# 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**

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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                 |
| ).<br>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.<br>54.  | J.F. Umaraliev<br>M.A. Kuronbayeva    | Phenolic compounds from Artemisia persica  |
| 54.<br>55.  | M.A. Kutolloayeva<br>M.I. Olimova     | Glucogalactan from the leaves of <i>Ficus carica L</i> .<br>Interaction of o-phenylenediamine with aldehydes |
| 55.<br>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.<br>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-<br>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.<br>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.<br>88. | B.R. Artikbaeva<br>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<br>104. F.A. Melikuziyev    | Optimization of DNA extraction from <i>Rheum</i> L. species<br>Triterpenoids of the endophytic bacteria <i>Bacillus</i><br><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<br>of potato genotypes  |
| 109. N. Allayorov                               | Optimization of iron (II) sulfate dosage for wastewater<br>treatment of hydrometallurgical plants: mechanisms of action<br>and practical application |
| 110. B.K. Rakhmanov                             | Leveraging somatic embryogenesis to develop biotechnological<br>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<br>Fraction from Aerial Parts of <i>Limonium otolepis</i>                                    |
| 117. P.K. Turdalieva                            | Study of anti-radical activity of medicinal plants in south<br>Fergana   |
| 118. F.N. Khayrullayev                          | X-ray analysis and Molecular docking of the ethyl 2-(4-<br>(dimethylamino)benzoyl)-3- hydroxy-5-methylpyrazolidine-3-<br>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'-<br>carboxamidodeoxybenzoins enaminoketone heterocyclizations                               |
| 124. S.V. Kozyrev                               | Solid-phase phosphorylation of chondroitin sulfates with   |
| 125. G.F. Krainova<br>126. A.A. Khudoyberdiyeva | phosphorus (V) oxide<br>Beckman fragmentation of the a-ring of dihydrolupeol oxymes<br>Synthesis and cytotoxicity of enaminones' derivatives         |
| 120. 11.11. Ishuao yoolulyovo                   | Synanesis and cytotoxienty of chammones derivatives  |

|      | A. Minkayeva<br>Zh.Zh. Karzhaubekova | Biologically active substances from <i>Artemisia albida</i> L.<br>Chemical composition and antimicrobial activity of the<br>essential oil from <i>Lavandula angustifolia</i> Mill. cultivated in the<br>collection of the MBG in the Almaty city |
|------|--------------------------------------|--|
| 129. | A.S. Vasilchenko                     | <i>Bacillus</i> -derived cycle lipopeptides modulate microbiome<br>structure and enzymatic activity of soil and increase<br>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<br>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<br>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><br><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<br>mesenchymal stem cells  |
| 146. | A. Ibragimov                         | Solubilization of lagochilin using cyclodextrins and the production of water-soluble clathrates in various dosage forms  |
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### FOR NOTES