

Event report

«First International Conference on Energy and Enhanced Oil Recovery 2024»

Date: May 20-22, 2024

Format: combined

Location: Independence Hall , Abai Hall , Al Farabi

Aim: creating a dialogue platform for discussing scientific issues and prospects, establishing connections between current researchers.

Conference Language : English

Participants:

Gabdullin M.T. – Rector (Chairman of the Board) of KBTU JSC;

Thirunamachandran Rama – Chancellor Canterbury Christ Church University.

Farkhat Abytov - General Director of the International Center of Excellence in the field of sustainable resource management of Central Asia " KAZENERGY"

Yuxi Li - Shandong New Materials Development Company "GINZRE "

Tyran Serik – General Director of «Caspi Neft»

Didar Batryshev - Vice-Rector for Science and Innovation of KBTU JSC;

Ministry of Energy of the Republic of Kazakhstan

Abdulakhat Ismailov - Dean of the School of Energy and Petroleum Industry of JSC KBTU

Kang Wanli - Professor at the School of Energy and Petroleum Industry of KBTU JSC

Zhou Zhu - Deputy Dean of the Faculty of Ecology and Environment at Yuzhang Normal University

Bertrand Sayuk: - Manager " EOR"

Yincheng Li - Deputy Chief Engineer of Shanghai Petrochemical Technology Research Institute "Sinopec"

Alesya Timofeeva - Water Oil Gas Group LLP

Weidong Zhang - Sinopec Expert Shanghai Petrochemical Technology Research Institute

Flavien Gatier – Technical director of EOR

Gusenov Iskander - Candidate of Sciences "Satpayev University"

Sonya Zhao - Senior Engineer at Petrochina Liaolfield Company

Gulnara Shaidulina - ALEMTRADE LLC

Hingai Liu - Manager of Heilongjiang Wanyida Petroleum Engineering

Xianzuyue Hua - Chief Expert of “ SINOPEC CATALYST ”

Ayaulym Baibekova - petroleum geologist - Alstron LLP

Fan Shi - Associate Professor, Northeast Petroleum University

Lijing Zhu – Manager China Petroleum University Beijing School of Economics

Chao Zhang – Manager of Shandong New Materials Development Company “ GINZRE ”

Deans, Heads of departments;

The conference was co-organized by: Canterbury Christ Church University, SNF , Shandong GINZRE New Materials Development Co. , Ltd , Eurasian Geological Chemical Engineering Technology Co. , Shengyang Normal University , Northeast Petroleum University

From May 20 to 22, 2024, **the First International Conference on Energy and Enhanced Oil Recovery was held at KBTU** . The conference participants included leading world scientists from the USA, Sweden, China, Qatar, Kazakhstan and other countries.

The main goal of the Conference:

As global energy demand grows and sustainable development goals are set, the energy sector faces unprecedented challenges and opportunities. For an in-depth look at the latest energy research and technological innovations, as well as sustainable enhanced oil recovery techniques The "First International Conference on Energy and Enhanced Oil Recovery " provided a unique opportunity for professionals, scientists and researchers in the field of energy and enhanced oil recovery to exchange ideas, discuss the latest scientific achievements and technological innovations in energy and related fields, and also allowed them to explore new theories and technologies in the field of enhanced oil recovery.



Key speakers for the conference



Christer Holmberg

h-index by Scopus – 62

Academician, Ph.D., Chalmers University of Technology (Sweden)

Topic: The influence of polymer additives on the phase behavior of oil-water systems of the Winsor III type.



Baojun Bai

h-index by Scopus – 52

Professor, Ph.D., Missouri University of Science and Technology (USA)

Topic: State of the art and prospects for using gels with different-sized particles to increase displacement efficiency.



Yujun Feng

h-index by Scopus – 51

Professor, PhD, Sichuan University (China)

Topic: Permeability-Adaptive EOR Polymers: From Laboratory Research to Field Testing



Sarkyt Kudaibergenov

h-index by Scopus – 26

Professor, Doctor of Chemistry. Sciences, Institute of Polymer Materials and Technologies (Kazakhstan)

Topic: Study of polyampholytes in EOR.



Zhen Zhao

h-index by Scopus – 77

Professor, Doctor of Philosophy, Shenyang Normal University, (China)

Topic: Design and development of catalysts for highly efficient processing and low-carbon use of oil and gas resources.



Wanli Kang

h-index by Scopus – 41

Professor, PhD, Kazakh-British Technical University, (Kazakhstan)

Topic: Heat-resistant and salt-resistant amphiphilic polymer supramolecular system and its oil displacement mechanism.



Peyman Purafshari

Professor, PhD, Nazarbayev University, (Kazakhstan)

h - index by Scopus – 34

Topic: New views on the mechanisms of low-salinity water flooding to enhance oil recovery.



Ibnelwalid A . Hussein

h-index by Scopus – 36

Professor, Ph.D., Qatar University (Qatar)

Topic: "Green" polymers for water management in hydrocarbon production.

	<p style="text-align: center;">Yingcheng Lee</p> <p style="text-align: center;"><i>h-index by Scopus – 19</i></p> <p>Professor, Ph.D., Shanghai Sinopec Petrochemical Research Institute (China)</p> <p style="text-align: center;">Topic: A new viscoelastic surfactant with ultra-low transformation ratio for chemical enhanced oil recovery from sandstone formations using a mixture of anionic - cationic surfactants.</p>
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Conference Program

May 20, 2024		
Time	Content	Place
9: 00-18:00	Registration participants	Almaty Hotel KBTU
12:00-13:00	Lunch	Almaty Hotel
14:00-14:30	Guest Lecture - Professor Baojun Bai Topic : Where and how best to apply the gel?	Al Farabi Hall K BTU
14:30-15:00	Guest Lecture – Professor Yujun Feng Topic: Smart soft materials for carbon capture in oil production with increased CO2 emissions.	
15:00-15:30	Guest Lecture – Professor Ibnelwalid A. Hussein Topic: Improving the efficiency of gas extraction using CO2.	
15:30-16:00	Break on coffee	
16:00-16:30	Guest Lecture – Professor Bing Wei Topic: Processes of displacement by miscible CO2 to enhance oil recovery.	
16:30-17:00	Guest lecture – Marat Sagyndikov	

	Topic: Important aspects of effective implementation of tertiary oil and gas production methods in existing oil and gas fields.	
18:30	Dinner	Restaurant

May 21 , 2024		
Time	Content	Place
9:00-10:00	THE OPENING CEREMONY	Independence Hall KBTU
	Moderators: Abdulakhat Ismailov, Wanli Kang	
	Greeting speech: Rector (Chairman of the Board) of KBTU - Maratbek Gabdullin. Canterbury Christ Church University, Vice-Chancellor, Professor – Rama Thirunamachandran Executive Director of the KAZENEGY Association and General Director of the International Center of Excellence in the Field of Sustainable Resource Management of Central Asia - Farkhat Abytov Representatives of the Ministry of Energy of the Republic of Kazakhstan Shandong New Materials Development Company GINZRE , Ltd – Yuxi Li Eurasian Geological-Chemical Engineering and Technical Company – Asan	
10:00	Seismic training	Outside
10:05-10:15	Group photo	Outside
10:15-10:45	Coffee Break	777
10:30	Smart field AIRANKOL – Opening	357
10:45	Signing of the memorandum of KBTU - East China Petroleum University	466
10:45-12:45	PLENARY SESSION	Independence Hall KBTU
	Section Chairman: Baojun Bai, Ibelwalid A. Hussein	
	1. Speaker – Technical Director of EOR at SNF headquarters France Flavien Gatier	

	<p>Topic: Polymer Enhanced Oil Recovery - Maximizing oil production from mature assets in a cost effective and sustainable manner.</p> <p>2. Speaker - academician Christer Holmberg</p> <p>Topic: The influence of polymer additives on the phase behavior of oil-water-surfactant systems of the Winsor type III .</p> <p>3. Speaker – Taishan scientist Yujun Feng</p> <p>Topic: Permeability-adaptive EOR polymers: from laboratory studies to field trials</p> <p>4. Speaker – scientist from Changjiang Zhen Zhao</p> <p>Topic: Design and development of catalysts for highly efficient conversion and low-carbon use of oil and gas resources.</p>	
12:45-14:00	Lunch	777
14:00-15:30	PLENARY SESSION	Independence Hall KBTU
	<p>Section Chairman: Yujun Feng, Flavien Gatier</p> <p>5. Speaker – Deputy Dean Yingcheng Li</p> <p>Topic: A new viscoelastic surfactant with ultra-low transformation ratio for chemical enhanced oil recovery from sandstone formations using a mixture of anionic -cationic surfactants.</p> <p>6. Speaker – Professor Peyman Pourafshari</p> <p>Topic: New ideas for low salinity water flooding mechanisms to enhance oil recovery.</p> <p>7. Speaker – professor of the department Baojun Bai</p> <p>Topic: State of the art and prospects for using gels with different-sized particles to increase displacement efficiency.</p>	
15:30-16:00	Coffee Break	777
16:00-17:30	PLENARY SESSION	Independence Hall KBTU
	<p>Section Chairman: Yingcheng Li, Peiman Pourafshari</p> <p>8. Speaker – Professor Sarkyt Kudaibergenov</p> <p>Topic: Study of polyampholytes in EOR.</p> <p>9. Speaker – Professor Ibnelwalid A. Hussein</p> <p>Topic: "Green" polymers for water management in hydrocarbon production.</p> <p>10. Speaker – Wanli Kang</p>	

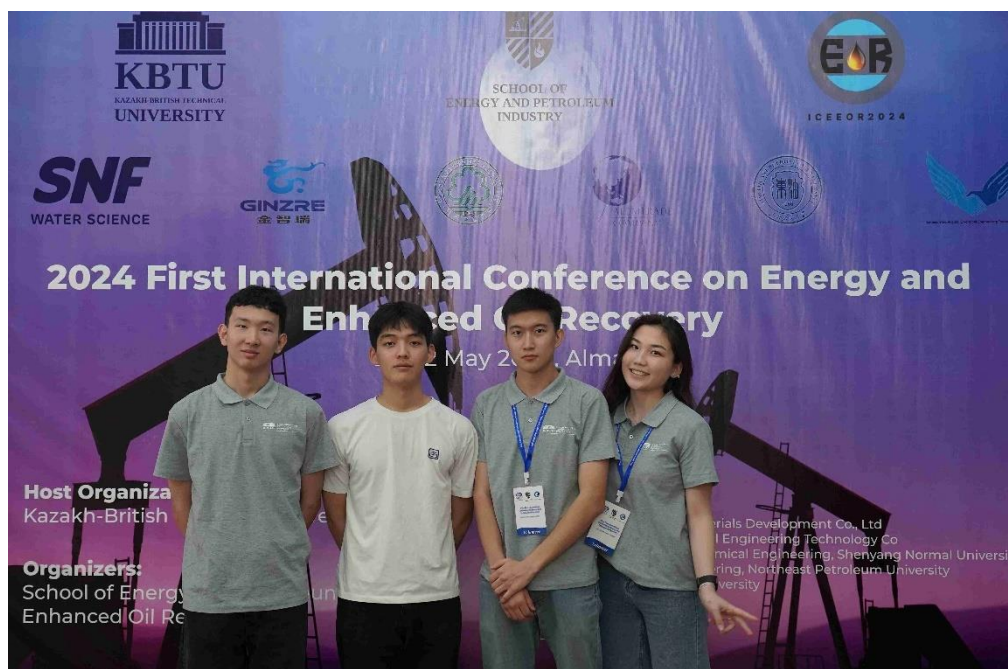
	Topic: New progress in heat and salt resistance of amphiphilic polymer and supermolecule flooding system .	
17:30-18:30	Chapter Posters	Abai Center Hall
19:00	Dinner	Reception House

May 22 , 2024

SECTION I : Chemical flooding, water control, CO 2 flooding		
Time	Content	Place
9:30- 11:00	Section leaders: Bing Wei, Marat Sagyndikov	Al Farabi Hall KBTU
	<p>1. Marat Sagyndikov Topic: Important aspects of the effective implementation of tertiary methods of enhanced oil recovery in existing oil and gas fields.</p> <p>2. Zhou Zhu Topic: Solution properties and oil-displacing properties of betaine-type amphiphilic polymer for enhancing oil recovery from high-salinity formations.</p> <p>3. Xu Han Topic: Research to determine the relative permeability of heavy oil formations at high temperatures.</p> <p>4. For Lee Topic: Interfacial dynamics and wettability modification: surfactants, micellar and microemulsion systems for enhanced oil recovery.</p> <p>5. Bing Wei Topic: Critical thresholds for the formation of deep CO2 foam.</p> <p>6. Chi Dong Topic: Study of the technology of selective water plugging of shallow low-temperature formations using a microfoam temporary plugger.</p>	
11:00-11:15	Coffee Break	777
	Section Chairman: Drong Xu, Bauyrzhan Sarsenbekuly	

11:15-12:45	<p>7. Shisun Bai Topic: Molecular dynamics study of the law of propagation of the interphase boundary of nanoscale two-phase spontaneous impregnation.</p> <p>8. Fang Shi Topic: Study of the liquid migration characteristics of an intelligent micronanocapsule Janus for oil displacement.</p> <p>9. Saule Aidarova Topic: Stabilization of foam with mixtures of surfactants and nanoparticles to enhance oil recovery.</p> <p>10. Ayaulym Baybekova Topic: Experience in using polymer flooding technology in the fields of the Republic of Kazakhstan.</p> <p>11. Iskander Gusenov Topic: Laboratory methods for assessing the effectiveness of polymer gel in reducing crack permeability.</p> <p>12. Haizhuang Jiang Topic: New polymer gel for transporting CO₂ gas into high-temperature and low-permeability formations.</p>	Al Farabi Hall KBTU
12:45-14:00	Dinner	777
15:00-17:00	Seminar Visit KBTU laboratories	KBTU

Conference Banner was located in the 1st floor foyer on the street side. Tole bi as a photo zone for the event. Volunteers take an active part in the event



1. **Registration of participants** was carried out in the foyer on the first floor from Tole bi street.

2 **Lanyards with name badges in the amount of 60 pieces** were distributed to the guests of the conference.

60 copies of programs were printed which were handed to guests during registration, as well as **60 copies of a collection of conference publications** .



Opening ceremony of the First International Conference on Energy and Enhanced Oil Recovery 2024





**Opening speech by the Rector
Gabdullin M.T.**

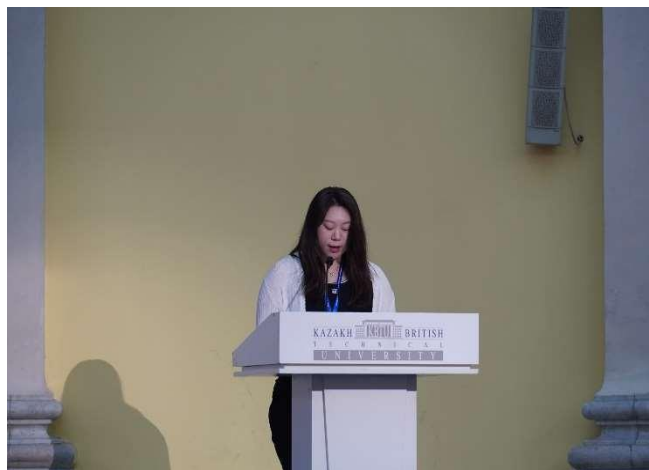
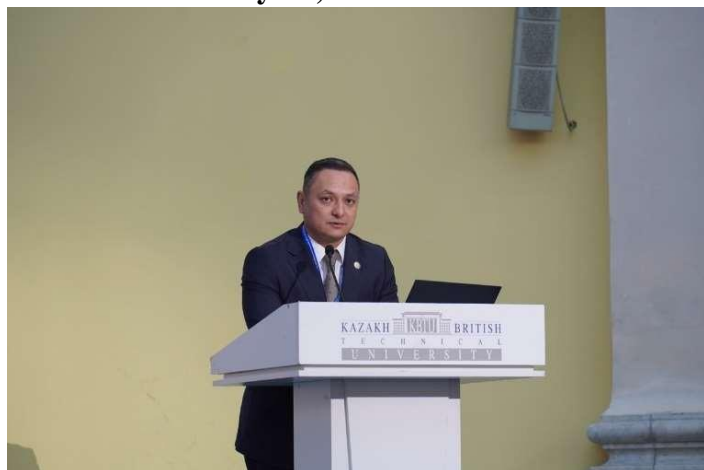


**Welcome speech by the Dean of SEPI
Ismailov A.A.**



Vice-Chancellor Rama Thirunamachandran , Canterbury Christ Church University

Farhat Abytov, Executive Director KAZENERGY



Yuxi Li , CEO of Shandong GINZRE



**Asan , representative companies
Eurasian Geological Chemical Engineering
technology Co.**

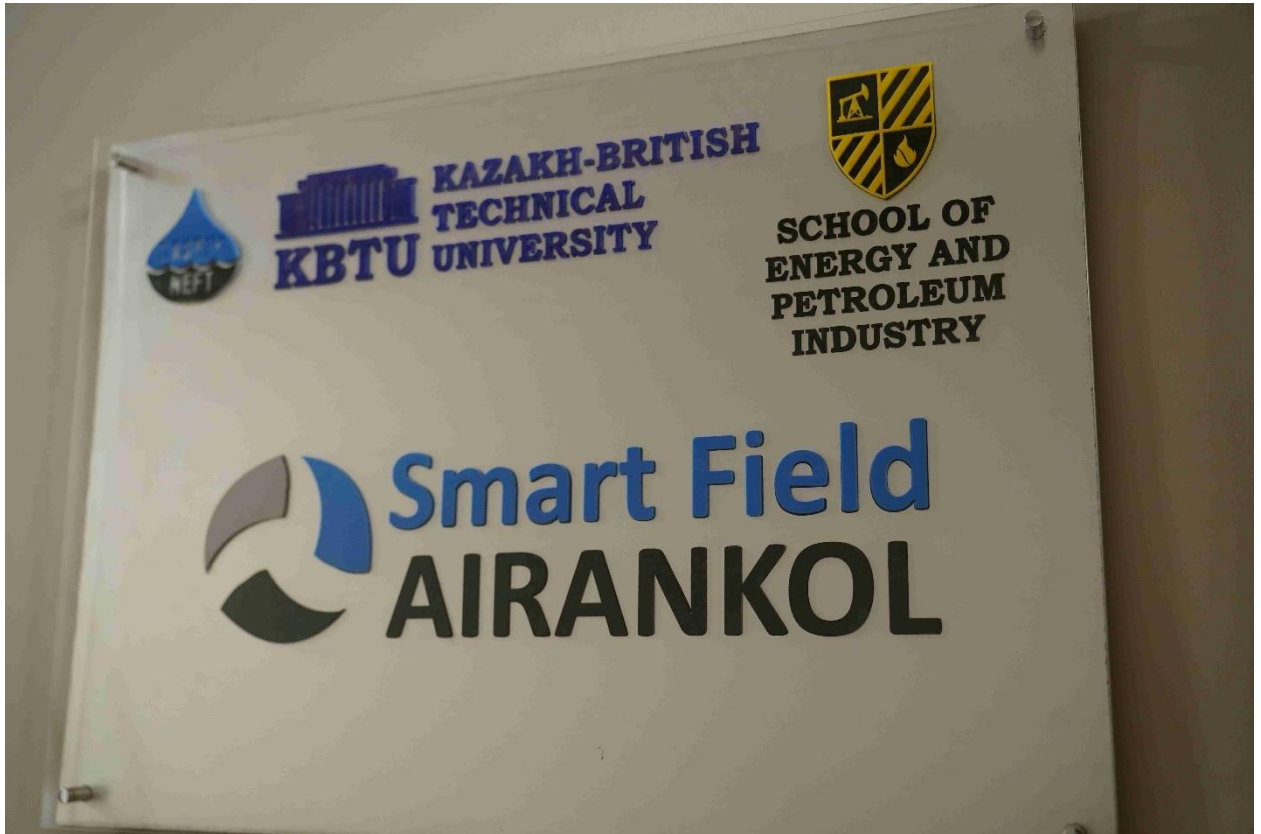
Group photo of participants against in front of KBTU



A coffee break and lunch were organized at the entrance to the Abay Center on the 2nd floor.



Smart Field AIRANKOL office 357



Rector of KBTU Gabdulin M.T. welcomes the conference speakers.



Opening ceremony of the Smart Field class AIRANKOL Rector of KBTU Gabdulin M.T. and General Director of “Caspi Neft” Serik Tyran.



Representatives of France are watching with interest innovations in the educational sphere of KBTU



Representatives of China. Smart Field AIRANKOL



Plenary session led by academician Christer Holmberg (Sweden)



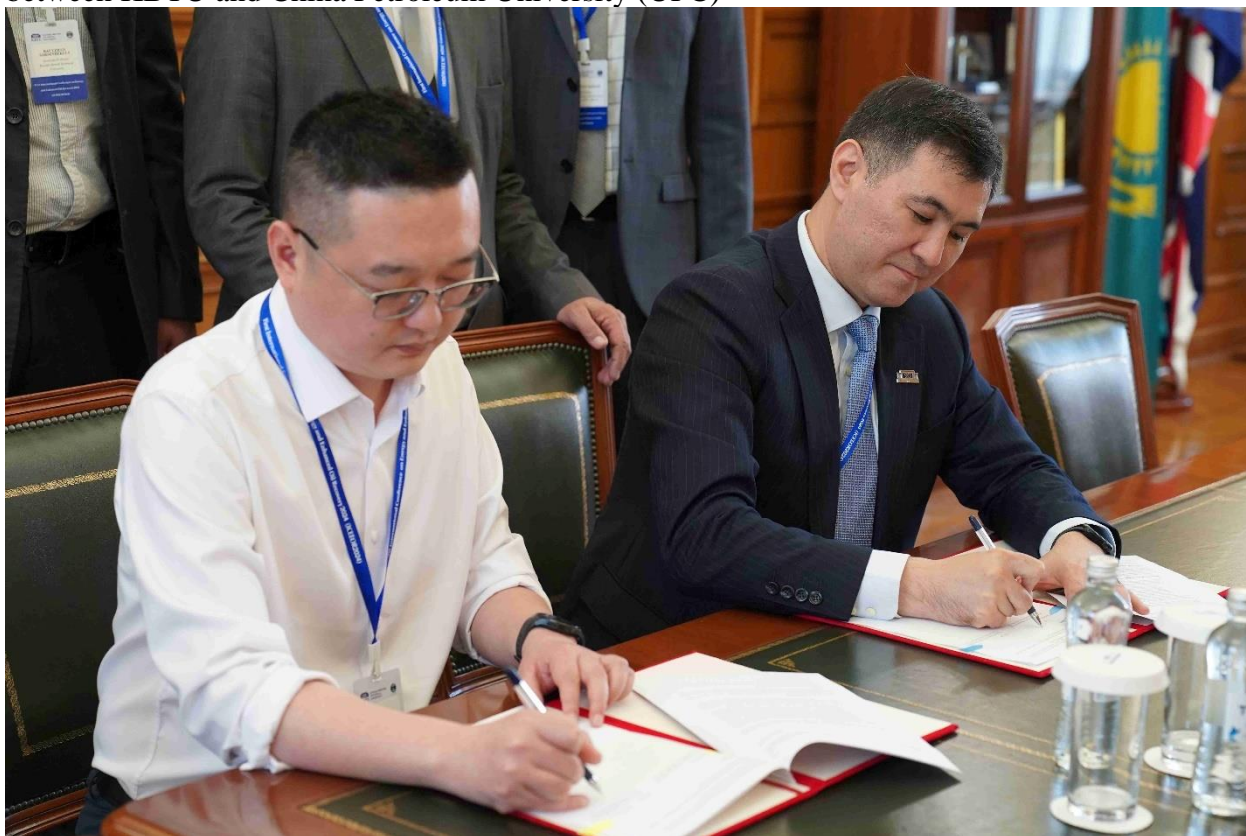
Flavien Gatier Design Director Yujun Fei Sichuan University



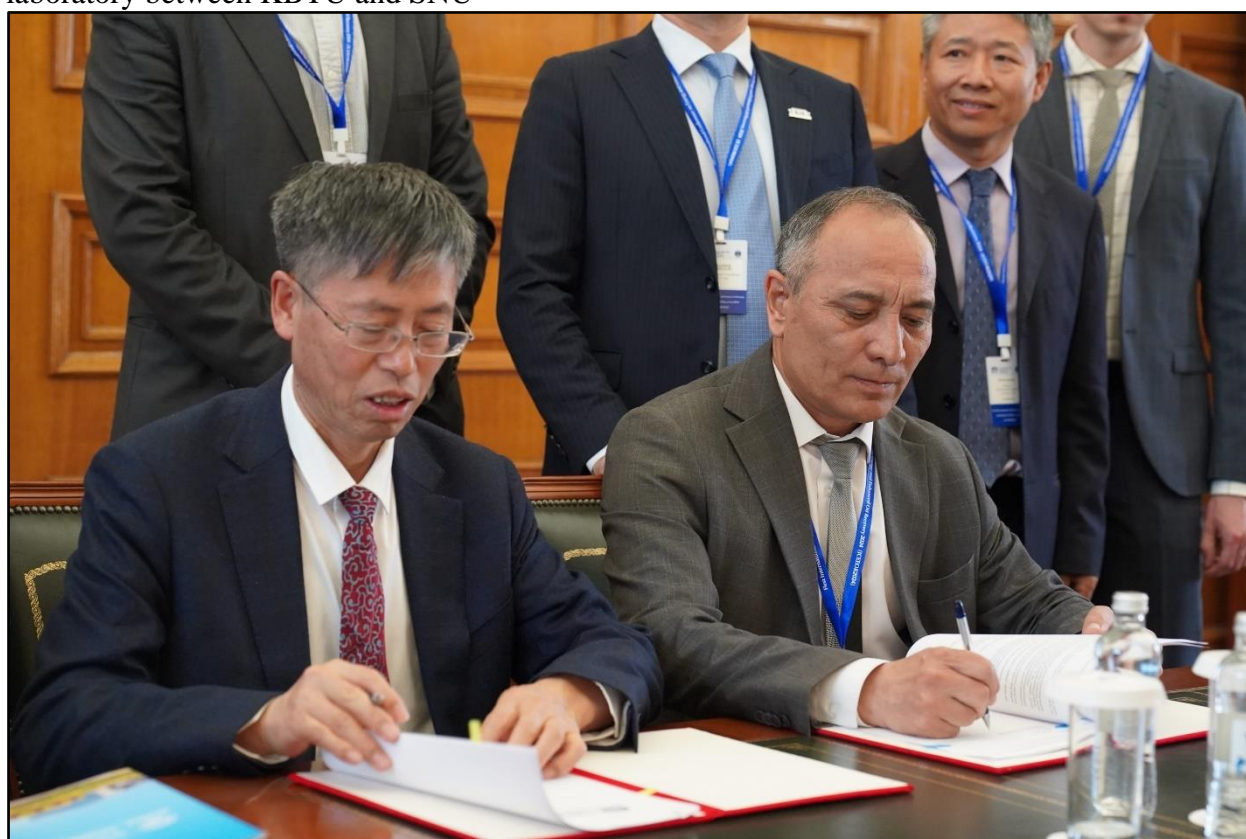
Participants of the Independence conference Hall KBTU



Rector of KBTU, Gabdullin M.T. and Professor Yujun Feng at the signing of a memorandum between KBTU and China Petroleum University (UPC)



Dean of SEPI, Ismailov. A.A and Dean Zhao Zhen sign an agreement on the creation of a joint laboratory between KBTU and SNU



Plenary Session at Al Farabi Hall



At the end of the conference, all participants received memorable gifts and souvenirs, as well as Diplomas of participants and Letters of Appreciation.



The expenses for the conference amounted to 5 509 245 KZT

Position	Third Party Provider	Spending amount
Kayindy Canyon Tour	IP "Onliner"	500 000 KZT
Sovereign products		0 T
Accommodation and lunch at the hotel	Almaty Hotel	728 500 KZT
Audio and video equipment (rent)	Alex Show Rental	2 000 000 KZT
Banner design Printing collections 60 pieces	Dala Trade Printing house	360,000 KZT
Catering	IP "Jasmine"	1 847 145 KZT

KZT 4,905,030

"Alemtrade" LLP	800 000 KZT
LLP "Eurasia Geokhim Tekhinzhinirg"	1 200 000 KZT
SNF	1 980 030 KZT
Joint Stock Company "Kazakh Institute of Oil and Gas"	450 000 KZT
Registration of 2 participants	457 000 KZT
Master's student registration	18 000 KZT

Results of the Event:

Several formal and informal meetings were held with representatives of Sweden, the USA, Italy, China, France, Qatar and other countries with the aim of creating a road map towards sustainable development and cooperation between KBTU and their representatives.

The conference was attended by representatives of the Ministry of Energy, KAZENERGY, as well as delegations of leading educational institutions of Kazakhstan and large international organizations, including the Italian oil and gas company ENI

Representatives of KBTU: Abdulakhat Ismailov, Dean of the School of Energy and Petroleum Industry and representatives of the SNU: Zhao Zhen, Dean of the Faculty of Chemistry and Chemical Engineering of Shenyang Normal University, signed an agreement on the creation of a joint research laboratory.

During the Conference, a memorandum was signed between KBTU and China Petroleum University. As part of the cooperation, the parties intend to interact in order to develop modern trends and implement professional programs aimed at meeting the needs for personnel training and advanced training of students.

Following the conference, an interactive Smart class was opened Field “AIRANKOL” has no analogues.

World-famous scientists and conference guests noted the highest level and organization of the “First International Conference on Energy and Enhanced Oil Recovery 2024 ”

Dean of SEPI

Ismailov A.A.

**Vice-Rector for Social and
Educational Issues**

Smolyakova E.S.