-4,4' -
		diphenylamine)
93.	M.R. Zaripova	Anti-inflammatory effect of <i>Gnaphalium uliginosum</i> L. extract
94.	A.A. Kadirov	Synthesis of surface-active substance for emulsion solutions
		and creams
95.	O.E. Ziyadullaev	Alkynylation reaction of ketones with acetylene in the 3,3'-
<u> </u>	~ ~	Ph2BINOL- 2Li/Ti(OiPr)4/Et2Zn catalytic system
96.	S.B. Navruzov	Changes in the amount of photosynthetic pigments in cotton
_		under hyperthermia conditions
97.	D.T. Babaeva	The role of biostimulants in plant adaptation to stress
98.	D.Sh. Abduazimova	Effect of NPK on total polyphenolic content and antiradical
		activity of medicinal plant extracts

99. S.D. Aronbayev	Determination of Se(IV) in plant and vitamin products by the voltammetric method using bismuth-modified screen printed electrodes
100. G.K. Babojonova	Properties of anion exchange materials based on polyvinyl chloride
101. Sh.M. Boboyorova	Preparation of biologically active salts of oleanolic acid with heterocyclic amino compounds
102. A.A. Bokova	DPPH radical scavenging activity of <i>Gnaphalium uliginosum</i> ethanolic crude extract
103. M.U. Mahmudova 104. F.A. Melikuziyev	Optimization of DNA extraction from <i>Rheum</i> L. species Triterpenoids of the endophytic bacteria <i>Bacillus</i> <i>zhangzhouensis</i>
105. F.A. Melikuziyev	Secondary metabolites of the endophytic bacteria <i>Bacillus zhangzhouensis</i>
106. B.S. Muminov	Use of the electrolysis method in the synthesis of organic substances
107. M.Sh. Sobirova	Influence of exogenous cytokinins on the level of viral infections during introducing potatoes in culture <i>in vitro</i>
108. G.B. Nasirova	The significance of glycoalkaloid profile as selection markers of potato genotypes
109. N. Allayorov	Optimization of iron (II) sulfate dosage for wastewater treatment of hydrometallurgical plants: mechanisms of action and practical application
110. B.K. Rakhmanov	Leveraging somatic embryogenesis to develop biotechnological plants as a source for pharmacy
111. M.K. Saliyeva	Ethynation of some heteratomic aldehydes using the catalytic system SnCl2•2H2O/Et3N/Et2O
112. S. Siddikova	Polysaccharides of obi-navvat peel and their prebiotic activity
113. F.A. Sobirova	Create a semi-solid pharmaceutical formulation of hemostatic agents
114. M.O. Abdullaeva	Phytochemical analysis and antiradical activity of medicinal plant extracts
115. K.V. Raimova	Dynamics of accumulation of polyphenols of the <i>Pinus</i> sylvestris plant
116. D.G. Urmonov	Gas Chromatography-Mass Spectrometry Analysis of Hexane Fraction from Aerial Parts of <i>Limonium otolepis</i>
117. P.K. Turdalieva	Study of anti-radical activity of medicinal plants in south Fergana
118. F.N. Khayrullayev	X-ray analysis and Molecular docking of the ethyl 2-(4- (dimethylamino)benzoyl)-3- hydroxy-5-methylpyrazolidine-3- carboxylate
119. S.F. Ziyaeva	Development of a kinetic model of the process of extraction of biologically active substances from pomegranate peel
120. R. Ziyayev	Alkaloids from Annona senegalensis Pers
121. E. Kemertelidze	Chemical constituents and biological activity of Yucca gloriosa
	L.
122. S.A. Fatykhava	Phenol profiling of <i>Sophora japonica</i> L. flowers extracts
123. K.V. Kukushkina	A new synthetic approach to isoquinolin(on)es through 2'- carboxamidodeoxybenzoins enaminoketone heterocyclizations
124. S.V. Kozyrev	Solid-phase phosphorylation of chondroitin sulfates with
125. G.F. Krainova 126. A.A. Khudoyberdiyeva	phosphorus (V) oxide Beckman fragmentation of the a-ring of dihydrolupeol oxymes Synthesis and cytotoxicity of enaminones' derivatives
120. 11.11. Ishuao yoolulyovo	Synanesis and cytotoxienty of chammones derivatives

	A. Minkayeva Zh.Zh. Karzhaubekova	Biologically active substances from <i>Artemisia albida</i> L. Chemical composition and antimicrobial activity of the essential oil from <i>Lavandula angustifolia</i> Mill. cultivated in the collection of the MBG in the Almaty city
129.	A.S. Vasilchenko	<i>Bacillus</i> -derived cycle lipopeptides modulate microbiome structure and enzymatic activity of soil and increase productivity of <i>Solanum tuberosum</i>
130.	D.K. Nurkadirov	Quantitative determination of flavonoids from the aerial parts of <i>Linaria vulgaris</i> MILL.
131.	E.H. Kerimli	Essential oil constituents of Ferula persica fruits
132.	L.Yu. Rakhimova	Phosphorylation of polysaccharides by phosphorous pentoxide in the presence of Na/K carbonates
133.	S.S. Khalikov	Plant metabolites as promising carriers of delivering anthelmintic substances
134.	Ye.V. Antsybora	Synthesys of methylene-bridged bioflavonoids
	Kh.I. Hasanov	Concept and some aspects of medical chemistry
	A.S. Bagae	Study of the solubility of dihydroquercetin in water in the presence of fulvic acids
137.	A.L. Stalinskaya	A series of novel substituted epoxybenzo [7,8] oxocyno [4,3- <i>b</i> ] pyridine derivatives: synthesis and in silico study of antiviral activity
138.	I.A. Tolmacheva	Synthesis of furanotriterpenoids from 1,10-seco-triterpenoids
139.	A.N. Tretyakova	Creation of new composite materials for regenerative medicine
		based on collagen and silver nanoparticles
140	F.B. Eshboev	Penicillic acid as a potential inhibitor of ftsz protein of <i>Staphylococcus aureus</i>
141.	Kh.A. Rasulova	Pharmacological properties of quinoline alkaloids of the genus haplophyllum, growing in the surkhan-darya region, and the
142.	DM Salidianava	prospects of their application in medicine
142.	D.M. Saijdjanova	On the production of metabolites and derivatives of the lappaconitine alkaloid with pronounced antiarrhythmic
		properties
143.	I. Kopaysinova	Selection of optimal conditions for cultivation of <i>Trichoplusia</i> <i>ni</i> insect cells
144.	Sh.Sh. Khasanov	Investigation of optimal conditions for long-term storage of <i>Helicopevra zea</i> insect cell lines
145.	Sh.Sh. Khasanov	Determination of optimal conditions for cultivating mesenchymal stem cells
146.	A. Ibragimov	Solubilization of lagochilin using cyclodextrins and the production of water-soluble clathrates in various dosage forms

### FOR NOTES