



PROCEEDINGS OF UZBEKISTAN-CHINA INTERNATIONAL SYMPOSIUM ON "CURRENT ISSUES IN THE CULTIVATION AND UTILIZATION OF MEDICINAL PLANTS"



Tashkent, June 18–19, 2026

<https://doi.org/10.5281/zenodo.21356314>

PROGRAM

OF THE UZBEKISTAN-CHINA INTERNATIONAL SYMPOSIUM ON "CURRENT ISSUES IN THE CULTIVATION AND UTILIZATION OF MEDICINAL PLANTS"

ABOUT THE SYMPOSIUM

The Uzbekistan–China International Symposium on "Current Issues in the Cultivation and Utilization of Medicinal Plants" serves as a prestigious integration platform for establishing experience exchange between various scientific schools and young scientists, developing fundamental and practical solutions to existing systemic problems, and forming new joint transboundary scientific projects.

The main objective of the international symposium is to create a high-tech international platform that serves to elevate the integration between leading scientists, researchers, and brand manufacturers (the business sector) of Uzbekistan and the People's Republic of China in the fields of medicinal plant cultivation, advanced raw material processing, phytochemistry, biotechnology, agrotechnology, food safety, traditional medicine, and folk medicine to a qualitatively new level.

The priority conceptual task of the symposium is to systematically form and scientifically substantiate the vertical integration in the medicinal plant phyto-industry from raw material cultivation to the production of ready high-value products, specifically the complete value chain principle: "Seed-to-Market".

SYMPOSIUM ORGANIZERS:

- Ministry of Higher Education, Science and Innovations of the Republic of Uzbekistan;
- "Uzkimyosanoat" Joint-Stock Company (Tashkent, Uzbekistan);
- Tashkent Institute of Chemical Technology (Tashkent, Uzbekistan);
- Scientific and Production Center for the Cultivation and Processing of Medicinal Plants (Tashkent, Uzbekistan);
- Shandong University of Technology (Zibo, Shandong, China);
- Qilu University of Technology (Shandong Academy of Sciences), Faculty of Chemistry and Pharmacy, Shandong Analysis and Test Center (Jinan, Shandong, China);
- Institute of Ecology, Shandong Academy of Sciences (Qilu University of Technology, Jinan, China);
- Nanjing Agricultural University (College of Plant Protection, Nanjing, China);
- Nankai University (School of Life Sciences, Tianjin, China);
- Northwest A&F University (College of Natural Resources and Environment, Yangling, China);
- Tashkent State Agrarian University (Tashkent, Uzbekistan);
- Uzbek–Chinese Joint Laboratory of "Soil Eco Biotechnology" (Uzbekistan- China).

PARTNER ORGANIZATIONS

- ✓ Committee on Science, Education and Health of the Senate of the Oliy Majlis of the Republic of Uzbekistan;
- ✓ Academy of Sciences of the Republic of Uzbekistan;
- ✓ Uzbekistan Food Industry Association;
- ✓ "Uzyogmoysanoat" Association;
- ✓ The association of traditional medicine of Uzbekistan;
- ✓ "SHANAZ" LLC;
- ✓ "Health Line" LLC;

INTERNATIONAL ORGANIZATIONS

- ✓ Dresden University of Technology (Germany);
- ✓ Mendelev University of Chemical Technology of Russia;
- ✓ M.Auezov South Kazakhstan University;
- ✓ "Republican Collection of Microorganisms" LLP (Kazakhstan);
- ✓ Integral University Lucknow, India;
- ✓ Óbuda University, Hungary;
- ✓ Jiangsu University (China).

- ✓ “Zuma Pharma” LLC;
- ✓ “Laxisam Pharmaceuticals” LLC;
- ✓ “Bayan Medical” LLC.

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2. **Farxad Raximov** – Vice-Rector of TICT, Professor – Vice-Chairman;
3. **Dilshod Karabayev** – Professor of TICT, – Symposium Secretary;
4. **Toir Safarov** – Vice-Rector of TICT, Professor;
5. **Bobiromon Kodirov** – Vice-Rector of TICT, Professor;
6. **Baxodir Boborajabov** – Vice-Rector of TICT, Professor;
7. **Odiljon Ziyadullayev** – Vice-Rector of TICT, Professor;
8. **Azizbek Kamolov** – Head of Department at TICT, Associate Professor;
9. **Shuxrat Buxorov** – Dean of the Faculty at TICT, Professor;
10. **Anvar Normatov** – Dean of the Faculty TICT, professor;
11. **Nortoji Khujamshukurov** – Professor at the TICT, Head of the Uzbek–Chinese Joint Laboratory of "Soil EcoBiotechnology", professor;
12. **G‘olib Nazarov** – Head of the Department of Biotechnology at TICT, Associate Professor;
13. **Mugrajitdin Toshmuxeammedov** – Professor of TICT;
14. **Zebo Babaxanova** – Professor at the TICT;
15. **Qamar Serkaev** - Professor at the TICT;
16. **Baxrom Izbasarov** – Director General of the Scientific and Production Center for the Cultivation and Processing of Medicinal Plants, Professor;
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24. **Wei Liu** – Researcher at Shandong Analysis and Test Center, Qilu University of Technology, Associate Professor (SDAS, China);
25. **Jinqian Yu** – Senior Researcher at Shandong Analysis and Test Center, Qilu University of Technology, Associate Professor, (SDAS, China);
26. **Jin-Hua Xiao** – Professor at the Nankai University (China);
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29. **Fajun Chen** – Professor at the Nanjing Agricultural University (China);
30. **Bakhytzhon Kedelbaev** – Professor at the M.Auezov South Kazakhstan Research University;
31. **Aslan Temirkhanov** – Scientific Secretary, Republican Collection of Microorganisms (Kazakhstan);
32. **Zhadyrassyn Nurbekova** - Associate professor, L.N.Gumilyov ENU (Kazakhstan);
33. **Farooqui Alvina** - Head Department of Bioengineering, Integral University, professor (India);
34. **Mukesh Kumar Awasthi** - Associate Professor, Northwest A&F University (China);
35. **Viktor Mechtcherine** – Director of the Institute of Construction Materials, Technische Universität Dresden (Germany).

**Organizing Committee Members
of the Uzbekistan–China International Symposium on
"Current Issues in the Cultivation and Utilization of Medicinal Plants"**

Scientific Sessions

Session 1. Biodiversity, Gene Pool, and Modern Agrotechnologies of Medicinal Plants

Chair: Professor **B.E.Izbasarov** – Director General of the Scientific and Production Center for the Cultivation and Processing of Medicinal Plants (Uzbekistan);

Co-Chair: Associate Professor **G'.A. Nazarov** – Head of the Department of Biotechnology, TICT (Uzbekistan);

Secretary: **X.O.Abdullayev** – Senior Lecturer at the Department of Biotechnology, TICT (Uzbekistan);

**Session 2. Phytochemistry, Biotransformation, and Advanced Processing of Medicinal
Plant Raw Materials**

Chair: Professor **Shanshan Wang** - Deputy Party Secretary of the Faculty of Chemistry and Pharmacy, Qilu University of Technology (SDAS, China);

Co-Chair: Professor **A.T.Ruziboyev** – Head of the Department of Food and Perfume-Cosmetic Products Technology, professor, TICT, (Uzbekistan);

Secretary: **A.Sh.Otajonov** – Senior Lecturer at the Department of Biotechnology, TICT (Uzbekistan);

**Session 3. Current Issues in the Utilization of Medicinal Plants in Pharmacology, Medicine,
and the Food Industry**

Chair: Professor **Fangling Du** – Party Secretary of Shandong University of Technology (China);

Co-Chair: Dr. **U.J.Ishimov** – Leading Researcher at the Institute of Bioorganic Chemistry named after Academician O.Sadikov of the Academy of Sciences of the Republic of Uzbekistan, PhD (Uzbekistan);

Secretary: Dr. **D.Sh.Matchanova** – Senior Lecturer at the Department of Biotechnology, TICT (Uzbekistan);

Session 4. Economics of Phyto-Industry, Marketing, and Prospects for International Cooperation

Chair: Professor **Jin-Hua Xiao** – Professor of Nankai University (China);

Co-Chair: Professor **S.S.Ravshanov** – Professor of the Department of Biotechnology, TICT (Uzbekistan);

Secretary: **F.B.Abdullayeva** – Senior Lecturer at the Department of Biotechnology, TICT (Uzbekistan);

Symposium Moderators

Khayrulla Pulatov - Professor of the Department of Industrial Ecology and Green Technologies, TICT.

Shakhnozakhon Salijonova - Associate Professor of the Department of Technology of Food and Perfumery-Cosmetic Products, DSc, TICT.

SYMPOSIUM FORMAT

The symposium will feature a diverse range of formats, including an opening ceremony followed by plenary, keynote, and invited lectures. Parallel sessions will host oral presentations, while poster presentations will be exhibited throughout the workshop. The symposium will be conducted in a hybrid (both offline and online) format. **Link for online participation:** <https://voovmeeting.com/dm/s4yb4fw9VBHJ> #Tencent Meeting : 859-0871-0474

Official Languages

Uzbek and English is used as the official language at the symposium.

Important dates

18/06/2026 Welcome + Opening ceremony + Keynote lectures + Parallel sessions
19/06/2026 Keynote lectures + Parallel sessions + Closing ceremony + *Excursion in Tashkent
(*optional and pay fee*)

***Inquiry or cancellation should be sent to:** *e-mail:* kdtinfo659@gmail.com; *Telegram:* [@KDT0803](https://www.telegram.me/KDT0803)

Session 2.
Phytochemistry,
Biotransformation, and

Advanced Processing of Medicinal Plant Raw Materials

DEVELOPMENT AND VALIDATION OF METHOD TO QUANTIFY PIPERINE IN BLACK PEPPER SEED

Anam Saleem¹, Abdul Rahman Khan¹, Nizamul Haque², Abbas Ali Mahdi³,
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³Department of Chemistry Era University Lucknow-226003, Uttar Pradesh, India

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India

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Place of study: Department of Chemistry, Central Instrumentation Facility (CIF),
Integral Centre of Excellence for Interdisciplinary Research (ICEIR), Integral University
Lucknow-226026, Uttar Pradesh, India

Abstract. This study describes the development and validation of a rapid, highly sensitive and selective liquid chromatography-tandem mass spectrometry (LC-MS/MS) method for the precise isolation and quantification of piperine from black pepper (*Piper nigrum* L.) seeds. The extraction process was optimized by subjecting 10g of finely

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315.	Norboboyeva M., Umirkulova F., Norboboyev J. Bug'doy kepagi va Achchiqmiya ekstrakti asosida funksional oziq-ovqat qo'shimchasi ishlab chiqish.	
316.	Madaminova G.A. Sholg'om (<i>Brassica rapa L.</i>) bargining kimyoviy tarkibi va biologik faol xususiyatlari.	
317.	Asqarov I.R., Abdulloyev O.Sh., Yusupov M.A., Sharobiddinov Sh.Sh. Sidr bargi (<i>Ziziphus jujuba mill.</i>) antiradikal faolligini DPPH metodi asosida baholash.	
318.	Xolmirzayeva L.A., Ismailova N.N. Skvalen – amarantning shifobaxsh komponenti.	
319.	Batirova F. Sport oziqlanish texnologiyasida fermentativ jarayonlar: oqsillarning hazm bo'lishini yaxshilash va bioavailability darajasini oshirish.	
320.	Kosimova Sh.M., Odiljonova M.Q., Olimjanova G.O. <i>Stevia rebaudiana</i> berton o'simligini dorivorlik xususiyatlari va yetishtirish agrotexnikasi.	
321.	Ibragimova K.S., Rakhmanberdiev R.G., Tilakov J.R., Khusenov A.Sh. Study of the antimicrobial properties of amine-containing inulin derivatives.	
322.	Norkulova L.U., Khaydarov K.Q. Study of the fruit composition of <i>elaegnus macrophylla thunb.</i> using spectral methods.	
323.	Norboboiev M., Umirkulova F., Norboboiev J. Study of the impact of bioactive compounds obtained from medicinal plants on the growth of probiotic microorganisms.	
324.	Vasundhara Yadav., Malik Nasibullah. Synthesis and pharmacological potential of pyrimidine derivatives in neurodegenerative diseases.	
325.	Rakhmanberdiev R.G., Ibragimova K.S., Tilakov J.R., Khusenov A.Sh. Synthesis and research of dialdehydinulin.	
326.	Jaya Gupta Mohd., Arsh Khan., Firoj Hassan. Synthesis, characterization and anticancer evaluations of novel bromobiphenyl imidazole chalcone.	
327.	Davletova X.Sh., Xaitbayev A.X. Tabiiy manbalar tarkibidan gialuron kislotani ajratib olish va xossalarini o'rganish.	
328.	Raxmonberdiyeva M.H., Abdikamalova A.B. Tabiiy va boyitilgan log'on ishqoriy bentonitining dispersion tarkibini elak metodi yordamida o'rganish.	
329.	Rahimova G.Y. Tarkibida biologik faol moddalar tutgan dorivor o'simliklardan tirnoqgulning farmakologik xususiyatlari.	
330.	Ovais Tahir., Imran Aslam. The contribution of medicinal plants to managing type 2 diabetes mellitus: a review of present evidence and future directions.	
331.	Toshboltaeva Kh.A., Turaev Kh.Kh., Ibragimov A.B., Kasimov	

3. G.Yu. Akmalova, D.I. Kiyaev Physiologically active polymers with anti-tuberculosis activity. VI-All-Russian Conference "Chemistry and Technology of Plant Substances". Sank - Petersburg, 2010, 149-151 pp.

SYNTHESIS, CHARACTERIZATION AND ANTICANCER EVALUATIONS OF NOVEL BROMOBIPHENYL IMIDAZOLE CHALCONE

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Abstract

Lung cancer remains a major global health challenge and is a leading cause of cancer-related mortality, highlighting the need for novel therapeutic agents. In this study, a new bromobiphenyl-imidazole chalcone derivative, *(E)*-1-(4'-bromo-[1,1'-biphenyl]-4-yl)-3-(1*H*-imidazol-4-yl)prop-2-en-1-one, was synthesized through a Claisen–Schmidt condensation reaction and evaluated for its anticancer activity against A549 cells. The synthesized compound was obtained in good yield and subsequently subjected to biological evaluation. Cytotoxicity studies revealed that the compound exhibited significant dose-dependent inhibition of A549 cell growth with an IC₅₀ value of 21.06 µg/mL, indicating promising anticancer potential. Further mechanistic investigations demonstrated enhanced intracellular ROS generation and induction of nuclear condensation, suggesting apoptosis-mediated cell death as a possible mode of action. The observed biological activity may be attributed to the combined presence of bromobiphenyl and imidazole pharmacophores within the conjugated chalcone framework, which promotes molecular planarity, electron delocalization, and favourable interactions with cellular targets.

Keywords: Cancer; pharmacophores; chalcone; Claisen–Schmidt condensation, synthesis; anticancer; cytotoxicity.

TABIIY MANBALAR TARKIBIDAN GIALURON KISLOTANI AJRATIB OLISH VA XOSSALARINI O'RGANISH

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davletovaxurshida4@gmail.com

Annotatsiya. Gialuron kislotasi (HA) hujayradan tashqari matritsaning chiziqli, sulfatlanmagan glikozaminoglikanidir, uning biologik faolligi va materialshunoslik potentsiali molekulyar og'irligi, kimyoviy modifikatsiya darajasi va viskoelastik xususiyatlari bilan belgilanadi. Ushbu tadqiqot tovuq terisidan gialuronat o'z ichiga olgan polisaxarid fraksiyasini ajratish va ko'p bosqichli tozalash uchun laboratoriya protokolini