

ACADEMY OF SCIENCES
OF THE REPUBLIC OF UZBEKISTAN

80

years of
AS RUz

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ACAD. S.Yu. YUNUSOV INSTITUTE OF THE CHEMISTRY
OF PLANT SUBSTANCES

INTERNATIONAL SCIENTIFIC
CONFERENCE

**Actual Problems of the
Chemistry of Natural Compounds**

PROGRAMME

March 15–16, 2023
Tashkent

CONFERENCE TOPICS

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

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

15 MARCH

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)

9.00–9.15 **OPENING CEREMONY**
**Greeting address from B.S. Yuldashev, President of the Academy
of Sciences of the Republic of Uzbekistan**

**Message of greeting from Prof. Dr. Sh. Sh. Sagdullaev, Director of
the Acad. S.Yu. Yunusov Institute of the Chemistry of Plant
Substances AS RUz**

9.15-9.30 **Prof. Dr. S. F. Aripova. THE ACADEMY OF SCIENCES OF THE
REPUBLIC OF UZBEKISTAN IS 80 YEARS OLD**

PLENARY PRESENTATIONS

Chairman: Prof. Dr. E. Kh. Botirov

Secretary: Ph.D. M. A. Mamatkhanova

9.30–10.00 **S. Deyev. TARGETED AGENTS FOR CANCER DIAGNOSTICS
AND THERAPY**

10.00–10.30 **P. Nazarov. THE USE OF NATURAL SUBSTANCES OF
PLANT ORIGIN FOR THE PRODUCTION OF PROMISING
ANTIBACTERIAL DRUGS**

10.30–11.00 **Sh.S. Azimova. SARS-COV-2: NEW DEVELOPMENTS FOR
PREVENTION AND DIAGNOSIS**

11.00–11.25 **I. Konstantinova. *E. coli* PURINE NUCLEOSIDE
PHOSPHORYLASE: IS THE SYNTHESIS OF MODIFIED
NUCLEOSIDES ALWAYS REGIOSELECTIVE?**

11.25–11.50 **E. Kh. Botirov. CHEMICAL STUDY OF TERPENOIDS AND
PHENOLIC COMPOUNDS OF PLANTS USED IN FOLK
MEDICINE OF UZBEKISTAN**

11.50–12.10 **P. William. FREEZE-DRYING TECHNOLOGY AND
LYOPHILIZER**

12.10–13.00 **Lunch**

13.00–14.00 **POSTER PRESENTATIONS**

PLENARY PRESENTATIONS

Chairman: Prof. Dr. S.F. Aripova

Secretary: Ph.D. R.F. Mukhamatkhanova

- 14.00–14.20 **J. Jenis.** CHEMICAL PROFILE AND BIOLOGICAL ACTIVITIES OF KAZAKHSTANI *Artemisia* SPECIES
- 14.20–14.40 **Bo-Zhao.** STUDY ON THE DITERPENOID ALKALOIDS OF *Delphinium* AND *Aconitum* GROWING IN CENTRAL ASIAN
- 14.40–15.00 **Nazim Sekeroglu.** CONVENTIONAL CROP BYPRODUCTS AS SUSTAINABLE RAW MATERIALS FOR NOVEL PHARMACEUTICAL AND NUTRACEUTICAL PRODUCTS
- 15.00–15.20 **F.M. Tursunkhodjaeva.** ON THE PHARMACOLOGICAL ACTIVITY AND PROSPECTS FOR THE PRACTICAL USE OF 1-ARYL-1,2,3,4-TETRAHYDROISOQUINOLINES
- 15.20–15.40 **M.S. Yunusov.** ANTIARRHYTHMICS BASED ON DITERPENE ALKALOIDS. CREATING AN INJECTION FORM.
- 15.40–16.00 **Break**

ORAL PRESENTATIONS

Chairman: Dr. R.K. Rakhmanberdyeva

Secretary: Sh.K. Khidoyatova

- 16.00–16.15 **K.A. Eshbakova.** CHEMICAL COMPONENTS OF *Rumex* SPECIES GROWING IN THE UZBEKISTAN AND THEIR ANTIBACTERIAL, ANTIOXIDANT, ANTICOAGULANT ACTIVITIES
- 16.15–16.30 **S.V. Nekhoroshev.** CHARACTERISTICS OF PEAT ORIGINATED FULVO ACIDS OF THE KHANTY-MANSIYSK AUTONOMOUS OKRUG – YUGRA
- 16.30–16.45 **M. Berzina.** NEW ADENOSINE ANALOGS: CHEMICAL-ENZYMATIC SYNTHESIS
- 16.45–17.00 **Y. Suleimen.** ESSENTIAL OIL COMPOSITION AND BIOACTIVITY OF *Tripolium pannonicum* L.
- 17.00–17.15 **F.R. Egamova.** TOTAL ECDYSTEROID-CONTAINING AND FLAVONOID-CONTAINING SUBSTANCES FROM PLANTS OF UZBEKISTAN, THE POSSIBILITY OF THEIR PRACTICAL USE IN MEDICINE

16 MARCH

PLENARY PRESENTATIONS

Chairman: Prof. Dr. J. Jenis

Secretary: PhD. J.M. Abdurakhmanov

- 09.00–09.30 **S.G. Leitao.** OVER TEN YEARS RESEARCH WITH SARACURA MIRÁ: *Ampelozizyphus amazonicus* THE BRAZILIAN ADAPTOGEN FROM THE AMAZON
- 09.30–10.00 **A.U. Berdiev.** TARGETED SYNTHESIS AND MODIFICATIONS OF QUINAZOLINE ALKALOIDS AND THEIR ANALOGUES
- 10.00–10.20 **Sevgi Gezici.** ANTI-INFLAMMATUVAR AND APOPTOTIC DNA FRAGMENTATION ACTIVITIES OF WHITE PITAYA FRUIT EXTRACTS AGAINST HUMAN COLON CANCER CELLS
- 10.20–10.40 **A.Z. Sadikov.** THE TECHNOLOGY OF PRODUCING THE SUBSTANCE OF DRUGS BASED ON DITERPENE ALKALOIDS
- 10.40–11.00 **Kh. Rasulova.** QUINOLINE ALKALOIDS OF THE FAMILY *Rutaceae*
- 11.00–11.30 **Break**

ORAL PRESENTATIONS

Chairman: Dr. S.Z. Nishanbaev

Secretary: B.S. Okhudedaev

- 11.30–11.45 **B. Eletckaia.** BIOSYNTHESIS OF FLEXIMER ANALOGUES OF PURINE NUCLEOSIDES, BY-PRODUCTS OF TRANSGLYCOSYLATION
- 11.45–12.00 **G. Mamytbekova.** ISOLATION AND IDENTIFICATION OF FUNGI FROM LICHEN PRODUCERS OF NEW ANTIBIOTICS
- 12.00–12.15 **A. Arautova.** SYNTHESIS OF 2-FLUOROCORDYCEPINE
- 12.15–12.30 **B. Abylaeva.** STAUDYING THE POSSIBILITY OF OBTAINING PEKTIN FROM WASTE BY ENZYMATIC HIDROLYSIS
- 12.30–12.45 **H.I. Ahunova.** ALKALOIDS FROM *Delphinium oreophilum*
- 12.45–13.00 **I.M. Khalilov.** GENETIC ANALYSIS OF THE CRY GENES OF THE ENTOMOPATHOGENIC *Bacillus thuringiensis* AGAINST *Helicoverpa armigera*
- 13.00–14.00 **Lunch**

ORAL PRESENTATIONS

Chairman: Dr. S.A. Sasmakov

Secretary: E.R. Kurbanova

- 14.00–14.15 **Z. Boronova.** DITERPENOID ALKALOIDS OF THE *Aconitum* PLANTS OF KYRGYZSTAN
- 14.15–14.30 **F. Ashurova.** BACTERICIDAL ACTION OF *Gentiana oliveri*
- 14.30–14.45 **M.B. Kayumov.** *In silico* STUDY OF BUFADIENOLIDES FROM *Bufo viridis* VENOM
- 14.45–15.00 **M.K. Narmukhamedova.** DETERMINATION OF THE ACTIVITY OF BACTERIAL RIBONUCLEASES
- 15.00–15.15 **S.Kh.Hojiboboeva.** MOLECULAR GENETIC ANALYSIS OF THE EFFECT OF THE SUPRAMOLECULAR COMPLEX OF GLYCYRRHIZIC ACID WITH BENZOTRIAZOLE ON WHEAT FUNGAL DISEASES
- 15.15–15.30 **M.A. Rasulova.** NATURAL NEUROTROPIC AUTOANTIBODIES IN COVID-19 ASSOCIATED ISCHEMIC STROKES
- 15.30–15.45 **A. Miftakhova.** DEVELOPMENT OF HIGHLY EFFICIENT KAZAKHSTAN'S HERBAL MEDICINAL SUBSTANCES WITH ANTIVIRAL ACTIVITY AGAINST COVID-19 AND SIMILAR VIRAL INFECTION
- 15.45–16.00 **N.R. Mukhamedov.** BIOLOGICAL ACTIVITY SCREENING AND FRACTIONATION OF *Naja naja oxiana* VENOM
- 16.00–16.15 **F.B. Kobilov.** CLONING ANALYSIS OF CRY1AA GENE OF *Bacillus thuringiensis* 1FO STRAIN
- 16.15–16.30 **I.M. Khalilov.** CLONING ANALYSIS OF CRY1AA GENE OF *Bacillus thuringiensis* 1FO STRAIN
- 17.00 **CONCLUSION SESSION**

POSTER PRESENTATIONS*

1. **M.V. Karakozova** Protein sequences analysis of the main *mdr* pump acrab-tolc from *Escherichia coli*: antibacterial action of substances of plant origin
2. **M. Berzina** New adenosine analogs: chemical-enzymatic synthesis
3. **A. Bashylau** Anti-inflammatory activity of phenolic compounds from transformed roots of *Artemisia annua L.* and *A. vulgaris L.*
4. **E.A. Lapchenko** Natural compounds of the genus *Lycium* and prospects of a biotechnological method of preservation and practical use
5. **L.A. Alexandrova** Novel N⁴-alkylcytidines as promising antimicrobial agents
6. **E.G. Karimli** Study of the essential oil fraction from *Ferula persica*
7. **E. Garayev** Research of hepatotropic biologically active substances
8. **E. A. Garayev** *In silico* prediction of trinitro and triamine tropic acid derivatives, their *in vitro* and *in vivo* studies
9. **Z.Kh. Sandybaeva** Technology for obtaining cellulose from seed husks and milky juice of *Ferula Ferula assa-foetida L.*
10. **O. Smirnova** Chemo-enzymatic synthesis of new ribavirin analogs
11. **K.M. Turdybekov** Isolation and crystal structure of 8 α ,14-dihydroxy-11,13-dihydromelampolide
12. **L.N. Zibareva** Novel flavonoid from *Serratula cupuliformis*
13. **D.N. Olennikov** New coumarins of wild and cultivated *Apiaceae* plants of *Siberia*
14. **N.I. Kashchenko** New acylated C,O-glycosylflavones and ethyl phenol glucosides from *Cucumis sativus*
15. **Y.Z. Khazimullina** Catalytic oxidation of 6-methyluracil
16. **E.V. Davletshin** Adducts of natural triterpenoid acids with mitochondria-targeted cationic compound fl6, promising as new anticancer drugs
17. **L.M. Zakirova** An approach to the oxo-, epoxy- and hydroxy-derivatives of 2*E*-benzylidene-24-nor-allobetulin
18. **V.V. Kraynik** Antioxidant activity of *Pinus sylvestris* and *Pinus sibirica* needles extracts
19. **Z.M. Muldakhmetov** Synthesis of (1*S*,9*a*)-1-[(1,2,3-triazol-1-yl)methyl]octahydro-1*H*-quinolizines from alkaloid lupinine
20. **A.E. Zakirova** (Tetrahydroxyethyl-1,4-naphthoquinonyl)oxy-urea – metabolites of the drug histochrome
21. **N.S. Remetova** Development of a dosage form - gel based on extract of *Xanthium strumarium L.*
22. **I.A. Aleksakhina** Synthesis of new benzimidazole nucleosides
23. **O.N. Zhavoronkova** Synthesis of new purine nucleosides – analogues of adenosine receptor agonists
24. **D.V. Eroshenko** The cytotoxic properties of oleanane aldehyde- β -enone against doxorubicin-resistant cancer cells
25. **I.U. Nasirli** Study of the alkaloid composition of the roots of the plant *Thalictrum minus l.* from the flora of Azerbaijan
26. **M.A. Zakharova** Ligand synthesis for targeted degradation of SARS CoV-2 NSP14
27. **J.N. Kalatskaja** Growth and biochemical characteristics of winter wheat seedlings after seed treatment with conjugate chitosan-caffeic acid
28. **E.A. Zorina** Chemical synthesis of 2-aminobenzimidazole 3'-deoxyriboside
29. **A. Mechshanova** Studying the qualitative composition of substances obtained from poplar buds by extraction and barothermic methods

* The first authors are listed. All authors are listed in the Abstract book

30. **E.L. Akhmedov** Interaction of tetra- μ -formiato-dimolybdenum monohydrate with a polydentate donor base
31. **M. Huan** Study of biochemically active components of *Tamaricaceae* family
32. **A.F. Miftakhova** Development of highly efficient Kazakhstan's herbal medicinal substances with antiviral activity against covid-19 and similar viral infection
33. **M.M. Ibrayeva** Comparative acidic combination analysis of some species of *Asteraceae* family
34. **M. Huan** Chemical research of the genus *Myricaria* (I)
35. **S.M. Turaeva** Means for protecting leguminous crops and grain products from pests
36. **S.M. Turaeva** Allelopathy of some essential oil plants from Uzbekistan
37. **E.R. Kurbanova** Influence of growing *Astragalus xanthomeloides* on the elemental composition in the conditions of Tashkent city
38. **E.R. Kurbanova** Growing an endemic plant *Astragalus babatagi* in the conditions of Tashkent city
39. **P.Nurmakhmadova** Toxic effect of *Achillea millefolium* essential oils on tuta absoluta meyrick larvae
40. **D.S. Ismailova** Relaxant activity of the 4-amino-5-(2-aminophenyl)-2,4-dihydro-3H-1,2,4-triazolo-3-thione
41. **S.M. Turaeva** Evaluation of insecticidal potential of 1,3,4-oxadiazol-2-thions
42. **P. Nurmakhmadova** Biological activity 2 alkylthio-5-amino-1,3,4-thiadiazoles
43. **N.M. Mamatkulova** Chemical composition of the unsaponifiable fraction plant *Adonis turkestanica*
44. **N.O. Panaeva** Growth-stimulating effect of the amount of neutral substances cotton leaves line t-104
45. **R.P. Zakirova** Obtaining of callus tissue *Ajuga turkestanica* (rgl.) Briq. and study its antifungal activity
46. **R.P. Zakirova** Composition based on the growth regulator floroaxan with glycyrrhizic acid for cotton growth
47. **A. Egamberdiev** Ontogenesis of *Ajuga turkestanica* (regel) brig.
48. **A. Egamberdiev** Generative period of *Ajuga turkestanica* (regel) brig
49. **A. Egamberdiev** Productivity of *Ajuga turkestanica* (regel) brig. seeds
50. **A. Egamberdiev** Distribution, raw material reserve and phytocenology of *Ajuga turkestanica* (regel) brig.
51. **L.N. Ashurova** Oleanolic acid from *Dipsacus azureus*
52. **L.N. Ashurova** The structure of sapolide from the aerial part of the *Saponaria officinalis*
53. **Yu.R. Mirzaev** Evaluation of the effect on arecoline tremor of the vincanine alkaloid and its pirazoline derivative, under experimental conditions
54. **Yu.R. Mirzaev** Comparative pharmacological activity of the vincanine alkaloid and its pirazoline derivative in a single administration
55. **S.D. Rakhimboev** Neurotropic activity of 5-(p-aminophenyl)-4-amino-1,2,4-triazole-3(2H) - thione potassium salt
56. **I.T. Abdinazarov** Evaluation of the effect of the extract obtained by sawing and drying the seeds of technical grape varieties on the performance of experimental animals.
57. **Z.I. Sanoev** Research of psychopharmacological activity of 1-(4-methoxyphenyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline
58. **S.Z. Rashidov** Comparative acute toxicity of derivatives with 1,3,4-oxadiazole-2-thione nucleus
59. **Yu.R. Mirzaev** Peculiarities of the psychotropic activity of donsumin
60. **A.B. Bazarbaeva** Prospects of using *Cistanche salsa* (c.a.mey) beck.

- (orobanchaceae) in medicine
61. **R.M. Ruzibaeva** Trachelantic acid from rindera *Oblongifolia* M.Popov
 62. **R.M. Ruzibaeva** Biological activities of alkaloids from *Rindera oblongifolia*
 63. **U.B. Mamarozikov** Growth-promoting activity of *Allium cepa* extract
 64. **T.T. Toshmurodov** Heterocyclization of 2-alkylthio-1,3,4-thiadiazole-5-phenylthioureas with malonic acid
 65. **A.A. Ziyaev** Synthesis of N-(R-phenyl)-(4,5-diphenyl-1,2,4-triazol-3-ylthio)acetohydrazones and their cytotoxic activity
 66. **O.K. Askarova** Flavonoids of the aerial part of *Perovskia angustifolia*
 67. **O.K. Askarova** Component composition and antimicrobial activity of *Perovskia botschantzevii* essential oil
 68. **E.Kh. Botirov** Components of essential oil and phenolic compounds of *Lophanthus schtschurowskianus*
 69. **L.A. Sharipova** IR-spectroscopic analysis of the complex compound of zinc nitrate with benzamide
 70. **F.A. Zulpanov** Synthesis of novel mono-substituted triazine, containing a farmacophoric quinazoline ring
 71. **F. A. Zulpanov** Targeted synthesis of 3-alkyl-6-nitrobenzopyrimidin-4-ones
 72. **Z.I. Ibodullaeva** Synthesis and properties of chitosan citrate *Bombyx mori*
 73. **R.Yu. Milusheva** Electrospinning of nanofibers from *Bombyx mori* chitosan solutions
 74. **V.N. Rakhmanova** UV-spectroscopic chitosan sulfate *Bombyx mori* studies
 75. **T.Sh. Khushatov** *Ferula tadshikorum* (*Apiaceae*) root stocks on Babatag
 76. **M. T. Muradov** Components of the aerial part of *Scutellaria oxystegia*
 77. **Z.J. Pulatova** Synthesis of the novel hydrazones based on 2-hydrazinobenzoxazoles and their inhibition activity
 78. **Z.J. Pulatova** Targeted synthesis of hydrazides, containing a pharmacophoric - benzoxazole cycle
 79. **T.N. Kaipnazarova** Triterpenoids from the plant *Astragalus transoxanus*
 80. **D.T. Asilbekova** Fatty acids and essential oils from aerial part of *Ferula kyzylkumica* - an endemic plant of Uzbekistan
 81. **Sh.Sh. Solijonov** Raw materials of *Ammothamnus lehmannii* in Kizilkum
 82. **Kh.I. Khasanova** Chemical components of *Ferula lapidosa*
 83. **D.A. Narbutaeva** On the antioxidant properties of *Caper buds* extract
 84. **D.K. Mutalova** Definition of stevioside in *Stevia rebaudiana* samples by high performance chromatography
 85. **R.A. Botirov** Extraction process of skimmianine alkaloid from *Haplophyllum perforatum* plant
 86. **B.S. Okhundedaev** Component composition of essential oil *Senecio subdentatus* flora of Uzbekistan
 87. **V.N. Akhmedov** Study of termitocidal properties of *Inula britannica*, *Inula helenium*, *Inula grandis* plant extracts
 88. **D.E. Dusmatova** Cytotoxic activity of sesquiterpene lactone britanin from *Inula britannica*
 89. **E. Mukhammadiev** Metabolites' composition of *Stachys hissarica*
 90. **N.Z. Mamadalieva** Metabolomic profiling of *Silene* species using UHPLC-MS analysis
 91. **N.Z. Mamadalieva** Metabolomic profiling and biological activities of *Ferula foetida* using uhplc-ms and gc-ms analysis
 92. **D.A. Narbutaeva** Biological activities of flavonoid sum isolated from *Crocus sativus*
 93. **S.S. Saidov** Synthesis and crystal structure of interaction products of 2-methoxycarbonylamino-benzimidazole and propionic acid
 94. **S.S. Saidov** Synthesis of benzo[4,5]Imidazo[2,1-B]quinazolin-12(5h)-one
 95. **E.O. Rakhmatov** Mefosin 25% aq.sol. is an effective herbicide composition

96. **U.Kh. Kurbanov** Plant protein composition of *Delphinium paradoxun* and *Delphinium ajacis*
97. **U.Kh. Kurbanov** New C₂₀-diterpen alkaloid from *Delphinium paradoxun*
98. **Sh.N. Madrakhimov** Creating of the composition and technology of suppositories based on the estrogen active tefestrol
99. **J.F. Umaraliev** Phytochemical investigation of *Artemisia persica* from the flora of Uzbekistan
100. **Sh.B. Rakhimov** Bromination of triacanthine
101. **Sh.B. Rakhimov** Benzoylation of triacanthine
102. **S.S. Narzullaev** Steroid glycoside from *Silene tomentella*
103. **F.R. Egamova** Total ecdysteroid-containing and flavonoid-containing substances from plants of Uzbekistan, the possibility of their practical use in medicine
104. **J. Abdurakhmanov** Clonning of recombinant plasmid ppiczaa-tp, encoding the thymidine phosphorylase in *Pichia pastoris* yeast
105. **S.A. Sasmakov** Clonning of recombinant plasmid ppiczaa-pnp, encoding the purine nucleoside phosphorylase (pnp) in *Pichia pastoris*
106. **O.A. Abdullajanov** Phenolic compounds and flavonoids from the *Artemisia porrecta*
107. **T.Sh. Khushatov** Introduction of *Silene viridiflora* L. in Uzbekistan
108. **S.S. Narzullaev** A machine learning study of the anabolic activity of ecdysteroids
109. **Sh.A. Ergasheva** Analysis of the aerial part of *Scutellaria comosa* prepared raw material
110. **D.R. Siddikov** Chemical components of *Delphinium semibarbatum* flowers
111. **D.R. Siddikov** Phenolic compounds of the aerial part of *Pelargonium hortorum*
112. **Q.S. Juraev** Furocoumarins from *Ferula lehmanii*
113. **Q.S. Juraev** Chemical components of *Ferula tadshikorum*
114. **E.Kh. Khalilova** Chemical composition *Ferula tadshikorum* of the flora of Uzbekistan
115. **N.G. Nurillaeva** Synthesis of new 1,2,3-triazole derivatives based on oxalic acid dipropargyl ester
116. **I.S. Ortikov** Catalytic synthesis of 1,4-disubstituted 1,2,3-triazoles based on ortho-propargyloxybenzaldehyde and some aromatic azides
117. **M.I. Olimova** Amidoalkylation of 6H(bromo, chloro)-benzoxazolin-2-ones
118. **M.I. Olimova** Synthesis of 5-chlorosulfonyl-n-propylbenzoxazoline sulfonamides
119. **A.I. Sanoev** Optimal time for harvesting licorice roots for the production of glabridine and the place of collection from the territory of Uzbekistan
120. **T.A. Khajibaev** Method for obtaining the substance "dry extract tribulus" with a residual amount of butanol less than 1 ppm
121. **D.K. Mutalova** Step-by-step production control "dry extract tribulus" from the aerial parts of *Tribulus terrestris*
122. **M. Mamatkhanova** Extraneous impurities of tenestrol substance
123. **Sh.R. Nigmanova** About the production technology of the drug substance galanthamine hydrobromide
124. **D.Z. Azizov** Structure and biological activity of arabinogalactan of *Ferula tenuisecta*
125. **Sh.S. Yuldasheva** Quantitative analysis of protein in liquid extract "Extradent"
126. **Sh.Kh. Rakhimova** Quantitative analysis of proteins in *Dictamnus angustifolius*, *Haplophyllum perforatum* and *Ruta graveolens* plants growing in the Republic of Uzbekistan
127. **Sh.Kh. Rakhimova** Protein substances of rhizomes with roots of *Aconitum septentrionale* and *Aconitum leucostomum* plants
128. **Sh.Kh. Rakhimova** Characteristics of protein fractions of *Cucurbita L.* pumpkin

- seeds
129. **Sh.Kh. Rakhimova** Proteins of *Convolvulus subhirsutus* and *Arundo donax* plants growing in the Republic of Uzbekistan
130. **Sh.Kh. Rakhimova** Quantitative determination of proteins in *Mentha longifolia* plant growing in Uzbekistan
131. **G.N. Kudratov** Synthesis of new potentially active hybrid 1-aryl-3-heterylureas
132. **G.N. Kudratov** Synthesis of new urea derivatives based on 2-aminothiophene esters (amide) and p-tolylisocyanate
133. **B.B. Jurayev** Synthesis of potentially active isomeric alkyl-benzimidazoles
134. **R.Yu. Milusheva** Polymolecular complexes of protein and chitosan *Bombyx mori*
135. **N.K. Usmanova** Chemical components of *Melilotus officinalis* and melilotus albus
136. **U.M. Yakubov** Chemoselective alkylation of 2,6,8-trimethylquinazolin-4-one
137. **S.M. Allabergenova** Synthesis of targeted sulfonylureas in the series of bicyclic 3-alkylquinazolones
138. **B.B. Abduazimov** Content of lignin in the licorice root residues
139. **B.B. Abduazimov** Achieving soluble lignin from licorice residues and their physiological activity
140. **B.B. Abduazimov** Waste cotton plant can be alternative feedstock for valued products
141. **A. Usmonkulova** Synthesis of bioactive compounds of local bacteria at different concentrations of heavy metal ions
142. **A. Usmonkulova** Synthesis of phytohormones by cyanobacteria under salinity conditions
143. **U.A. Kurbanov** Synthesis of novel hybrid molecules containing indole and quinoline cycles
144. **A.U. Ubaydullaev** Isolation of 1,4-bis(3,4-dimethoxyphenyl) tetrahydro-1H,3H-furo[3,4-c]furan from plant seeds of *Haplophyllum perforatum*
145. **A.U. Ubaydullaev** Nitration reactions of quinoline alkaloids anhydroperforine and haplophyllidine
146. **Sh.N. Zhurakulov** Quercetin aminomethylation with tetrahydroisoquinoline derivatives and biological activity of their conjugates
147. **Sh.Sh. Khasanov** Obtaining recombinant baculoviruses in bac-to-bac® platform
148. **M. Shukurjonov** Components of the bac-to-bac® baculovirus expression system
149. **N. Tosheva** Growth and maintenance studies of vero cell lines
150. **R. Mukhamatkhanova** Optimized method for obtaining furocoumarins from *Ficus carica* leaves
151. **I.D. Sham'yanov** *Guaianolide austriacin* is a rice yield stimulant
152. **I.D. Sham'yanov** A new anti-helminth composition
153. **S.F. Aripova** Anatomical structure of the assimilated organs of *Physalis angulata* L. in the natural conditions
154. **S.F. Aripova** Study of chemical composition of *Dracocephalum paulsenii* plant
155. **A.A. Janibekov** Study of process extraction of the cycloarthane triterpenoids from aerial part of plants of the genus *Astragalus*
156. **K. Allambergenova** Chemical composition of essential oil from *Halimodendron halodendron*
157. **F.R. Egamova** Results of pharmacological studies of *Ferula tadshikorum* resin of flora of Uzbekistan
158. **U.T. Zokirova** Destruction of polyphenols of *Vitis vinifera* during extraction under mwi conditions
159. **M.Z. Isoqulov** The producers for microbial inoculant improving plant growth in saline conditions
160. **Sh.B. Latypova** Influence of the combination of cytosine with succinic acid on the acute alcoholic intoxication

161. **A.A. Azamatov** Effect of 33 derivatives of 1-aryl-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline on the locomotor activity of intact and amphetamine-treated mice in the open field
162. **O. Alimukhamedova** Comparison of the oligonucleotide probes of different structures for the diagnosis of the Hepatitis B virus by PCR analysis
163. **A.A. Makhnev** Synthesis of paramagnetic particles coated with SiO₂ layer for DNA/RNA isolation from biological objects
164. **A.A. Makhnev** Influence of melting temperature (tm) on the efficiency of PCR reaction in gene expression study
165. **N.M. Yuldasheva** Terpenoids of the *Ferula ferganensis* plant
166. **N.M. Yuldasheva** Flavonoids of *Inula salicina*
167. **Sh.A. Sulaymonov** Flavonoids of *Oxytropis rosea*
168. **Sh.A. Sulaymonov** Sterols of *Oxytropis rosea*
169. **Sh. Agloxodjayeva** Determination of the authenticity of escin in the preparation essilar by TLC method
170. **G.X. Kadirova** Screening for phosphate-solubilizing wheat rhizobacteria (*Triticum aestivum* L.)
171. **R. Kuralova** Microorganisms in saline soil and their ecological significance
172. **S.D. Makhmudov** Obtaining powder x-ray diffractogram of hemicelluloses from the fruit of *Prunus domestica* L.
173. **G.I. Amanova** Total sum of polyphenolic compounds in *Nitraria schoberi* L. species widely spread in the arid southern Aral sea regions
174. **K.Ch. Kurbonov** Concentrations of free amino acids in the organs of *Capparis spinosa*
175. **U.J. Ishimov** Peptides of the *Thymoptin*
176. **U.J. Ishimov** Novel antioxidant peptides from the camel milk hydrolysates
177. **R.Z Khudoykulova** Synthesis of 6H(Br)-2,4-dichloroquinazolines and direction of nucleophile substitution reactions
178. **R.Z Khudoykulova** Synthesis and interaction of 6H(Br)-2,4-dichloroquinazolines with methyl-piperidines
179. **Sh.X. Kubayev** Reaction of N-(5-amino-1H-benzo[d]imidazol-2-Yl) acetamide with carboxylic acids
180. **S.Sh. Abdirahimova** Vitamins found in various organs of *Lycium ruthenicum murr.* growing in the southern Aral sea region
181. **S.Sh. Abdirahimova** Carbohydrate percentage composition in some species of *Atriplex* plant genus widely spread in the southern Aral sea region.
182. **Z.Zh. Mirakhmetova** Optimisation of isolation of peptides from *Latrodectus mactans* venom
183. **Sh.J. Fazliddinov** Primary structure of the insectotoxin from the scorpion venom *Mesobuthus eupeus*
184. **N.M. Ashirmatova** Surface activity of *Rumex* species
185. **N.M. Ashirmatova** Antibacterial and antimicrobial activity of extracts and fractions of medicinal plants *Rumex halaezii*, *Rumex syriacus*
186. **R.K. Karimov** Alkylation reactions of quinazolin-4-one derivatives
187. **Kh.Kh. Dolimov** Isolation of the total proteins of *Arundo donax* root and their antimicrobial activities
188. **S.Z. Aglamov** D-pinitol from *Astragalus amygdalinus* plant
189. **R. Rakhmanberdiyeva** Polysaccharides of the aerial part of *Pisum sativum*
190. **N.Sh. Berdiev** Flavonoids from the plant *Geranium sanguineum*
191. **A.U. Berdiev** Targeted syntheses of some novel (e)-1-(4-chlorobenzylidene)-2-hetarylhydrazines
192. **A.U. Berdiev** Synthesis of novel thienopyrimidine-benzimidazole hybride molecules

193. **Sh.R. Makhmudova** Flower petal lipids of *Crocus sativus l.*
194. **D.R. Gulyamova** Quantitative determination of the amount of carotenoids in raw nettle (*Urtica dioica*)
195. **Sh.S. Yuldasheva** Studies of tannins in the liquid extract "Extradent"
196. **N.I. Mukarramov** Determination of ferulic acid in *Ferula tadshikorum* resin by HPLC
197. **Kh.Kh. Dolimov** Expression of recombinant exoinulinase *Helianthus tuberosus* in *Pichia pastoris* GS115
198. **N.Kh. Yuldasheva** On the hypolipidemic effect of total extractive preparations containing flavonoids, triterpene glycosides and phytoecdysteroids isolated from *Thermopsis alterniflora*, *Zygophyllum oxianum* and *Silene viridiflora*
199. **S. Yuldasheva** Molecular docking based binding energies of some O-alkyl derivatives of gossypol
200. **Yu.R. Mirzaev** Some data on the influence of the bud and flower extract of *Capparis spinosa* on the da receptors
201. **D.M. Rizayev** Cloning of the dreb2a gene from the desert plant *Halocnemum strobilaceum*
202. **K.H. Ergashev** On the synthesis of chitosan metal complexes *Bombyx mori* with manganese ions (ii)
203. **A.T. Abdurasulov** The interpolyelectrolyte complexes based on chitosan *Bombyx mori* and starch
204. **N.N. Shodiev** Isolation and characterization of thermophilic bacteria from hot spring in Oltinsoy village, Navoiy region, Uzbekistan
205. **V.V. Shurigin** *Bacillus subtilis* imruz-7 - the active producer of alkaline protease
206. **M.Z. Alimova** Antifungal activity of endophytic bacteria from soybean
207. **D. Husanova** *Preruleation clusters* of flat perylene molecules
208. **Sh.K. Khidoyatova** Lipids of *Calligonum junceum L.*
209. **Sh.Kh. Ibotov** Lipids and fatty acids of *Salsola pestifer* seeds
210. **N.K. Yuldasheva** Lipids of the seeds of *Alhagi persarum*
211. **A.U. Berdiev** Synthesis, crystal structure and hirshfeld surface analysis of new derivative of thieno[2,3-d]pyrimidine
212. **I.S. Ortikov** Synthesis, crystal structure and hirshfeld surface analysis of (1-(2-methyl-4-nitrophenyl)-1h-1,2,3-triazol-4-yl) methyl 2-hydroxy benzoate
213. **K. Abdireymov** A simple and convenient method for arylsulfonylation of 2,5-dimethylbenzimidazole
214. **M.R. Umarova** Study of cytotoxic activity of oxadiazole derivatives
215. **U.B. Khamidova** Cytotoxicity of 1,3,4-oxadiazole-2-thione derivatives *in vitro*
216. **B. B. Juraev** Direction of alkylation reactions of 2-methyl-5-chlorobenzimidazole
217. **A.A. Siddikova** Pectin substances of *Scutellaria adenostegia* and *Scutellaria comosa* and their antimicrobial activity
218. **F.A. Kodiralieva** Polysaccharide content of aerial part and underground parts of *Convolvulus syhirsitus*
219. **F.A. Kodiralieva** Polysaccharides of the aerial part of *Gentiana olivieri*
220. **Z.Ch. Abraeva** Components from the plant *Haplophyllum latifolium*
221. **Kh.A. Rasulova** Gc-ms analysis and comparision on *Haplophyllum pedicellatum*
222. **N.Kh.Yakubova** Study of the acute toxicity of new diazoimino derivatives of gossypol
223. **M.I. Egamberdiyeva** Resistance of nodular bacteria of local soybean varieties to salt stress
224. **M.M. Nazirov** Biodegradation of polyethylene terephthalate (pet) by petase enzyme

225. **N.A. Sherbekova** Biodiversity of cotton rhizosphere bacteria
226. **I.M. Khalilov** Biodegradation of polyethylene in the effect of temperature by microorganisms
227. **M. Narmukhamedova** Determination of the activity of bacterial ribonucleases
228. **I.S. Ortikov** Catalytic cyclization of isomeric bromoazides and propargyl ester
229. **D.I. Kosimov** Isolation of microorganisms and their use in the process of degradation of pesticides
230. **R.B. Ergashev** Evaluation of the effect of biogenic silver nanoparticles on wheat growth
231. **G.D. Shermatova** 1-O-methylemodin and stigmaterol compounds from the underground part of *Rumex pamiricus rech. F. (polygonaceae)*.
232. **J.I. Islamova** Mechanisms of 20-hydroecdysione effect on elite athletes
233. **D.R. Kodirova** Gerfine - new alkaloid from *Haplophyllum griffithianum*
234. **Sh.Kh. Rakhimova** Comparative evaluation of proteins of *Capparis spinosa* plants cultivated in the Republic of Uzbekistan
235. **R. Rakhmanberdiyeva** The use of a new density gradient "gledol" for lymphocyte isolation from peripheral blood
236. **Sh.E. Ochilov** Synthesis derivatives of 5-fluorouracil
237. **A.Q. Azimova** Characteristics of *Vitis L.* plant
238. **A.S. Ishmuratova** Determination of the toxicity of *Rubia tinctorum* roots extract
239. **X.U. Khalbekova** Amino acid composition of species of the genus *Atriplex L.*
240. **T.A. Khudoiberdiev** Selection of optimal conditions for obtaining a lipolytic enzyme from the seeds of *Nigella sativa*
241. **F.A. Sobirova** Synthesis of derivatives of lagoxilin with phthalic anhydride
242. **M.R. Tursunova** Biological activity of the oil extract of *Curcuma longa* harvested in Surkhandarya region
243. **N. Bekmukhamedova** Antagonistic ability of a local pigment forming strain of actinomycete of the genus *Nocardia*
244. **K.V. Raimova** Chemical structure of the polyphenol composition of the leaves of *Pontian hawthorn crataegus pontica*
245. **H.U. Mamadaminov** Herbicidal activity of sulfonyleureas in the series of bicyclic alkylquinazolones
246. **K. Abdireymov** Synthesis of novel N¹-arylsulfonyl-2-ethyl-5-methyl-benzimidazoles
247. **B.B. Abduazimov** The content of total and acid-insoluble ash content in the residues of licorice roots
248. **Kh.E. Yunusov** Fabrication of carboxymethylcellulose electrospun/polyvinylalcohol nanofibers functionalized with silver nanoparticles
249. **M.M. Kuzieva** Oxidized nanocellulose and its applications
250. **A.A. Atakhanov** Preparation of cellulose nanofibers using electrospinning
251. **D.J. Ergashev** Preparation and research of microcrystalline cellulose and nanocellulose from licorice root cellulose
252. **G.G. Rakhmonova** Evaluation of the analgetic effect of glabtan in the "hot plate" model
253. **A. Dzhuraev** Synthesis of new amides of 3-O-acetil-18 β -H-glycyrrhetic acid
254. **M.A. Kuronboeva** Polysaccharides of *Ficus carica l.*
255. **B.I. Mamatkulov** Acute toxicity testing of native and modified forms of immunoparazitan-N
256. **Z.S. Khashimova** Effect of *cuscuta europeae* glycoproteins on cancer cells
257. **D.T. Babaeva** Synergistic effect of the steroid biostimulant and fungicide on the phytopathogenic fungus *Fusarium oxysporum sp. vasinfectum*
258. **A.A. Boydedayev** Multifunctional polysaccharide hydrogels for wound healing

259. **A.A. Boydedayev** Hyaluronan-based hydrogels with hemostatic properties
260. **U.R. Togaev** On the composition of trail pheromone of *Anacanthotermes turkestanicus*
261. **N.J. Burkhanova** Dft investigation chitosan-stabilized Cu/Ag nanoparticles
262. **F.M. Turakulov** Synthesis selenium nanoparticles in solution sodium-carboxymethylcellulose based on nanocomposites for the cancer treatment
263. **M.M. Mirkholisov** Synthesis and characterization of sodium-carboxymethylcellulose solution containing zinc oxide nanoparticles for the creation of biomaterials
264. **Kh.E. Yunusov** Physicochemical characteristics of cellulose – containing silver nanoparticles for air filtration
265. **J. Jalilov** Ftir-spectroscopic analysis of sodium- carboxymethylcellulose containing silver cations based on antibacterial film
266. **S.D. Baltabayeva** Study of the elemental composition of melon melo mill growing in Karakalpakstan
267. **D.Sh. Shakarova** Separating cytosine derivatives in thin layer of chitosan-silica nanohybrid sorbent
268. **J.G. Bakhtiyarov** Analysis of oil and vitamin composition of melon seeds
269. **N. Bibikov** Crude extracts antibacterial and antifungal activity of six fungal isolates from *Orchids zeuxine strateumatica* and *Spiranthes hongkongensis*
270. **G. Mardonova** Endophytes from licorice-*Glycyrrhiza glabra linn* as biocontrol agents against *Fusarium* caused diseases
271. **A.A. Ibragimov** Determination of macro- and micro-elements in persimmons by the method of mass-spectrometry with inductively-coupled plasma
272. **I.T. Yakubov** Study of gene expression of DNA and histone methylation and demethylation enzymes in rat stomach cells
273. **J. Joldasov** Screening of natural compounds of *Peganum harmala* and *Glycyrrhiza glabra* against the main protease of SARS COV-2 by autodock program
274. **Z.A. Kadirova** Extraction of flavonoids from the medicinal plant *Physalis alkekengi*
275. **B.P. Karlybaeva** Degree of deacetylation of chitosan produced from *Artemia parthenogenetica* cyst of the Aral sea
276. **M.S. Zokirova** Study of the processes of obtaining pectin from two plant species of the genus *Crataegus*
277. **R.Z. Mamadalieva** Structural elucidation of triterpene glycoside from the roots of *Allochrusa gypsophiloides*
278. **Sh. Khasanov** Synthesis of coordination compound based on copper (ii) sulfate and cefotaxime
279. **M.A. Rasulova** Natural neurotropic autoantibodies in COVID-19 associated ischemic strokes
280. **O.M. Namozov** Synthesis of polycomplexes of microelements with polypeptides
281. **N. Abdunazarova** Evaluation quality of the dry extract obtained on the basis celandine
282. **S.M. Nurmuratova** Study of the influence of biologically active supplement «bifobalans aktiv" in the experimental rats: hematological research
283. **O.O. Rakhmonov** Obtaining a physiologically active substance from the waste of a cotton cleaning plant
284. **Sh.Sh. Orazova** Sec liquid chromatography of *Cistanche salsa* beck polysaccharides

285. **D.T. Safarova** Obtaining dry extracts by spray drying for the development of antihypertensive drugs
286. **J.R. Suyunov** Synthesis and thermal analysis of the complex compound of nickel (ii) sulphate with naphthaldine disulfoacid
287. **J.R. Suyunov** Synthesis and IR-spectrum analysis of the complex compound of naphthaldine disulpho acid with copper (ii) acetate
288. **T.M. Babaev** Polymeric preparation for the treatment and prevention of gynecological diseases in farm animals
289. **O.N. Ashirov** Fermentation of the methylotrophic yeast *Pichia pastoris* for recombinant protein expression
290. **A.A. Tojikulov** Determination of deoxynivalenol and zearalenone in food products by high performance liquid chromatography
291. **M. Yakhshmuratov** Quantum-chemical analysis and synthesis of the coordination compound of sodium m-cresoxyacetate with copper (ii) format
292. **Sh.Sh. Shakharov** Chemical synthesis of boron nitride nanoparticles with a hexagonal crystal structure
293. **U.A. Khasanov** Iron processing slag for obtaining iron oxide red pigment
294. **Kh. Agzamkhuzhaeva** Ribosome-inactivated proteins (rips) of the black elder *Sambucus nigra*
295. **Yu.I. Oshchepkova** Study of antiarrhythmic activity of modified forms of amiodarone
296. **D.G. Urmonov** The synthesis of some Mannich reaction products of indole with furfural under solvent-free conditions
297. **Z.E. Urunbayeva** Synthesis of pharmacologically active isoquinoline derivatives
298. **A.A. Xudoyberdiyeva** Study reaction interaction of acetoacet ether, homoveratrylamines and p-hydroxybezaldehyde
299. **S.F. Aripova** Low molecular metabolites of fungi. 13,22-dimetoxystachibotrin from stachybotrys chartarum
300. **Z.O. Kilichev** Synthesis pyrroles based on β -dicarbonyl compounds
301. **S.M. Mirzokulov** 1-(Aminoalkyl)isoquinolines as convenient intermediates for important heterocyclic products
302. **D. Ergasheva** Search for stimulus affecting the level of inorganic polyphosphates in thymocytes
303. **F. B. Eshboev** Antimicrobial activities of extracts of endophytic fungi isolated from *Cirsium vulgare*
304. **O.Kh. Saitmuratova** Bioactive addition ver-mol – 2 for prophylaxis and treatment diabetes mellitus
305. **A. Sovetbek** Chemical constituents of the aerial part of the *Ferula foetida*
306. **A. Musagalikyzy** Phytochemical studies of biologically active substances of the aerial part of *Daphne altaica*
307. **A. Zhomartova** Phytochemical study and biological activities of *Artemisia albida* willd
308. **A. Minkayeva** Studying the chemical composition and biological active constituents of the *Ferula foetida*'s underground part
309. **M. Kyzsaykal** Chemical composition of the plant *Prangos pabularia* growing in the south of Kyrgyzstan
310. **G. Asrankulova** The state of lipid metabolism in old rats in high altitude conditions against the background of the use of coenzyme q10
311. **N. Akynbekova** Influence of l-arginine on lipid metabolism in experimental atherosclerosis and morphological characteristics of the myocardia in animals