

Academy of Sciences
of the Republic of Uzbekistan

S.Y. Yunusov Institute of the
Chemistry of Plant Substances

Journal of Chemistry of Natural Compounds

ACTUAL PROBLEMS OF THE CHEMISTRY OF NATURAL COMPOUNDS

SCIENTIFIC AND PRACTICAL CONFERENCE
OF YOUNG SCIENTISTS

PROGRAM

April 23, 2025 year

Tashkent

Dear _____

We invite you to take an active part in the scientific and practical conference of young scientists "**Actual problems of the chemistry of natural compounds**", which will be held on April 23, 2025 at the Institute of Chemistry of Plant Substances Academy of Sciences of the Republic of Uzbekistan.

CONFERENCE TOPICS

1. Chemistry, biology, pharmacology, technology and biotechnology of natural compounds, organic chemistry;
2. Successes and problems of creation of new drugs.

ORGANIZING COMMITTEE

Chairman: Acad. Sagdullaev Sh. Sh.

Co-Chairman: Vice-President of the AS RUz, Prof. Turdikulova Sh.U.

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Acad. Turaev A.S.
Prof. Abdullaev N.D.
Prof. Aripova S.F.
Prof. Azimova Sh.S.
PhD. Bobakulov Kh.M.
Prof. Botirov E.Kh.
Prof. Elmurodov B.J.
Prof. Gusakova S.D.
Dr. Mamatkhanova M.A.
Dr. Normakhamatov N.S.
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Dr. Tursunkhodjaeva F.M.
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S.Y. Yunusov Institute of the Chemistry of Plant Substances,
77, Mirzo-Ulugbek Str., Tashkent, 100170, Uzbekistan

23 April 2025 year

8⁰⁰ – 9⁰⁰

REGISTRATION OF THE PARTICIPANTS TO THE CONFERENCE

(S.Y. Yunusov Institute of the Chemistry of Plant Substances, 77, Mirzo-Ulugbek Str., Tashkent, 100170, Uzbekistan)

9⁰⁰ – 9²⁵

WELCOME SPEECH OF CHAIRMEN AND CO-CHAIRMEN

Sh.Sh. SAGDULLAEV – Academician of the Academy of Sciences of the Republic of Uzbekistan, Director of the S.Y. Yunusov Institute of the Chemistry of Plant Substances AS RUz.

GREETING ADDRESSES

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

PLENARY PRESENTATIONS

Chairmen: Prof. Sh.S. Azimova

Secretary: Dr. M.A. Mamatkhanova

9²⁵ – 9⁵⁰

Acad. R.Z. Sabirov – ION CHANNELS IN CELL VOLUME REGULATION, PROLIFERATION AND DEATH

9⁵⁰ – 10¹⁰

Prof. F.M. Tursunkhodzhaeva – RATIONAL DESIGN OF NEW DRUGS BASED ON NATURAL COMPOUNDS

10¹⁰ – 10³⁰

Prof. E. Kh. Botirov – PLANTS OF THE GENUS *PEROVSKIA* (LAMIACEAE) OF THE FLORA OF UZBEKISTAN - A PROMISING SOURCE OF BIOLOGICALLY ACTIVE TERPENOIDS AND PHENOLIC COMPOUNDS

10³⁰ – 10⁵⁵

Acad. K.Sh. Tojibaev – NEW PERSPECTIVES FOR LARGE-SCALE ASSESSMENT OF PLANT DIVERSITY IN CENTRAL ASIA

10⁵⁵ – 11²⁵

Acad. S.O. Bachurin – MEDICINAL CHEMISTRY AS A STRATEGY FOR TARGETED DRUG DISCOVERY FOR THE TREATMENT OF NEURODEGENERATIVE DISEASES

ORAL PRESENTATIONS

Chairmen: Prof. F.M. Tursunkhodzhaeva

Secretary: Ph.D. R.F. Mukhamatkhanova

11²⁵ – 11³⁷

A.A. Ganiev – NEW FUSED OXABICYCLIC BISABOLANES CHARACTERIZED BY A C-2-O-C_{SC} BRIDGE FROM *Artemisia persica*

11³⁷ – 11⁴⁹

K.Ch. Qurbonov – STUDY OF THE COMPOSITION OF WATERY AND ETHANOL EXTRACTS OF THE PLANT *Capparis spinosa* L. USING THE LC-ESI-MS METHOD

11⁴⁹ – 12⁰⁰

M.R. Umarova – CYTOTOXICITY OF ALKYL DERIVATIVES OF SOME 1,2,3,4-TETRAHYDROISOQUINOLINES ON NORMAL CELLS

12⁰⁰ – 13⁰⁰ LUNCH

ORAL PRESENTATIONS

Chairmen: Prof. S.F. Aripova

Secretary: Ph.D. Sh.M. Adizov

- 13⁰⁰ – 13¹⁰ **Bo Zhao** – NEW DITERPENOID ALKALOIDS FROM *Delphinium iliense*
- 13¹⁰ – 13²⁰ **D.Sh. Akhmedova** – LIPIDS OF *Datisca cannabina*
- 13²⁰ – 13³⁰ **A.R. Khurramov** – A NEW WITHANOLIDE FROM *Saponaria officinalis*
- 13³⁰ – 13⁴⁰ **F.A. Zulpanov** – SYNTHESIS OF NOVEL THIOUREA DERIVATIVES OF 6-AMINOBENZOPYRIMIDIN-4-ONES
- 13⁴⁰ – 13⁵⁰ **Kh.T. Saydullaeva** – THE INFLUENCE OF SUPRAMOLECULAR COMPLEXES ON THE GERMINATION OF *Atriplex pratovii* SUKHOR. SEEDS DISTRIBUTED IN THE SOUTHERN ARAL SEA REGION
- 13⁵⁰ – 14⁰⁰ **Sh.R. Makhmudova** – COMPONENTS OF STAMENS FROM *Crocus sativus*

ORAL PRESENTATIONS

Chairmen: Dr. S.A. Sasmakov

Secretary: Ph.D. J.M. Abdurakhmanov

- 14⁰⁰ – 14¹⁰ **U.K. Aytmuratova** – ANTIRHEUMATOID ACTIVITY OF TWO 1H-1,2,3-TRIAZOLES DERIVATIVES IN A COLLAGEN-INDUCED RHEUMATOID ARTHRITIS MODEL
- 14¹⁰ – 14²⁰ **T.X. Sadullayev** – CLONING OF THE HBsAg GENE INTO A PLASMID VECTOR FOR *IN VITRO* TRANSCRIPTION
- 14²⁰ – 14³⁰ **A.A. Siddikova** – COMPOSITIONS OF POLYSACCHARIDES WITH BIOLOGICALLY ACTIVE SYNTHETIC COMPOUNDS TO IMPROVE THEIR SOLUBILITY AND BIOAVAILABILITY
- 14³⁰ – 14⁴⁰ **G.I. Amanova** – RESULTS OF BIOCHEMICAL, BIOLOGICAL AND BIOTECHNOLOGICAL STUDIES OF *Nitraria schoberi* L. PLANT DISTRIBUTED IN THE SOUTHERN ARAL SEA REGION
- 14⁴⁰ – 14⁵⁰ **D.M. Mukhtarkhuzhaeva** – STUDYING OF CARBOHYDRATE AND MONOSACCHARIDE COMPOSITION OF *Crotalaria juncea* SEEDS
- 14⁵⁰ – 15⁰⁰ **U.Yu. Yusupova** – ISOLATION OF STEROID SAPONIN FROM AERIAL PARTS OF *Silene tomentella*

ORAL PRESENTATIONS

Chairmen: Prof. R.K. Rakhmanberdieva

Secretary: Ph.D. D.R. Siddikov

- 15⁰⁰ – 15¹⁰ **A.I.Sanoev** – QUANTITATIVE CONTENT OF GLYCYRRHETINIC ACID IN THE RESIDUE OF *Glycyrrhiza glabra* ROOTS FORMED AFTER WATER EXTRACTION

15 ¹⁰ – 15 ²⁰	Sh.O. Melieva – FLAVONOIDS FROM THE <i>Dracocephalum diversifolium</i>
15 ²⁰ – 15 ³⁰	S.N. Duysenova – CARBOHYDRATE COMPOSITION OF THE ABOVE-GROUND PART OF <i>Artemisia juncea</i> PLANT
15 ³⁰ – 15 ⁴⁰	M.U. Zhuraev – FLAVONOIDS AND PHENYLPROPANOIDS OF THE AERIAL PARTS OF <i>Salvia sarawschanica</i>
15 ⁴⁰ – 15 ⁵⁰	S.Kh. Mullabaeva – COMPOSITION OF THE ABOVEGROUND PART OF <i>Perovskia botschantzevii</i>
15 ⁵⁰ – 16 ⁰⁰	S.M. Allabergenova – A FACILE METHOD FOR OBTAINING POTENTIALLY ACTIVE SULFONAMIDES IN THE BICYCLIC QUINAZOLONES SERIES
16 ⁰⁰ – 17 ⁰⁰	AWARDING OF THE PARTICIPANTS AND CONCLUSION OF THE CEREMONY

PUBLICATIONS

1. S.I. Atkiyayeva Chemical components of *Perovskia scrophulariifolia* roots
2. N.A. Abdullabekova Development of UV-spectrophotometric analysis methods for torasemide
3. N.U. Abdukhalikova Development of a UV-spectrophotometric method for the analysis of mephedrone
4. U.D. Matchanov Stability of the complex obtained from quarsetin with monoammonium salt of glycyrrhizinic acid
5. U.D. Matchanov Study of the “sadaraykhon” variety of *Ocimum basilicum* L. cultivated in Uzbekistan
6. G.M. Ikromova Composition and antimicrobial activity of *Perovskia kudrjaschevii* essential oil
7. R.M. Ruzibaeva (1S)-Laudanidine alkaloids from *Lindelofia macrostyla*
8. R.M. Ruzibaeva Vitamin composition of some types of plants of the Boraginaceae family
9. R.M. Ruzibaeva Flavonoid composition of some types of plants of the Boraginaceae family
10. F.R. Egamova The actoprotective effect of a dry extract from the aerial part of *Cistanche salsa*
11. Kh.N. Olimova Loliolide lactone isolated from *Rindera cyclodonta* plant
12. N. Akhmedova Investigation of catalytic properties of recombinant uridine (UP) and thymidine phosphorylases (TP) expressed
13. M.A. Khamdamova Obtaining supramolecular complexes of the monoammonium salt of glycyrrhizic acid with some antibiotics
14. D.E. Dusmatova Volatile compounds of the aerial part of *Tragopogon graminifolius*
15. D.Sh. Tojiboeva Volatile components of *Handelia trichophylla*
16. D.Sh. Tojiboeva Secondary metabolites of *Handelia trichophylla*
17. Z.M. Makhkamova Ultrasonic extraction of sesquiterpene lactones from *Imula grandis* roots
18. D.S. Rakhmonova Determination of microbiological purity of the above-ground parts of *Carthamus tinctorius*
19. Sh.O. Khakimjanova Study of essential oils of the seeds of *Isatis tinctoria*
20. G.S. Kimsanova Study of water-soluble vitamins of the *Inonotus hispidus* basidiomycetes
21. R.L. Anvarova The study of proteins in the creation of promising sunflower varieties
22. Al-Duvaji Halya Ahmad Study of the lipid-protein complex of elite sesame seeds of the karshiga variety in the soil and climatic conditions of

Karakalpakstan

23. E.O. Rakhmatov Determination of the amount of acetamizole in the modified pecatsetin composition
24. D.M. Saydjanova About the antiarrhythmic (N-desacetylappaconite hydrobromide) substance
25. N.B. Akhmedova Multi-component synthesis of pyranopyrazole derivatives in a microwave reactor
26. D. Turdaliyev Design of specific oligonucleotides for HPV 11 detection
27. A.E. Egamberdiev *Adonis turkestanica* (Korsh.) adolf – a promising medicinal plant
28. D.T. Bobodustova Synthesis of azomethines and amides in the series of 1,3,4-oxadiazoles
29. G.T. Burieva Quantitative determination of flavones from the aerial part of *Artemisia juncea*
30. I.F. Tojiev Synthesis of cyanoalkyl containing derivatives of 5-(2,3,4-pyridyl)-1,3,4-oxadiazol-2-thione
31. U. Joraboyeva Beta-2-microglobulin (B2M) based pcr assay internal control system
32. Z.Y. Samandarova Polar lipids of *Achillea filipendulina* seeds with bracts
33. Zh.K. Namazbayeva Reaction of foliosidine with chloroacetyl chloride
34. N.G. Nurillaeva Synthesis of new 1H-1,2,3-triazole derivatives based on di(prop-2-yn-1-yl) adipate
35. R.Kh. Arzanov 2-Phenylquinazolin-4(3H)-ones thionation and heterocyclization reaction
36. G.I. Khamraeva Targeted synthesis of ethyl 3,5-dialkyl-4-oxo-3,4-dihydrothieno[2,3-d]pyrimidine-6-carboxylates
37. A.U. Berdiev Targeted synthesis of novel thienopyrimidine – tryptamine hybrid compounds
38. I.E. Yuldashova Synthesis of propanenitrile derivative in “green chemistry” conditions and it’s some “genetic” modifications
39. I.E. Yuldashova Targeted acylation and arylsulfonylation of benzo[d]thiazole-2(3H)-thione
40. M.I. Olimova Targeted reactions of benzo((imida)thia)zolin-2-ones (thiones) with arylsulfochlorides
41. B.B. Zhuraev Selective reduction of nitro derivatives of 2-alkylbenzimidazoles
42. D.M. Ruziboev Synthesis of 2,3-dialkyl-quinazolin-4(3H)-ones
43. S.A. Safarova Chemical modification and structure of lappaconitine alkaloid
44. T.N. Kaipnazarov Arylacylation of cycloartane glycoside

45. E.A. Mukhammadiev Apigenin glycosides identified in *Stachys hissarica* by UHPLC-MS
46. M.B. Saidova Study of the composition of the extract of *Perovskia kudryashovii*, a plant belonging to the genus *Perovskia* of the family Lamiaceae
47. A.Zh. Akhmedov Isoflavone glycoside from *Astragalus alopecias*
48. J. Mengturayev *In silico* comparative analysis of the β -galactosidase gene mrna in *Homo sapiens* and *Glycine soja*
49. S.N. Shomuratova Total lipids of seeds *Ammodendron conollyi*
50. M.U. Zhuraev Chemical components of *Perovskia angustifolia* roots
51. D.T. Babaeva The antioxidant activity of a natural stimulant in potato cultivation
52. D.M. Rizaev Amplification of the dreb2a transcription factor gene from *Salsola richteri*
53. J.T. Qodirov Alkylation of meloxicam at the endocyclic *N*-atom of thiazole ring
54. Z.I. Narmatova Crystalline and molecular structure of pallidol from *Caragana aurantiaca* roots
55. U.M. Omanova Phytochemical composition of *Oxytropis macrodonta*
56. U.M. Omanova Research of lipids from *Astragalus pterocephalus* extracts
57. N.Y. Aseminova Astaxanthin in *Artemia* cysts: the role and application of a natural pigment
58. D.J. Davranbekova Improvement of lecithin extraction technology from unrefined cottonseed oil
59. D.D. Dovudova Technology for obtaining an antihypertensive agent based on medicinal plants
60. E.R. Kurbanova Enhancement of seed germination in *Sophora pachycarpa* through chemical scarification
61. B.B. Muzaffarova Possibilities of obtaining anti-inflammatory and antibacterial materials based on some synthetic isoquinoline derivatives
62. M.Z. Nomozova Study of metabolites providing antifungal properties of *Trichoderma asperellum*
63. P.A. Nurmakhmadova The effectiveness of insecticides against *Helicoverpa armigera*
64. Sh.Sh. Orazova Study of gallic acid in *Cistache salsa* plants
65. G.M. Burxonova Study of the amino acid and protein content of *Poterium polygamum*
66. N.S. Abdunazarov Optimization of growth conditions for streptomyces spectabilis strain
67. S.N. Tojiyeva Modification of metabolites of the poisonous fungus *Stachybotrys chartarum*

68. S.M. Turaeva Laboratory evaluation of toxicity of selected insecticides against egg and larval stages of *Helicoverpa armigera* (Hübner) (Lepidoptera: Noctuidae)
69. N.R. Halikova Composite materials based on *Nigella sativa*
70. S.D. Baltabayeva Study of carbohydrates in the content of melon peel
71. S.D. Baltabayeva Study of flavonoids in the content of melon peel
72. Sh.Sh. Kosimova Antibacterial activity screening of *Streptomyces* isolates (groups III-IV) against pathogenic strains
73. M.A. Mulyukin The molecular composition of *Thymus vulgaris* L. cultivated by hydroponic method
74. B.D. Rakhmonov Flavonoid composition of wild pear *Pyrus pyraster* native to the republic of Uzbekistan
75. K.V. Eroshkina Proteolytic activity of the enzyme complex from *Bacillus* sp
76. O.O. Imomova Screening of lactic acid bacteria for the preparation of starter cultures for the soft cheese production aims
77. J.N. Makhamov Malt extract with a softened bitterness in the taste
78. S.D. Tangirova Antimicrobial activity of the total flavonoids of *Hypericum perforatum*
79. E.R. Kurbanova The effectiveness of the use of growth regulators at different sowing dates of *Astragalus babatagi*
80. N.M. Mamatkulova Application of plant extract of *Mentha asiatica* Boriss. to enhance seed germination
81. N.S. Otajonova Development of an effective method for sterilizing *Dracocephalum moldavica* seeds to enhance their germination rate
82. E.R. Kurbanova Potential applications of polyprenols from the wild plant *Vitis vinifera* L. to improve soybean seed germination
83. F.Yu. Zhaloliddinov Synthesis and structure of 2,5-dimercapto-1,3,4-thiadiazole derivatives
84. Z.E. Abdimuratova Reactions of 5-aryl-2-amino-1,3,4-thiadiazoles with aryliso(thio)cyanates
85. G.E. Saidova Step-by-step control of the production of natural sweetener substances sweetlife-i and sweetlife-ii from the aerial parts of *Stevia rebaudiana* Bertoni
86. T.M. Muminova Synthesis of azomethines in the benzimidazole series
87. S.B. Navruzov Effect of dag-1 preparation on flavonoid content in cotton varieties under heat stress
88. U.B. Khamidova Study of cytotoxicity of extracts obtained from lichenes *X. sanspersa*, *X. elegans* and *L. argopholis*

89. A.D. Raximov Antiradical activity of polyphenolic compounds Yan-1 and Yan-2, diazoimino derivatives of gossypol
90. M.N. Vazirova Amino acid and mineral composition of *Iris pseudacorus* seeds
91. N.A. Tosheva Study of the cytotoxic properties of modified nucleosides on vero b cell line
92. D.Sh. Azizova Polysaccharides of the aboveground and underground parts of *Cistanhe salsa* and *C. mongolica*
93. D.G. Omanov Development of analytical methods for the determination of sodium hyaluronate in drugs
94. A.M. Yarilkaganova Investigation of the toxicity of liposomes from egg yolk and soy lecithins
95. D.E. Dusmatova Spatial structure of new igalan derivatives
96. T.E. Reymbayeva Reaction of the alkaloid lycorine with acetyl chloride
97. A.S. Gofurov Reaction of 2-(6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-1-yl)-phenol with bromine
98. S.S. Omonova Alkaloids of plants of the genus *Heliotropium*, growing in the fergana valley of Uzbekistan
99. A.F. Xamidov Secondary metabolites of *Cousinia microcarpa*
100. M.F. Tukhtaeva The effects of triburenal on the experimental acute renal failure in rats
101. D.I. Djuraeva Development of a model of experimental endometriosis in rats

FOR NOTES

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