



















INTERNATIONAL SCIENTIFIC WEEK, DEDICATED TO THE "YEAR OF ENVIRONMENTAL PROTECTION AND "GREEN" ECONOMY"

TASHKENT INSTITUTE OF CHEMICAL TECHNOLOGY

# PROGRAM INTERNATIONAL SCIENTIFIC WEEK

"Sustainable Development and Green Economy" May 28 – 31, 2025



### Dear researchers, professors and colleagues!

The organizing committee invites you to take part in the work of the International Scientific Week "Sustainable Development and Green Economy".

# Organizers of the scientific week "Sustainable development and green economy"

### I. Ministries, departments, international partners and organizations

- 1. Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan
- 2. Tashkent Institute of Chemical Technology, Uzbekistan
- 3. Institute Of Materials Science, Uzbekistan Academy of Sciences
- 4. Integral University, India
- 5. Mukhtar Auezov South Kazakhstan Research University, Kazakhstan

### II. Companies and enterprises

- 1. JSC "Uzkimyosanoat";
- 2. Association "Uzsanoatqurilishmateriallari"
- 3. LLC "ARTEL ELECTRONICS"
- 4. JSC "Kvarts":
- 5. JSC "Asl Oyna";
- 6. JSC Maxam Chirchik
- 7. JSC Ammofos-Maxam
- 8. JSC Navoiyazot
- 9. JSC Dekhkanabad Potash Plant
- 10. AKKERMANN CEMENT LLC.
- 11. Holding "Art Gloss Gallery".



Venue: Tashkent Institute of Chemical Technology.



Locations: Tashkent city, Mirzo Ulugbek street, 41.





### **Brief overview for the Program of International Scientific Week**

Event	Location	Time	Key Activities	
	May 28			
Opening of the International Scientific Week "Sustainable Development and Green Economy"	TICT, Faculty of Chemical Engineering	09:00– 10:00	Opening speeches for the International Scientific Week "Sustainable Development and Green Economy"	
IV International Scientific and Technical Conference "Innovative Technologies for the Production of Glass, Ceramics and Binding Materials-2025", dedicated to the 85th Anniversary of Doctor of Chemical Sciences, Professor Abdulla Ismatov	TICT, Faculty of Chemical Engineering	10:00– 17:00	Opening of the Conference, memorial tribute to Prof. Ismatov, international plenary reports, official launch as part of the morning plenary program poster & industrial exhibitions	
	May 29			
International Scientific Forum on Sustainable Development and Green Economy	TICT, Faculty of Chemical Engineering	09:00– 17:00	Morning plenary speeches, afternoon session speeches (EN/UZ/RU), poster sessions	
	May 30			
Conference session at the Institute of Materials Science of the Academy of Sciences of the Republic of Uzbekistan	Parkent, Tashkent region	07:00 <b>–</b> 18:00	Travel, technical presentations, research tours, collaboration discussions	
May 30-31				
Republican Conference "Young Chemists" – Day 1	TICT, Faculty of Food & Wine Tech.	09:00– 17:00	Opening speeches, student reports, afternoon session speeches	
Republican Conference "Young Chemists" – Day 2	TICT, Faculty of Food & Wine Tech.	10:00– 16:00	Sectional scientific sessions, final poster presentations	

#### **FOREIGN GUESTS**

Kamel Eid (State of Egypt) Mohamed Mehdi Chehimi (French Republic) Claudio Augusto Oller do Nascimento (Federative Republic of Brazil) Ali S. Alshami (USA) Paulo Cardozo Carvalho de Araújo (Federative Republic of Brazil) Jose Roberto Simões Moreira (Federative Republic of Brazil) Lelia Cristina da Rocha Soares (Federative Republic of Brazil) Tonni Agustiono Kurniawan (China) Kang Dong-Gyun (Republic of Korea) Choi Byung-Ho (Republic of Korea) **Hamilton Valera** Kim Dong - Hyun (Republic of Korea) Kang Jin - Kyu (Republic of Korea) Aboubakr M. Abdullah Ali Lee Seung - Min (Republic of Korea) Kang Kyung - Chan (Republic of Korea) Ryu Young-Bok (Republic of Korea) Sakomoto San (Japan)

Qatar University, Qatar Université Paris Cité & CNRS

University of São Paulo

University of North Dakota University of São Paulo

University of São Paulo

University of São Paulo

Xiamen University, China
CEO Giant Chemical Co, Ltd.
CEO Serenma Entech
University of São Paulo, Brazil
Director Giant Chemical Co. Ltd.
Giant Chemical Co. Ltd.
Qatar University, Qatar
Korea Institute of Industrial Technology

Korea Institute of Industrial Technology Korea Institute of Industrial Technology Korea Institute of Industrial Technology E-Globaledge Corporation (Rigaku) Alexander Puchkov Alexander Shaforostov Mohamed Ali Hassan Zenhoum (Egypt) Zulfiya Chernochova (Czech Republic)

Nida Fatima (India)
Syed Aqeel Ahmad (India)
Makarov Nikolay Alexandrovich
(Russian Federation)
Anisimov Valeriy Valerievich (Russian
Federation)
Iriskulova Shahina Kahramanovna
(Kazakhstan)

Àitulova Zhanar Mukhtarovna (Kazakhstan)

Ìsmailova Gulchexra Kamolovna (Kazakhstan)

Khidirbayev Ulugbek Orumbayevich (Kazakhstan)

Irismetova Aziza Adilzhanovna (Kazakhstan)

Lim Woong Mook (Republic of Korea)

Octavio Alberto Calvo Gomez (United Mexican States)
Makhmudova G.I. c

Zhakipbaev B.E. (Kazakhstan)

Kedelbaev Bakhytzhan Shilmirzaevich (Kazakhstan) Tashkaraev Rakhmatilla Abdullaevich (Kazakhstan) Batirov Bobir Mehmonovich (Kazakhstan) Kurbanbaev Muhtar Endibaevich

(Kazakhstan)

Adirbaeva Tatyana Amanovna (Kazakhstan)

**Dubinina Elena Sergeevna (Kazakhstan)** 

Ulyev Leonid Mixaylovich (Russian Federation)
Flavio Manenti (Italy)

Yoon Kangsook (Republic of Korea)

Nicolas Iannotta (Italy)
Luis Felipe Sanchez Martinez
Marcello Bozzini (Italy)
Antonio Marcomini (Italy)
Ko Seonok (Republic of Korea)

E-Globaledge Corporation (Rigaku)

MN Labtech Helwan University

Institute of Macromolecular Chemistry of the Czech Academy of Sciences

Integral University Integral University Mendeleev University

Mendeleev University

Mukhtar Auezov South Kazakhstan

Research University

Mukhtar Auezov South Kazakhstan

Research University

Professional College named after Anvar

Ismailov

Professional College named after Anvar

Ismailov

Professional College named after Anvar

Ismailov

Shaykhontohur District Specialized

School

Tashkent Institute of Chemical

Technology

Peoples' Friendship University named

after Academician A.Kuatbekov

Peoples' Friendship University named

after Academician A.Kuatbekov

Mukhtar Auezov South Kazakhstan

Research University

Peoples' Friendship University named

after Academician A.Kuatbekov

Peoples' Friendship University named

after Academician A.Kuatbekov

Mukhtar Auezov South Kazakhstan

Research University

Mukhtar Auezov South Kazakhstan

Research University

Mukhtar Auezov South Kazakhstan

Research University

Tomsk Poltechnical University

Milan Poitechnical University Milan Poitechnical University Milan Poitechnical University Milan Poitechnical University University Ca' Foscari of Venice

NC Career

# IV INTERNATIONAL SCIENTIFIC AND TECHNICAL CONFERENCE "INNOVATIVE TECHNOLOGIES FOR THE PRODUCTION OF GLASS, CERAMICS AND BINDING MATERIALS-2025", DEDICATED TO THE 85TH ANNIVERSARY OF DOCTOR OF CHEMICAL SCIENCES, PROFESSOR ABDULLA ISMATOV

The purpose of the international scientific and technical conference is to discuss modern innovative technologies for the production of silicate materials - glass, ceramics and binders, the technology of rare and precious metals, as well as composite materials based on them, issues of sustainable development of the chemical and metallurgical industry, familiarizing the world community with the achievements of Uzbekistan in these areas.

Conference objectives - to popularize the significant results achieved in scientific activities in the republic and abroad, as well as the further development of the industry of glass, ceramics, binders, rare and precious metals. During the conference, lectures and master classes will be organized by leading experts and scientists from the USA, Italy, Spain, Poland, Qatar, France, Brazil, Armenia, Korea, Kazakhstan, Uzbekistan and other countries.

#### **CONFERENCE SECTIONS:**

**1-section.** Technology transfer: innovations in the production of glass, ceramics, and binding materials.

**2-section.** Sustainable future: energy-efficient and resource-saving solutions in chemical and metallurgical industries.

**3-section.** Modern methods and prospects for the production of composite materials: from theory to practice.

### **KEY DATES**

May 28, 2025 - Opening of the conference and Plenary reports (Tashkent).

May 29, 2025 - Conference sessions

*May 30, 2025* – Visit to the Solar Complex of the Institute of Materials Science of the Academy of Sciences of Uzbekistan (Parkent).

### FORMS OF PARTICIPATION IN THE CONFERENCE:

- presentation of a plenary report up to 15 minutes (10 minutes report and 5 minutes questions-answers);
- presentation with a sectional report up to 10 minutes (7 minutes report and 3 minutes questions-answers);
- participation in a conference with poster presentation (publication of posters)
- participation in a conference without a report (publication of materials in a collection).

# THE PROGRAM OF THE IV INTERNATIONAL SCIENTIFIC AND TECHNICAL CONFERENCE "INNOVATIVE TECHNOLOGIES FOR THE PRODUCTION OF GLASS, CERAMICS AND BINDING MATERIALS-2025"

Venue: Conference hall of the Faculty of Chemical Engineering TICT

Date: May 28, 2025, Time: 9:00-17:00, Address: Tashkent, st. Mirzo Ulugbek, 41.

For online participants, connect to the Zoom conference:

https://us06web.zoom.us/j/88207943991?pwd=tLOhXtSRrpQixqJ2vYB8I1m0zof0Da.1

Meeting ID: 882 0794 3991

Passcode: 769626

Passcode: 769626			
	May 28, 2025 (Wednesday) 9 00-10 10		
Openir	Opening of the International Scientific Week "Sustainable Development and Green Economy"		
	Conference hall of the Faculty of	"Chemical Engineering" TICT	
Moderato	rs: Dr. Babakhanova Zebo Abdullaev	na, Dr. Erkinov Farrukh Botirovich	
900 - 930	Registration of participants. Poster session (full day). Exhibition of the results of scientific research of the institute, exhibition of industrial partners (full day).	Entrance hall of Faculty of Chemical Engineering of TICT	
930 - 940	Greeting speech: Representatives from Ministry of Higher Education, Science and Innovation of Republic of Uzbekistan	Sharipov Kongratbay Avezimbetovich Minister of higher education, science and innovations of Republic of Uzbekistan	
9 <sup>40</sup> – 9 <sup>50</sup>	Greeting speech: Representatives from "Uzkimyosanoat" JVC	Temirov Odil Shukurovich Chairman of the Board "Uzkimyosanoat" JVC	
9 <sup>50</sup> – 10 <sup>00</sup>	Opening of the scientific week: Tashkent institute of chemical technology	Usmonov Botir Shukurillaevich Rector of Tashkent institute of chemical technology	
10 <sup>00</sup> – 10 <sup>10</sup>	Opening of the scientific week: Association "Uzsanoatqurilishmateriallari"	Bobokulov Bakhtiyor Bahronbekovich Chairman of the board	

May 28, 2025 (Wednesday) 10 10-17 00		
	10	•••
		session.
	Conference hall of the Faculty	of "Chemical Engineering" TICT
Moderators: Dr. Babakhanova Zebo Abdullaevna, Dr. Erkinov Farrukh Botirovich		
10 <sup>10</sup> – 11 <sup>00</sup>	Opening & Memorial speech:	Aripova Mastura Xikmatovna Head of Department
	Memorial speech:	Collegues, mentees and relatives of Professor Ismatov Abdulla Akhmedovich
11 <sup>00</sup> -11 <sup>30</sup>	00-11 <sup>30</sup> Coffee break	
11 <sup>30</sup> -11 <sup>45</sup>	Scientific reports: Czech Academy of Sciences	Zulfiya Chernochova
	Institute of Macromolecular chemistry (Czech Republic)	The lithium phthalocyanine (γ-structure) as a molecular oxygen sensor

11 <sup>45</sup> -12 <sup>00</sup>	Scientific reports: Russian Chemical Technological University named after Mendeleev (Russian Federation)	Makarov Nikolay Alexandrovich Powders of refractory oxides obtained using the deep eutectic solvent method
12 <sup>00</sup> -12 <sup>15</sup>	Scientific reports: Association "Uzsanoatqurilishmateriallari"	Ismoilov Bokhodir Deputy Chairman of the Board
12 <sup>15</sup> -12 <sup>30</sup>	Scientific reports: Rigaku Globaledge Corporation (Japan)	Sakomoto San RIGAKU. 70th Anniversary of Achievement and Innovation.
12 <sup>30</sup> -12 <sup>45</sup>	Scientific reports: Milano Polytechnical University (Italy)	Silvia Franz Photoelectrocatalytic remediation of PFAS contaminated groundwaters from Veneto region, Italy (online)
12 <sup>45</sup> -13 <sup>00</sup>	Scientific reports: Tomsk Polytechnic University (Russian Federation)	Ulyev Nikolay Mixaylovich Modern methods for increasing the energy efficiency of chemical-technological processes in industry
13 <sup>00</sup> -14 <sup>00</sup>	Lunch	
14 <sup>00</sup> –14 <sup>15</sup>	Scientific reports: Xiamen University (China)	Tonni Agustiono Kurniawan Applications of circular economy in wastewater treatments and renewable energy to promote resource recovery and zero-waste approach
14 <sup>15</sup> –14 <sup>30</sup>	Scientific reports: Tashkent Institute of Chemical Technology (Uzbekistan)	Abdurahmononov Odiljon Green approach to obtaining high-purity h-BN nanoparticles
14 <sup>30</sup> –14 <sup>45</sup>	Scientific reports: Belorussian State Technological University (Belarus)	<b>Dyadenko Mikhail Valeryevich</b> Influence of TiO <sub>2</sub> on the bioactivity and physicochemical properties of the Na <sub>2</sub> O-CaO-MgO-SiO <sub>2</sub> -P <sub>2</sub> O <sub>5</sub> system of glass
14 <sup>45</sup> –15 <sup>00</sup>	Scientific reports: M. Auezov South Kazakhstan Research University (Kazakhstan)	<b>Zh.M. Aitulova</b> Research of mineral raw materials from domestic deposits for the synthesis of ultramarine
15 <sup>00</sup> –15 <sup>15</sup>	Scientific reports: University of São Paulo, Brazil	Hamilton Valera Mechanistic Aspects of the Low-Temperature Electrochemical Oxidation of Small Organic Molecules (online)
15 <sup>15</sup> –15 <sup>30</sup>	Scientific reports: Tashkent Institute of Chemical Technology (Uzbekistan)	Lee Geun-Seong Reduction of CO <sub>2</sub> emissions for green cement production
15 <sup>30</sup> –15 <sup>45</sup>	Scientific reports: Urgench State University (Uzbekistan)	Khurmatbek Jumaniyozov Mechanisms of Isomorphism and Their Impact on the Microstructure and Properties of Silicate Materials
15 <sup>45</sup> –16 <sup>00</sup>	Scientific reports: Institute of Materials Science of the Academy of Sciences of the (Uzbekistan)	Javokhir Shermatov Hydrogen catalyst - synthesized on a solar furnace
16 <sup>00</sup> –16 <sup>15</sup>	Scientific reports: Tashkent Institute of Chemical Technology (Uzbekistan)	<b>Farrukh Erkinov</b> Laboratory of physical-chemical analysis and nanomaterials: opportunities, challenges and future discoveries

16 <sup>15</sup> –16 <sup>30</sup>	Scientific reports: Belorussian State Technological University (Belarus)	Trusova Ekaterina Evgenyevna Synthesis and spectroscopic characteristics of luminating oxyfthoride glass ceramics (online)
16 <sup>30</sup> –16 <sup>45</sup>	Scientific reports: Shaykhontohur Specialized School (Uzbekistan)	Woong-Mook Lim A study of the manufacture of ceramic membranes for gas separation and their characteristics
16 <sup>45</sup> -17 <sup>00</sup>	Scientific reports: Belorussian State Technological University (Belarus)	Dyadenko Mikhail Valerevich Lantanborosilicate glass for fiber optics
	Closing speeches	The discussion of the results.

May 29, 2025 (Thursday)	
9 00-13 00	
Conference sessions	

### Faculty of "Chemical Engineering" TICT, 319 auditorium

9 00 -9 30	Registration of participants
9 <sup>30</sup> -13 <sup>00</sup>	Conference sessions. Scientific speeches.
13 <sup>00</sup> -14 <sup>00</sup>	Lunch. Discussion of scientific cooperation and free time.
14 <sup>00–</sup> 16 <sup>00</sup>	Poster sessions.

### May 30 (Friday) 7 00-18 00

# Conference session at the Institute of Materials Science of the Academy of Sciences of the Republic of Uzbekistan.

**Address:** Institute of Materials Science of the Academy of Sciences of the Republic of Uzbekistan. Parkent city, Tashkent region.

7 00 - 7 45	Meeting point: Faculty of Chemical Engineering of TICT at the address: 100007, Tashkent, st. Mirzo Ulugbek, 41.
8 00 -9 30	Organized relocation from Tashkent to Parkent city.
10 <sup>00</sup> -10 <sup>30</sup>	<b>Scientific reports: Dr. O. Parpiev,</b> Director of the Institute of Materials Science <b>Topic</b> : Possibilities of the Large Solar Furnace in the development of new types of advanced materials.
10 <sup>30</sup> -12 <sup>30</sup>	Scientific research activities and discussion of cooperation with the Institute of Materials Science. Excursion around the Institute.
13 <sup>00</sup> -16 <sup>30</sup>	Lunch. Discussion of scientific cooperation and free time.
16 <sup>30</sup> -18 <sup>00</sup>	Organized relocation from Parkent to Tashkent city.

# SCIENTIFIC FORUM "SUSTAINABLE DEVELOPMENT AND GREEN ECONOMY"

The goal of the International Scientific Forum "Sustainable Development and Green Economy" is a broad international exchange of fundamental and practical scientific achievements, new approaches in areas traditionally included in the field of green economy, chemistry and technology (ecological economics, environmental economics, low-carbon economic development, protection of biodiversity and ecosystem services, environmentally sustainable economic progress, new methods for the synthesis of chemical compounds, chemical catalysis, safe energy-saving and waste-free technological production, circular economy, etc.), organization of international events aimed at increasing student interest in technical fields, popularization of basic sciences and development of international cooperation in research activities in the field of chemistry, biology and chemical technology.

## Sessions of the scientific forum "Sustainable development and green economy":

- 1. Innovations in Greenhouse Gas Capture and Conversion
- 2. Innovations in Nanomaterials for Energy Generation and Conversion
- 3. Sustainable Environmental Rehabilitation
- 4. Sustainable Development of the Chemical and Food Industry
- 5. Green Economy, Increasing Export Potential and Modern Pedagogical Technologies

### **KEY DATES**

May 29, 2025 - Opening of the conference and Plenary reports.

#### FORMS OF PARTICIPATION IN THE CONFERENCE:

- presentation of a plenary report up to 15 minutes (10 minutes report and 5 minutes questions-answers);
- presentation with a sectional report up to 10 minutes (7 minutes report and 3 minutes questions-answers);
- participation in a conference with poster presentation (publication of posters)
- participation in a conference without a report (publication of materials in a collection).

# PROGRAM INTERNATIONAL SCIENTIFIC FORUM "SUSTAINABLE DEVELOPMENT AND GREEN ECONOMY"

Venue: Conference hall of the Faculty of Chemical Engineering TICT

Date: May 29, 2025, Time: 9:00-17:00, Address: Tashkent, st. Mirzo Ulugbek, 41.

For online participants, connect to the Zoom conference:

 $\underline{https://us06web.zoom.us/j/88207943991?pwd=tLOhXtSRrpQixqJ2vYB8l1m0zof0Da.1}$ 

Meeting ID: 882 0794 3991

Passcode: 769626

May 29, 2025 (Thursday)		
	900-13	
	Plenary se	ession.
Cor	nference hall of the Faculty of	"Chemical Engineering" TICT
	Zebo Babakhanova and Dr. Kl	hayrulla Pulatov
900 - 930	Registration of Forum participants. Poster session (full day). Exhibition of the results of scientific research of the institute, exhibition of	Entrance hall of Faculty of Chemical Engineering of TICTI
9 <sup>30</sup> - 10 <sup>00</sup>	industrial partners (full day).  Opening of the scientific forum:	Representative of Ministry of higher education, science, and innovations
		Representative of JSC "Uzkimyosanoat"
		Dr. Usmonov Botir Shukurillaevich Rector of Tashkent institute of chemical technology
10 <sup>00</sup> -10 <sup>15</sup>	Scientific speech: Université Paris Cité & CNRS, France	<b>Dr. Mohamed Mehdi Chehimi</b> Biochar: sustainable materials, chemistry and applications
10 <sup>15</sup> -10 <sup>30</sup>	Scientific speech: University of São Paulo, Escola Politécnica, Brazil	<b>Dr. Jose Roberto Simões Moreira</b> Concentrated Solar Energy Simulator for Producing Solar Fuels
10 <sup>30</sup> -10 <sup>45</sup>	Scientific speech: Tashkent institute of chemical technology, Uzbekistan	<b>Dr. Zafar Turakulov and Azizbek Kamolov</b> TECA and MCDA analysis for CO <sub>2</sub> capture from NGCC power plant
10 <sup>45</sup> -11 <sup>00</sup>	Scientific speech: University of North Dakota, USA	Dr. Ali S. Alshami The Energy-Water Nexus: Meeting the Challenges Through Green and Sustainable Gas and Water Purification Membranes
11 <sup>00</sup> -11 <sup>05</sup>	Photo session	
11 <sup>05</sup> -11 <sup>30</sup>	Coffee break	
	Shakhnoza Salijanova and Dr.	•
11 <sup>30</sup> -11 <sup>45</sup>	Scientific speech: Qatar university, Qatar	Dr. Kamel Eid Cotton Wastes Driven Scalable Design of Hierarchal Porous Carbon Nanofibers Encapsulated Heteroatoms and Pt-free Nanocrystals for Green Hydrogen Production

11 <sup>45</sup> -12 <sup>00</sup>	Scientific speech: Tashkent institute of chemical technology, Uzbekistan	Dr. Narges Samanian Baghersad Smart biodegradable packaging
12 <sup>00</sup> -12 <sup>15</sup>	Scientific speech: University of São Paulo, Brazil	Dr. Lelia Cristina da Rocha Soares Sustainable perspectives on the use of hydrogen produced from ammonia
12 <sup>15</sup> -12 <sup>30</sup>	Scientific speech: Tashkent institute of chemical technology, Uzbekistan	Dr. Octavio Calvo Gomes The Healing Power of Sulfur Volatiles
12 <sup>30</sup> -12 <sup>45</sup>	Scientific speech: University of São Paulo, Brazil	<b>Dr. Claudio Augusto Oller do Nascimento</b> Turquoise Hydrogen
12 <sup>45</sup> -13 <sup>00</sup>	Scientific speech: Integral University, India	Dr. Nida Fatima Entrepreneurship as a Catalyst for Sustainable Development: Lessons from India's Startup Ecosystem (Online)
	Closing speeches	The discussion of the results.
13 <sup>00</sup> -14 <sup>00</sup>	Lunch	

# May 29, 2025 (Thursday) 14<sup>00-</sup>17<sup>00</sup>

### Forum sessions (working lang.: English) Conference hall of the Faculty of "Chemical Engineering" TICT

14 <sup>00</sup> -15 <sup>20</sup>	All sessions 1-5	Moderators: Lelia Suarez
	Scientific speeches	Igitov Farrukh
14 <sup>00</sup> -14 <sup>10</sup>	Syed Aqeel Ahmad (India)	Green fuel for the future of sustainable
		transportation (online)
14 <sup>10</sup> -14 <sup>20</sup>	Fares Abedalwally Ogleh	Sustainable Protein Alternatives: Single-Cell
	Al Momani (Qatar)	Protein (SCP) Production for Livestock Feed
		within a Circular Economy (online)
14 <sup>20</sup> -14 <sup>30</sup>	Jaloliddin Eshbobayev	Water treatment using solar energy
14 <sup>30</sup> -14 <sup>40</sup>	Xandamov Davron	Mechanism of Chromium ion removal from
		water using activated bentonites
14 <sup>40</sup> -14 <sup>50</sup>	Paulo Cardozo	Cost of offshore CCS
14 <sup>50</sup> -15 <sup>00</sup>	Aboubakr M. Abdullah Ali	Corrosion Behavior of Different Steels in Sweet
		and Sour Environments: Insights from
		Research in Qatar
15 <sup>00</sup> -15 <sup>10</sup>	Morad Amir IREK Springer	Scientific Publishing and Knowledge Exchange
	(online)	
15 <sup>10</sup> -15 <sup>20</sup>	Shaxnozaxon Gaipova	Analysis of the oil phase in oily emulsion
		products
15 <sup>20</sup> -15 <sup>30</sup>	Time break for sessions and moderator change	
15 <sup>30</sup> -16 <sup>40</sup>	All sessions 1-5	Moderators: Mavlanova Feruza and Paolo
	Scientific speeches	Cardozo
15 <sup>30</sup> -15 <sup>40</sup>	Alvina Farouqui (online)	Cyanobacteria: A sustainable bioresource for
		circular economy

15 <sup>40</sup> -15 <sup>50</sup>	Muinov Ulug'bek	Optimization of Small Wind Turbines Using
		ANFIS for Rural Energy Systems
15 <sup>50</sup> -16 <sup>00</sup>	Maksudova Aziza	Efficient biological water treatment
16 <sup>00</sup> -16 <sup>10</sup>	Esemuratova Gulbakhar	Development of rural wastewater treatment in
		Nukus city
16 <sup>10</sup> -16 <sup>20</sup>	Shahzod Sheraliev	Sustainibilty Report of Tashkent Institute of
		Chemical Technology
16 <sup>20</sup> -16 <sup>30</sup>	Tursunova Dilshoda	Monte Carlo molecular modeling of methylene
		blue adsorption on titanium oxide-iron
		molybdate composites in aqueous solution
16 <sup>30</sup> -16 <sup>40</sup>	Hamroyev Sanjar	The role of green energy in strengthening the
		sovereignty of Uzbekistan
16 <sup>40</sup> -17 <sup>00</sup>	Conclusions and Awards	

### May 29, 2025 (Thursday) 14<sup>00-</sup>17<sup>00</sup>

### Forum sessions (working lang.: Uzbek And Russian)

M.U. Room 319, Lecture hall of the Faculty of "Chemical Engineering" TICT

14 <sup>00</sup> -17 <sup>00</sup>	4 <sup>00</sup> -17 <sup>00</sup> Sessions 1-3 Moderators: E. Saidaxmedov, Umarova V.			
Scientific speeches				
16 <sup>40</sup> -17 <sup>00</sup> Conclusions and Awards				

### May 29, 2025 (Thursday) 14<sup>00-</sup>17<sup>00</sup>

### Forum sessions (working lang.: Uzbek And Russian)

M.U. Room 224, Lecture hall of the Faculty of "Chemical Engineering" TICT

mi.o. Room 224, Lecture hair of the racarty of Chemical Engineering Thor				
14 <sup>00</sup> -17 <sup>00</sup>	Sessions 4-5	Moderators: A. Joʻrayev, X. Muzaffarova, A.		
	Normatov, D. Maksumova, F. Kasimov			
		Haydarova		
Scientific speeches				
16 <sup>40</sup> -17 <sup>00</sup>	Conclusions and Awards			

### May 29, 2025 (Thursday) 14<sup>00</sup>-16<sup>00</sup>

### Forum poster sessions

Entrance hall of the Faculty of "Chemical Engineering" TICT

14 <sup>00</sup> -16 <sup>00</sup>	14 <sup>00</sup> -16 <sup>00</sup> All Sessions 1-5 Moderators: D. Begmatov			
Poster sessions				
16 <sup>40</sup> -17 <sup>00</sup> Conclusions and Awards				
10 -17	C	Disclusions and Awards		

# XXXIV REPUBLICAN SCIENTIFIC CONFERENCE "YOUNG CHEMISTS"

The conference aims to identify solutions to theoretical and practical issues, such as scientific research, innovations, and the creation of technologies for applying their results in production in various fields of the economy - chemistry, mathematics, engineering, natural sciences, production technologies, agricultural sciences, environmental protection, life safety, economics, social and humanitarian sciences, and to draw scientific and practical conclusions on solving urgent issues in the fields. The conference will be attended by professors, researchers, young scientists, and young scholars from higher educational institutions of our republic.

# Sections of the scientific conference and their addresses "YOUNG CHEMISTS"

Nº	Name of the session	Address	
1.	Technology of inorganic substances	Alisher Navoi St. 32, block 1, third floor, main conference hall of the Faculty of "Focand wine production technologies" TICT	
2.	Technology of organic and high molecular compounds.	and wine production teerinelegies. The f	
3.	Technology of oil and gas processing		
4.	Technology of safe food products. Biotechnology	Alisher Navoi St. Room 3/102, Lecture hall of the Faculty of "Food and wine production technologies" TICT	
5.	Computer methods and fundamental sciences in chemical technology	Alisher Navoi St. Room 2/303, Lecture hall of the Faculty of "Food and wine production technologies" TICT	
6.	Innovations in education, industrial economics, product quality and management, social and humanitarian sciences	Alisher Navoi St. 32, block 2, first floor, conference hall of the International relations office, TICT	
7.	Industrial ecology and safety of life		

### **KEY DATES**

May 30, 2025 - Opening of the conference and Plenary reports.

May 31, 2025 - Sectional reports.

### FORMS OF PARTICIPATION IN THE CONFERENCE:

- presentation of a plenary report up to 15 minutes (10 minutes report and 5 minutes questions-answers);
- presentation with a sectional report up to 10 minutes (7 minutes report and 3 minutes questions-answers);
- participation in a conference with poster presentation (publication of posters)
- participation in a conference without a report (publication of materials in a collection).

### PROGRAM OF SCIENTIFIC CONFERENCE "YOUNG CHEMISTS"

**Venue:** Conference hall of Faculty of food and wine technologies of TICTI **Date:** May 30, 2025, Time: 9:00-17:00, Address: Tashkent, st. A. Navoiy, 32.

For online participants, connect to the Zoom conference:

https://us06web.zoom.us/j/88207943991?pwd=tLOhXtSRrpQixqJ2vYB8I1m0zof0Da.1

Meeting ID: 882 0794 3991

Passcode: 769626

#### DAY 1

May 30, 2025 (Friday) 9 <sup>00–</sup> 14 <sup>00</sup>				
Plenary session.				
Conference hall Rectorate TICT				
Moderators: Pro	f. T. Safarov, N. Khodjayeva			
9 <sup>30</sup> - 10 <sup>00</sup>	Registration of conference participants	Conference hall of Faculty of food and wine technologies of TICT		
10 <sup>00</sup> -10 <sup>30</sup>	Opening of the scientific forum:	Prof. B.Usmonov Rector of Tashkent institute of chemica technology		
	Greeting speeches:	Prof. G. Rakhmanberdiev		
		Prof. A. Ikramov		
		Prof. A. Shernayev		
10 <sup>30</sup> -10 <sup>45</sup>	Scientific reports: Tashkent Institute of Chemical Technology	Asliddin Umaraliyev Faxriddin Oʻgli Education for a Green Economy: Preparing Future Generations for Sustainability Supervisor: PhD.U.R.Kadirov		

10 <sup>45</sup> -11 <sup>00</sup>	Scientific reports:	Oʻngʻarov Sardor Alisher oʻgʻli
	Tashkent Institute of Chemical	Scientific basis of suitable treatment
	Technology	technologies for industrial and domestic
		wastewater
4 400 4 445		Supervisor: PhD K.I. Usmanov
11 <sup>00</sup> -11 <sup>15</sup>	Scientific reports:	Xumara Abdashimova Abrarovna
	Tashkent Institute of Chemical	Extraction of biologically active
	Technology	compounds from maclura pomifera fruit
11 <sup>15</sup> -11 <sup>30</sup>	Saigntifia rangeta:	Supervisor: dots. G. A. Nazarov  Abduhakimova Dinora Ilxom gizi
11.0-11.0	Scientific reports: Academy of Labour and Social	•
	Relations	reality technologies in the educational
	relations	process
		Supervisor: dots: N.M. Abdulxayev
11 <sup>30</sup> -11 <sup>45</sup>	Scientific reports:	Kadirniyazova Shoira
	Tashkent Institute of Chemical	Dentin synthesis based on the system
	Technology	Na <sub>2</sub> O-MgO-K <sub>2</sub> O-Sb <sub>2</sub> O <sub>3</sub> -Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -ZrO <sub>2</sub>
		Supervisor: prof. M.Kh.Aripova
11 <sup>45</sup> -12 <sup>00</sup>	Scientific reports:	Maksudova Nigora
	Academy of Labor and Social	Organic chemistry, technology, creativity
	Relations	Supervisor: prof. X.L.Pulatov
12 <sup>00</sup> -12 <sup>15</sup>	Scientific reports:	Tashbaev Jakhongir
	Tashkent Institute of Chemical	The use of portland cement in dentistry:
	Technology	properties, applications, and advancements
12 <sup>15</sup> -12 <sup>30</sup>	Photo session	Supervisor: prof. M.Kh.Aripova
12 <sup>30</sup> -13 <sup>30</sup>	Lunch	
1213-7	Lunch	

### DAY 1

	May 30, 2025 (Saturday) 14 <sup>00–</sup> 17 <sup>00</sup>	
	Conference sessions	
Conference lecture halls of faculties		
13 <sup>30</sup> –14 <sup>00</sup>	Registration of participants	
14 <sup>00–</sup> 16 <sup>00</sup>	Conference sessions. Scientific speeches.	
16 <sup>00–</sup> 17 <sup>00</sup>	Poster sessions.	

### DAY 2

May 31, 2025 (Saturday) $10^{00-}13^{00}$ Conference sessions				
Conference a	Conference and lecture halls of faculties			
930 -1000	Registration of participants			
10 <sup>00–</sup> 13 <sup>00</sup>	Conference sessions. Scientific speeches.			
14 <sup>00–</sup> 16 <sup>00</sup>	Poster sessions.			