ACADEMY OF SCIENCES OF
THE REPUBLIC OF UZBEKISTAN

INSTITUTE OF POLYMER CHEMISTRY AND PHYSICS

"HIGH-MOLECULAR COMPOUNDS"
PROBLEM COUNCIL



INTERNATIONAL CONFERENCE

ADVANCED POLYMER SCIENCE FOR SUSTAINABLE DEVELOPMENT

dedicated to

the 35th Anniversary of the Independence of the Republic of Uzbekistan

the 45th Anniversary of the Institute of Polymer Chemistry and Physics

the 110th Anniversary of Academician Kh.U.Usmanov.

Conference Program

October 22-23, 2026
Tashkent

Dear participants, the year 2026 marks several significant milestones for Uzbekistan and the development of polymer science in the country: ***the 35th Anniversary of the Independence of the Republic of Uzbekistan, the 45th Anniversary of the Institute of Polymer Chemistry and Physics, and the 110th Anniversary of Academician Kh. U. Usmanov***, an outstanding scientist and founder of the Uzbek school of polymer science.

To commemorate these important anniversaries, the Institute of Polymer Chemistry and Physics of the Academy of Sciences of the Republic of Uzbekistan is pleased to invite scientists, researchers, industry professionals, and young scholars to participate in the **International Conference "ADVANCED POLYMER SCIENCE FOR SUSTAINABLE DEVELOPMENT"**, which will be held on **October 22–23, 2026, in Tashkent,** Uzbekistan.

Conference Language – Uzbek, English, Russian

Conference Organizer - Institute of Polymer Chemistry and Physics of the Academy of Sciences of the Republic of Uzbekistan

Tashkent city, Abdulla Kadiri street 7-b, phone: (+998 71)241-85-94 fax:(+998 71) 241-26-60 e-mail: polymer@academy.uz, polymeruz@gmail.com

Conference Venue

Panarams Tashkent Hotel (https://panarams.uz/)

Boyqurgon 2, Yuqori Qora Qamish Street, 100007, Tashkent, Uzbekistan

Continuous Poster Session

All poster presentations will be displayed continuously throughout both days of the conference (October 22-23, 2026) at the **Conference Venue**

Registration fees

Registration fees for the conference are as follows:
360 000 UZS — standard registration fee for scientists aged 40 and above;
180 000 UZS — reduced registration fee for scientists under the age of 40, including undergraduate and graduate students

BANK DETAILS FOR INTERNATIONAL TRANSFER (SWIFT)

Beneficiary Name: Institute of Polymer Chemistry and Physics of the Academy of Sciences of the Republic of Uzbekistan
Beneficiary Address: Tashkent city, Abdulla Kadiri street 7-b
Tax Identification Number (TIN / ИНН): 303038241
Beneficiary Bank: Central Bank of the Republic of Uzbekistan, Tashkent (acting for the Operational Department of the Treasury, Ministry of Finance)
Bank Address: Tashkent, Uzbekistan, A. Qodiriy Street, 2
SWIFT / BIC Code: INIPUZ22XXX
Bank Identification Code (MFO): 00014
Account Details: Settlement Account (P/c): 201122919
Sub-account (л/с): 40011086026277701510004300 2 (Note: The funds are routed through the Settlement Center of the Main Department of the Central Bank in Tashkent)
Purpose of Payment: Conference registration fee for [Participant's Full Name], [Passport Number].

БАНКОВСКИЕ РЕКВИЗИТЫ ДЛЯ ГРАЖДАН УЗБЕКИСТАНА

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www.polchemphys.uz; https://polchemphys.uz/en/conference/

October 22, 2026 (Day 1)

8^{30}-9^{30} **Registration of participants**

WELCOME OPENING CEREMONY

CHAIRMAN: ACADEMICIAN RASHIDOVA S.SH.
CO-CHAIRS: PROF. TURDIKULOVA SH.U., PROF. ATAKHANOV A.A.

WELCOME ADDRESS

9^{30}-10^{00}

Abdumutolib Atakhanov
Director of the Institute of Polymer Chemistry and Physics
Shavkat Apyuov
President of the Academy of Sciences of the Republic of Uzbekistan
Shakhlokhon Turdikulova
Vice-President of the Academy of Sciences of the Republic of Uzbekistan

MORNING SESSION

CHAIRMEN: ABDUMUTOLIB ATAKHANOV, SERGEY LYULIN
SECRETARY: MAKHLIYO KUZIEVA

PLENARY LECTURES

10^{00}-10^{20} **Abdumutolib Atakhanov *(Uzbekistan)***
45 Years of the Institute of Polymer Chemistry and Physics: Legacy, Achievements and Future

10^{20}-10^{35} ***Coffee break***

10^{35}-10^{55} **Valery Kulichikhin *(Russia)***
Rheology of fiber formation from polymer solutions

10^{55}-11^{15} **Guohua Jiang *(China)***
Fabrication of high-strength regenerated cellulose fibers by an ionic liquid-based green strategy

11^{15}-11^{35} **Sergei Kostjuk *(France)***
Interconversion between cationic and radical RAFT polymerization: a route to well-defined block copolymers

ORAL CONTRIBUTIONS

11^{35}-11^{50} **Noira Vokhidova *(Uzbekistan)***
Chitosan-Driven nanocapsules: formation and functional properties

11^{50}-12^{05} **Zhexenbek Toktarbay *(Kazakhstan)***
Preparation of Highly Superhydrophobic Nanostructured Materials for Advanced Environmental, Protective, and Functional Applications

12^{05}-12^{20} **Valentin Kudyshkin *(Uzbekistan)***
Synthesis and properties of modified low-molecular-weight polyethylene

12^{20}-14^{00} ***Group photo***
Lunch

EVENING SESSION

CHAIRS: VALERY KULICHIKHIN, GUOHUA JIANG
SECRETARY: GULUZRA BOZORBOEVA

PLENARY LECTURES

14^{00}-14^{20} **Huseyin Bekir Yildiz *(Turkey)***
Biophotovoltaics at the interfaces of biology, materials science, and clean energy technologies

14^{20}-14^{40} **Sarkyt Kudaibergenov *(Kazakhstan)***
Polyampholyte hydrogels for energy storage and conversion

ORAL CONTRIBUTIONS

14^{40}-14^{55} **Adkham Rafikov *(Uzbekistan)***
Biochemical modification of secondary fiber raw materials

14^{55}-15^{10} **Dmitry Shiman *(Belarus)***
Synthesis of polystyrene particles with controlled size via emulsion and dispersion radical polymerization

15^{10}-15^{25} **Olim Ruzimuradov *(Uzbekistan)***
High-Performance SiO/Polymer Composite Electrodes with Enhanced Lithium-Storage Properties

15^{25}-15^{40} ***Coffee break***

CHAIRS: SARKYT KUDAIBERGENOV, VALENTIN KUDYSHKIN
SECRETARY: NILUFAR BURKHANOVA

15^{40}-15^{55} **Haydar Yunusov *(Uzbekistan)***
Fabrication and characterization of HPMC/Na-CMC dissolving microneedles for transdermal drug delivery

15^{55}-16^{10} **Petr Pantyukhov *(Russia)***
Conductive composite films based on polyaniline copolymer and oxidized carbon nanotubes

16^{10}-16^{25} **Aziz Ibragimov *(Uzbekistan)***
MOF-Nanocellulose Hybrid Aerogels via In-Situ Growth

16^{25}-16^{40} **Grigoriy Mun *(Kazakhstan)***
Macromolecular design of novel thermoresponsive copolymers and their physicochemical behavior

16^{40}-16^{55} **Nuritdin Kattaev *(Uzbekistan)***
Modern functional polymer composites for photocatalysis, sorption, gas sensors, and electrochemical technologies

16^{55}-17^{10} **Sherzod Yuldoshov *(Uzbekistan)***
Formation of bimetallic silver and gold nanoparticles in a carboxymethyl cellulose/sericin graft copolymer matrix

17^{10}-18^{00} ***Summing up the first day of the conference***

October 23, 2026 (Day 2)

MORNING SESSION

CHAIRS: SERGEI KOSTJUK, NOIRA VOKHIDOVA

SECRETARY: ZIYODA ABRAROVA

PLENARY LECTURES

09^{30}-09^{50}	**Leon Mishnaevsky Jr.** ***(Denmark)***
	Polymer composites and coatings for wind energy applications: advanced solutions and computational modelling
09^{50}-10^{10}	**Zhu Xiaomin** ***(China)***
	Hyperbranched polyethoxysiloxane – a unique silica precursor polymer for preparation of nanostructured silica materials
10^{10}-10^{30}	**Sergey Lyulin** ***(Russia)***
	Scientific challenges of microplastic pollution
10^{30}-10^{45}	***Coffee break***

CHAIRS: HUSEYIN BEKIR YILDIZ, ZHU XIAOMIN

SECRETARY: FOZIL TURAKULOV

ORAL CONTRIBUTIONS

10^{45}-11^{00}	**Ilnar Nurgaliev** ***(Uzbekistan)***
	Advanced computational materials science: integrating quantum chemical modeling, molecular dynamics, and artificial intelligence for the development of functional materials
11^{00}-11^{15}	**Alexander Bochek** ***(Russia)***
	Chitosan nanofibers with polyamide obtained by capillary-free electrospinning from acetic acid solutions.
11^{15}-11^{30}	**Davronbek Bekchanov** ***(Uzbekistan)***
	Functional polymer-nanocomposite materials: synthesis, properties, and applications
11^{30}-11^{45}	**Olga Gribovskaya** ***(Belarus)***
	Enzymatic sericin hydrolysates from Bombyx mori cocoons: α-glucosidase inhibition and antidiabetic effect in type 2 diabetes mellitus
11^{45}-12^{00}	**Ulugbek Shoislamov** ***(Uzbekistan)***
	Nanostructured metal oxide semiconductors for solar energy conversion
12^{00}-12^{15}	**Erkeblan Tazhbayev** ***(Kazakhstan)***
	Physicochemical principles of creating functional polymer systems: from nanoparticles to hydrogels and microneedles
12^{15}-12^{30}	**Alisher Eshankulov** ***(Uzbekistan)***
	Synthesis of silicon quantum dots for green energy
12^{30}-14^{00}	***LUNCH***

EVENING SESSION

CHAIRS: ERKEBLAN TAZHBAYEV, DMITRY SHIMAN

SECRETARY: ILKHOM GOYIBNAZAROV

YOUTH SESSION

14^{00}-14^{10}	**Yan Zhou** ***(China)***
	Preparation of edible high-swelling carboxymethyl cellulose-based hydrogel for gastric filling
14^{10}-14^{20}	**Fozil Turakulov** ***(Uzbekistan)***
	Synthesis of doxorubicin loaded selenium-platinium bimetallic nanoparticles carboxymethylcellulose-based biocomposite solution with synergistic antioxidant activity
14^{20}-14^{30}	**Dmitry Buslaev** ***(Russia)***
	Synthesis of polyurethanes based on cellulose derivatives with diisocyanate in a common solvent dimethylacetamide and properties of the resulting films
14^{30}-14^{40}	**Shohistaxon Qo'ychiyeva** ***(Uzbekistan)***
	Biochar morphology and conductive network formation in 3d-printed cotton-waste-derived biochar–pla composites

14^{40}-14^{50}	**Daribay Arailym *(Kazakhstan)*** Development of mucoadhesive PETMP:PETA nanoparticles for intranasal brain drug delivery
14^{50}-15^{00}	**Makhliyo Kuzieva *(Uzbekistan)*** Stimuli-responsive poly(n-isopropylacrylamide)/nanocellulose composites for biomedical applications
15^{00}-15^{10}	**Kodirbek Berdinazarov *(Uzbekistan)*** LLDPE/EVA blends properties: rheological, mechanical, and morphological properties
15^{10}-15^{20}	**Khumoyun Gulomzhanov *(Uzbekistan)*** MXene based polymer materials
15^{20}-15^{30}	**Zavqiddin Juliev *(Uzbekistan)*** Understanding photoluminescence and charge-carrier dynamics in triple-cation perovskite films on a different interfaces
15^{30}-15^{40}	**Aldana Galieva *(Kazakhstan)*** PEGylated albumin nanocarriers for anti-tuberculosis drug delivery
15^{40}-15^{50}	**Zainura Zhakhonkulova *(Uzbekistan)*** Synthesis of chitosan/β-d-cyclodextrin polycomplexes and their hydrodynamic properties
15^{50}-16^{00}	**Ilkhom Goyibnazarov *(Uzbekistan)*** Creation and characterization of cryogels based on carboxymethyl cellulose
16^{00}-16^{10}	**Nazokat Matrasulova *(Uzbekistan)*** The ability of powdered sorbents based on waste silk fibroin to adsorb pigments contained in vegetable oils
16^{10}-16^{20}	**Nozima Alimova *(Uzbekistan)*** Melt graft copolymerization of acrylic acid onto low-molecular-weight polyethylene
16^{20}-16^{30}	**Doniyor Shomuradov *(Uzbekistan)*** Effect of gelatinization temperature on the microstructure and water loss of corn starch-based biodegradable film-forming systems
16^{30}-17^{00}	**Round Table** **"Future of Polymer Science: From Fundamental Research to Advanced Technologies and Sustainable Applications"**

SUMMARY AND CLOSING OF THE INTERNATIONAL CONFERENCE

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