











## **PROGRAM**

X Anniversary International Conference
"Topical problems of the uranium industry",
dedicated to the 25th anniversary of NAC Kazatomprom JSC
and the 20th anniversary of the Institute of High
Technologies LLP

https://uranconference.kz/

Almaty, Republic of Kazakhstan November 24 - 26, 2022,

Venue: Kazakh-British Technical University JSC (KBTU)

## **ORGANISING COMMITTEE:**

#### Chair:

- Ye.Zh. Mukanov Chair of the Management Board of NAC Kazatomprom JSC Deputy:
- A. Kh. Akzholova Acting Chief Production Officer of NAC Kazatomprom JSC
- A.K. Omirgali Director of Scientific and Technical Projects Department of NAC Kazatomprom JSC

#### Secretary:

- A.K. Amanova Manager of Scientific and Technical Projects Department of NAC Kazatomprom JSC
- M. T. Gabdullin Rector (Chairman of the Board) KBTU JSC
- Ye. K. Yarmukhamedov NFC Department Director of NAC Kazatomprom JSC
- S. K. Kairambayev Chief Expert of HSE Department of NAC Kazatomprom JSC
- I. A. Tsoy Chief Expert of the Mining Department of NAC Kazatomprom JSC
- Ye. S. Smolyakova Vice-rector for social and educational issues
- S. B. Aidarova Professor, Director of the Oil Engineering Institute
- "One Belt, One Road"
- T. Kh Shuriyev Chief Expert of Production Department of NAC Kazatomprom JSC
- A. K. Alpysbayev Chief Manager of HSE Department of NAC Kazatomprom JSC
- B. B. Burkurmanov Chief Manager of Scientific and Technical Projects Department of NAC Kazatomprom JSC
- G. K. Kapishev Chief Manager of Nuclear Technologies and RW Department of NAC Kazatomprom
- M. T. Oralbekov Chief Manager of Production Department of NAC Kazatomprom JSC
- G. N. Yarovoy Chief Manager of IT Department NAC Kazatomprom JSC
- S. V. Bezhetsky Chair of the Management Board of UMP JSC
- M. K. KylyshkanovHead of the Scientific Center of UMP JSC
- T. O. Aubakirov Deputy Chair of the Management Board for Geology of Volkovgeology JSC
- A. Sh. Azhikulov Head of Scientific and Organizational Section of Volkovgeology JSC branch CEME
- A. E. Pirmatov General Director of IHT LLP
- S. A. Dyussambayev Deputy General Director for Research and Development of IHT LLP
- K. A. Kadirbekov Laboratory manager
   ("A. Bekturov Institute of Chemical Sciences" JSC)

## **PROGRAMM COMMITTIEE:**

- Ye.Zh. Mukanov Chair of the Management Board of NAC Kazatomprom JSC
- M. T. Gabdullin Rector (Chairman of the Board) KBTU JSC
- A.K. Omirgali Director of Scientific and Technical Projects Department of NAC Kazatomprom JSC
- E. Pirmatov General Director of IHT LLP
- S. A. Dyussambayev Deputy General Director for Research and Development of IHT LLP
- M. P. Kopbaeva Head of the Laboratory of Uranium Technology of IHT LLP
- A. A. Zharmenov General DirectorRepublican State Enterprise National

Center for Complex Processing of Mineral Raw Materials of the Republic of Kazakhstan

- M. Zh. Bitimbayev Chief Researcher of the Republican Public Organization "National Engineering Academy of the Republic of Kazakhstan"
- Kh. A. Yusupov Professor at Satbayev University
- S. B. Aidarova Professor, Director of the Oil Engineering Institute
   "One Belt, One Road"
- K. Kh. Nusupov Professor at KBTU
- N. B. Beisenkhanov Dean of the School of Materials Science and Green Technology KBTU
- V. V. Korobkin Professor of the School of Geology and Geological Exploration of KBTU
- A. Zh. Akhmetzhanov Dean of the School of Geology and Geological Exploration of KBTU
- K. A. Kadirbekov Laboratory manager
   ("A. Bekturov Institute of Chemical Sciences" JSC)
- B. B. Burkurmanov Chief Manager of Scientific and Technical Projects
   Department of NAC Kazatomprom JSC
- M. K. Absametov Director of LLP "Institute of Hydrogeology and Geoecology named after U.M. Ahmedsafin"
- D. G. Batryshev Managing director of Science and innovation Department KBTU JSC
- S. Sultanbekov Director of the branch of "Volkovgeology" JSC
- A. L. Kozlovsky Head of the Laboratory of Solid State Physics Astana branch of RSE on REM "Institute of Nuclear Physics"
- V. I. Gorkun Chief Manager of Scientific Programs of ANGSTREM LLP
- Michel Cuney Research Director Emeritus at the GeoResources Laboratory, University of Lorraine, France
- Jorshan Choi Lawrence Livermore National Laboratory (retired), USA
- Y. M. Fedorchuk Professor of the Department of General Technical Disciplines of the School of Basic Engineering Training Tomsk National Research Polytechnic University, Russian Federation
- Ikeda Hajime Assistant professor, Akita University, Japan
- Mojtaba Mirzaeian Associate Professor, Chemical Engineering, University of the West of Scotland, UK.

Time	November 24, 2022 ,THU	
08:30-09:30	Registration	
09:30-10:00	Opening X International Conference-2022 (welcome and congratulatory speeches)	
10:00-11:15	PLENARY SESSION (INDEPENDENCE HALL)	
11:15-11:30	COFFEE BREAK / Poster presentation	
11:30-12:45	PLENARY SESSION (INDEPENDENCE HALL)	
12:45-13:00	PLENARY SESSION (INDEPENDENCE HALL)	
13:00-14:00	Lunch	
14:00-16:00	PLENARY SESSION (INDEPENDENCE HALL)	
16:00-16:30	COFFEE BREAK / Poster presentation	
16:30-17:15	Oral presentation: Oral presentation: Oral presentation: Oral presentation: SECTION 1. SECTION 2. SECTION 4. SECTION 7.	
17:15-17:30	(ABAY HALL) (INDEPENDENCE HALL) (AL-FARABI (777 HALL) HALL)	
18:00	Gathering of participants for a Gala Dinner by invitation	
18:30	Gala Dinner by invitation	

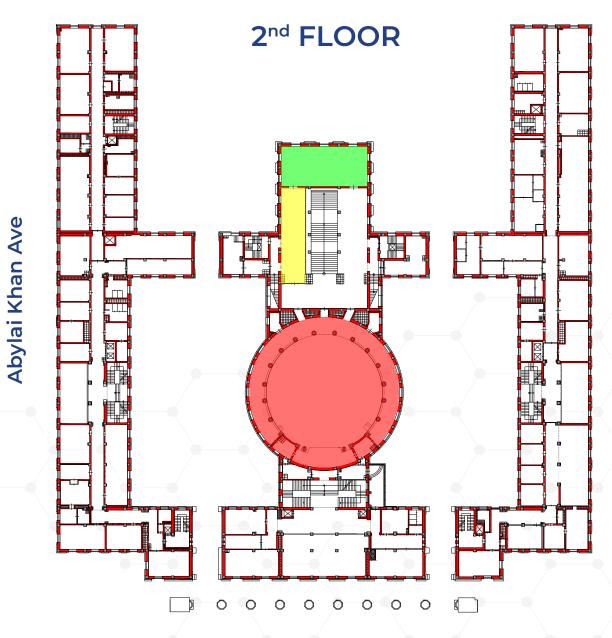


- SECTION 2. Uranium mining and processing technology
- SECTION 3. Technologies and actual problems of the pre-reactor nuclear fuel cycle conversion, production of nuclear fuel.
- SECTION 4. Resources and efficient technologies for the production of rare, rare-earth metals and high-tach products based on them
- SECTION 5. Safe operation of nuclear industry enterprises and man-made waste management
- SECTION 6. Issues of sustainable development (ESG), legal, macroeconomic and educational aspects of the functioning of the nuclear industry
  - SECTION 7. Digitalization, automation and robotizationin the nuclear industry

Time	November 25, 2022, FRI			
08:30-09:30	Registra	tion		
09:00-11:15	Oral presentation: SECTION 3. (ABAY HALL)	Oral presentation: SECTION 2. (INDEPENDENCE HALL)	Oral presentation: SECTION 4. (AL-FARABI HALL)	Oral presentation: SECTION 6. (777 HALL)
11:15-11:30	COFFEE BREAK / Poster presentation			
11:30-12:45	Oral presentation: SECTION 3.	Oral presentation: SECTION 2.	Oral presentation: SECTION 4.	Oral presentation: SECTION 6.
12:45-13:00	(ABAY HALL)	(INDEPENDENCE HALL)	(AL-FARABI HALL)	(777 HALL)
13:00-14:00	Lunch			
14:00-16:00	Oral presentation: SECTION 1. (ABAY HALL)	Oral presentation: SECTION 2. (INDEPENDENCE HALL)	Oral presentation: SECTION 5. (AL-FARABI HALL)	Oral presentation: SECTION 7. (777 HALL)
16:00-16:30	COFFE	E BREAK / Poster pi	resentation	
16:30-17:15	Oral presentation:	Oral presentation:	Oral presentation:	Oral presentation:
17:15-17:30	SECTION 1. (ABAY HALL)	SECTION 2. (INDEPENDENCE	SECTION 5. (AL-FARABI HALL)	SECTION 7. (777 HALL)
18:00		HALL)		
18:30	Closing	of X International	Conference-202	2

November 26, 2022, SAT Team building by invitation

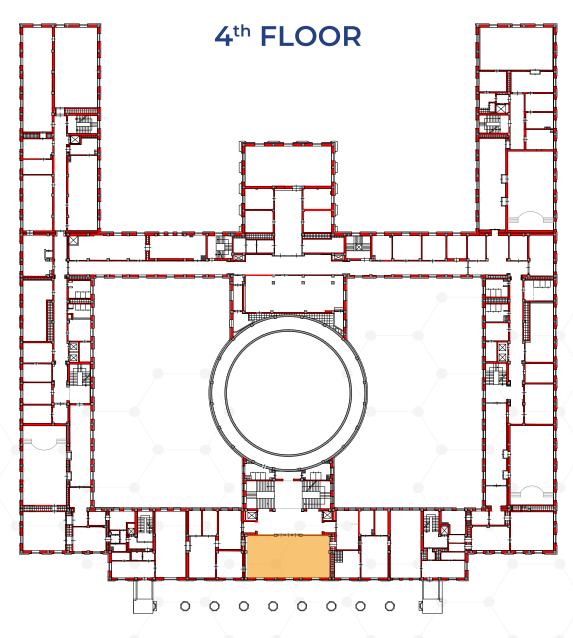
## Kazybek Bi Street



**Tole Bi Street** 

- INDEPENDENCE HALL
- 777 HALL
- ABAY HALL

## Kazybek Bi Street



**Tole Bi Street** 

- AL-FARABI HALL

Abylai Khan Ave

## Day of participants arrival - November 23, 2022

Arrival of participants, accommodation in hotels

## DAY ONE - NOVEMBER 24, 2022

**08:30** Registration of participants

## PLENARY SESSION INDEPENDENCE HALL

Moderator: Chokan Turarovich Laumulin - PhD
KBTU Professor and researcher at the Cambridge Central Asian Forum,
Jesus College of the University of Cambridge
Vice Chair of the UNECE Committee on Sustainable Energy
Geneva, Switzerland

9:30-9:40	Opening X International Conference-202 A moment for safety	2
	Speaker	Report
9:40-9:45	Yerzhan Zhanabilovich Mukanov Chair of the Management Board NAC Kazatomprom JSC	Greeting
9:45–9:50	Maratbek Tulebergenovich Gabdullin KBTU Rector (Chair of the Management Board)	Greeting
9:50–9:55	Tulegen Mukhanovich Mukhanov First Deputy Executive Director ALE Republican Association of Mining and Metallurgical Enterprises	Congratulatory word
9:55–10:00	Nurlan Bektasovich Ryspanov President National Academy of Mining Sciences	Congratulatory word
10:00–10:15	Yerzhan Zhanabilovich Mukanov Chair of the Management Board NAC Kazatomprom JSC	On strategy and development prospects of NAC Kazatomprom JSC
10:15–10:30	Armanbek Kasymuly Omirgali Scientific and Technical Projects Director NAC Kazatomprom JSC	Scientific and technological activity in NAC Kazatomprom JSC
10:30–10:45	Askar Eshmuratovich Pirmatov  「General Director Institute of High Technologies LLP	Institute of High Technologies LLP - industry research center of NAC Kazatomprom JSC

10:45-11:15	ALE Republican Association     and Metallurgical Enterprise		Awarding
	· National Academy of Mini	ng Sciences	
		Group photo	
11:15-11:30		COFFEE BREAK	
11:30–11:50	Josef Belac CEO, Chairman of The Boa Czech Republic	rd ALVEL Co.	Centre of Competence in the Nuclear Fuel Cycle
11:50-12:10	Olena Mykolaichuk Director Division of Nuclea and Waste Technology	r Fuel Cycle	Uranium Resources, Production, Supply and Demand: An IAEA Global Overview
12:10-12:30	<b>Paul Scherrer Institute</b> Switzerland	AO KБТУ Kazakhstan	Solemn signing of a cooperation agreement with NAC Kazatomprom JSC
12:30–12:45	Murat Zhurinovich	of the Republic	On the prospects for comprehensive research n the uranium industry
12:45–13:00	Alexander Vladimirovich E Advisor to the First Deputy Ge TENEX JSC Russian Federation	•	uranium industry - state and development prospects
13:00–14:00		Lunch	
	Р	LENARY SESSION	

## PLENARY SESSION INDEPENDENCE HALL

Moderator: Baurzhan Orazovich Duissebayev Doctor of Technical Sciences, Academician NAC Kazatomprom JSC

14:00–14:30	Abdurasul Aldashevich Zharmenov General Director Republican State Enterprise National Center for Complex Processing of Mineral Raw Materials of the Republic of Kazakhstan	Science and technology - the basis of economic efficiency
14:30-14:55	PAUTZ Andreas  Head of Research Division Nuclear Energy and Safety Paul Scherrer Institute Switzerland	Radionuclide production and separation towards medical application at Paul Scherrer Institute

14:55-15:20	Shukhrat Sharofovich Alikulov Vice-Rector Navoi State Mining and Technology University Mashkhur Amonovich Kurbanov Deputy Head of the Central Research Laboratory of Navoi Mining and Metallurgical Plant JSC Uzbekistan	Proposal for the integrated extraction of associated metals from hydrogenous and man-made uranium deposits
15:20–15:35	Daniyar Maralovich Dzhanseytov Deputy General Director for Research RSE on REM Institute of Nuclear Physics ME RK	Institute of Nuclear Physics – Kazatomprom: joint promising projects
15:35–16:00	Yuri Alexandrovich Ulyanin First Deputy General Director TENEX JSC Russian Federation	Status and prospects for the development of uranium mining by ROSATOM State Corporation abroad
16:00–16:30	КОФЕ – БРЕЙК	

## SECTION REPORTS

**Moderators:** 

SECTION 1	24.11.2022
Geology, Geotechnology and Mining and Preparatory Works	
ABAY HALL	

Michel Cuney
Research Director Emeritus, GeoResources Laboratory, University of Lorraine, France
Yury Vasilievich Demekhov Candidate of Geological-Mineral Sciences.
Deputy General Director for Production

Deputy General Director for Production

JV Budyonovskoye JSC

Kazakhstan

	Speaker/Organization	Report
16:30–17:00	Michel Cuney Research Director Emeritus GeoResources Laboratory University of Lorraine France	A new classification of sandstone related uranium deposits
17:00–17:15	<b>Telman Khamzaevich Shuriyev</b> ΓChief Expert of the Production Department of NAC Kazatomprom JSC	Improving the process of reuse of equipment and materials in uranium mining at uranium mining enterprises of NAC Kazatomprom JSC
17:15–17:30	Ludmila Valentinovna Shagarova Senior Researcher U.M. Ahmedsafin Institute of Hydrogeology and Geoecology LLP	Capabilities of GEE cloud technologies for monitoring geological tasks
17:30–18:00	Gathering of participants for a Gala Dinner by invitation	
18:30	Gala Dinner by invitation	

#### **SECTION 2**

### **Uranium mining and processing technologies INDEPENDENCE HALL**

	Baurzhan Orazovich Duissebayev - Doctor of Technical Science	
	Academician of National Academy of Mining Sciences	
	Academic supervisor UKTB LLP	
Moderators:	Kazakhstan	

#### **Moderators:**

**Sébastien Hocquet - PhD** 

Head of ISR R&D Program Orano Mining

France

	Speaker/Organization	Report
16:30–17:00	Baurzhan Orazovich Duissebayev Academic supervisor UKTB LLP	Intensification of the ISR process of uranium by sulfonation of reservoir organic matter with sulfurous acid
17:00–17:15	Sébastien Hocquet Head of ISR R&D Program Orano Mining France	A new scientific collaboration between Orano Mining and Kazatomprom for taking of the next challenges of ISR technology for uranium mining
17:15–17:30	Yergali Omirgalievich Battalov Executive Director Gurvansaikhan LLC Mongolia	Mineral resource base of uranium of the Gurvansaikhan company in Mongolia and prospects for the organization and development of mining operations
17:30–18:00	Gathering of participants for a Gala Dinner by invitation	
18:30	Gala Dinner by invitation	

#### **SECTION 4**

24.11.2022

Resources and efficient technologies for the production of rare, rare earth metals and high-tech products based on them **AL-FARABI HALL** 

Moderators:	Eurasian Academy of Mining Sciences Chief Engineer of ISL Metals Group LLP Kazakhstan	tor of Technical Sciences, Academician of the
	PAUTZ Andreas - PhD  Head of Research Division Nuclear Energy Paul Scherrer Institute Switzerland	y and Safety
	Speaker/Organization	Donort

	Speaker/Organization	Report
16:30–17:00	Eshmurat Azimovich Pirmatov Deputy General Director ISL Metals Group LLP	Status and prospects for the development of ion-exchange processes and devices in the hydrometallurgy of rare and rare-earth metals

17:00-17:15	Ainur Nurkalievna Berkinbayeva Head of chemical and analytical laboratory Institute of Metallurgy and Enrichment JSC	Prospects for improving the technology for obtaining rare earth elements from mineral and technogenic raw materials of Kazakhstan
17:15–17:30	Alexander Nikolayevich Dyachenko Head of the Department of Chemistry and Technology of Rare Elements MIREA - Russian Technological University Russian Federation (online)	Prospects for the development of beryllium production
17:30–18:00	Gathering of participants for a Gala Dinner by invitation	
18:30	<b>Gala Dinner</b> by	y invitation

## SECTION 7 24.11.2022 Digitalization, automation and robotization in the nuclear industry

**Ikeda Hajime** - PhD assistant professor at Akita University Japan

#### **Moderators:**

**Sayat Ibrayev** - Doctor of Technical Sciences, Professor U.A. Dzholdasbekov Institute of Mechanics and Engineering Kazakhstan

**777 HALL** 

	Speaker/Organization	Report
16:30–17:00	Ikeda Hajime Assistant professor Akita University Japan	Overview of smart mining from Japan perspective
17:00–17:15	Nadezhda Vasiliyevna Gurova Department Director Technolink JSC Russian Federation	Quality management as a component of production management
17:15–17:30	Airat Tagirovich Ismailov Project Program Manager Innovation Factors Schlumberger	INNOVATION FACTORS - an approach to creating innovations
17:30–18:00	Gathering of participants for a Gala Dinner by invitation	
18:30	Gala Dir	nner by invitation

## SECTION 1 Geology, Geotechnology and Mining and Preparatory Works ABAY HALL

<b>Michel Cuney</b> - PhD, Research Director Emeritus
GeoResources Laboratory, University of Lorraine
France

#### **Moderators:**

**Yury Vasiliyevich Demekhov** - Candidate of Geological-Mineral Sciences

Deputy General Director for Production

JV Budyonovskoye JSC

Kazakhstan

KazaKnstan			
	Speaker/Organization	Report	
14:00-14:10	Fustic Milovan Associate Professor School of Mining and Geosciences,	Depositional Models and Reservoir  Architectureof Uranium Bearing Paleocene -  Eocene Strata, New Insights from Cores, Logs,	
	Department of Geological Sciences Nazarbayev University	and Innovative Workflow, South Tortkuduk, Southern Kazakhstan	
14:10-14:20	Marat Zhakupovich Bitimbayev Doctor of Technical Sciences, Academician of the National Engineering Academy of the Republic of Kazakhstan	Depositional Models and Reservoir Architectu of Uranium Bearing Paleocene - Eocene Strata New Insights from Cores, Logs, and Innovative Workflow, South	
14:20-14:30	Sergey Sergeyevich Rozhkov  Head of Geotechnology Sector  B.N. Laskorin Leading Research Institute of  Chemical Technology JSC	Express technological testing of uranium ores to assess the possibility of mining them by the ISL method	
	Andrey Vladimirovich Redko	Introduction of the technology of radio wave geointroscopy of the inter-well space	
14:30-14:40	Mining Development Director  JV Inkai LLP	"4D RWGI" in JV INKAI LLP to monitor the uranium ISL process	
14:40-14:50	Adil Mukanuly Orynbek  Main hydrogeologist of geological and geophysical works department  Volkovgeology JSC	Monitoring studies within the framework of groundwater protection in the Shu-Sarysu and Syrdarya uranium ore provinces	
14:50-15:00	Pyotr Egorovich Chistilin Chief Specialist Volkovgeology JSC	Influence of distribution of uranium content in ores of reservoir-infiltration type deposits on the ISL process	
15:00-15:10	Alexander Georgievich Ivanov Chief Specialist Design & Survey and Research & Development Institute of Industrial Technology, JSC Russian Federation	Axial stability of production strings made of polymer casing pipes and ways to maintain it during the construction and operation of technological wells of uranium ISL	
15:10-15:20	Sergey Borisovich Subbotin Senior Researcher Branch "Institute of Radiation Safety and Ecology RSE on REM "National Nuclear Center of the Republic of Kazakhstan" (online)	the methods of isotope hydrogeology in the development of uranium deposits by in situ leaching	

15:20-15:30	Karina Rasilievna Svetlakova hief executor of the project Institute of High Technologies LLP	Modeling of lithological differences and geometrization of mineralization in hydrogen-type uranium deposits using radial basis functions
15:30-15:40	Altynai Aidoskyzy Shylbatyr Chemist-technologist BioSmart research institute LLP	Investigation of methods for the regeneration and inhibition of gypsum in an ore-bearing stratum resulting from chemical clogging during ISL
15:40-15:50	Nurzhan Nurlanovich Abdrakhmanovч Chief geologist Baiken-U LLP	Selection of Rational Parameters for Recovery of Filtration Characteristics of Ores in Downhole Development of Uranium Deposits
15:50-16:00	Sergey Anatoliyevich Sedyshev Chief geologist JV Zarechnoye JSC	Prospects for expanding the raw material base of the Zarechnoye ISL mine
16:00–16:30	COFFEE BREAK	
16:30-16:45	Yermek Zhamshitovich Murtazin Deputy Director U.M. Ahmedsafin Institute of Hydrogeology and Geoecology LLP Satbayev University	Assessment of the heat and power potential of the artesian basins of western and southern Kazakhstan
16:45-17:00	Yevgeny Georgievich Yurenkov Director of Development Leonid Anatoliyevich Kuzmin Director of the branch in Irkutsk - head of the geological and geophysical group of the separate structural divisions "Drilling site No. 3" RUSBURMASH JSC Russian Federation	Experience of using the Logging of instantaneous fission neutrons method in the Russian Federation in the development of uranium deposits by ISL
17:00-17:10	Ansar Kayrbekovich Seitzhanov Economic Analysis Manager NAC Kazatomprom JSC	Improving the efficiency of the strapping process at the uranium mining enterprises of NAC Kazatomprom JSC
17:10-17:20	Nazerke Asirbekkyzy Asirbek Geophysicist Central experimental and methodical Expedition Branch Volkovgeology JSC	Interpretation of Logging of instantaneous fission neutrons data with simultaneous GR at hydrogen-type uranium deposits
17:20-17:30	Zhadyra Kuanyshovna Artykova M.Auezov South Kazakhstan University, Department of Oil Refining and Petrochemistry (online)	Study of the rheological properties of composite polymer materials for drilling fluids
17:30–17:40	Rustem Kadrovich Igizbaev  Head of the laboratory "Movement of rocks"  Branch of RSE on REM  National Center for Integrated Processing of Mineral Raw Materials of the Republic of Kazakhstan of the Committee for Industrial Development of the Ministry of Industry and Infrastructure Development D.A.Kunayev Institute of Mining	the operational horizons of quarry and mine fields into categories of easy drillability and easy explosiveness of ores and host rocks, and conducting drilling and blasting operations using their individual passport for each category in order to reduce the cost of breaking them by 20% or more

17:40–17:50	Rustem Kadrovich Igizbaev  Head of the laboratory "Movement of rocks " Branch of RSE on REM National Center for Integrated Processing of Mineral Raw Materials of the Republic of Kazakhstan of the Committee for Industrial Development of the Ministry of Industry and Infrastructure Development D.A.Kunayev Institute of Mining	Forecasting and Prevention of Homogeneous Geomechanical Disasters in Exploitation Quarries (New Technology)
17:50-18:00	<b>Yerlan Dumanovich Karamendin</b> Semizbay Mine Semizbay-U LLP	Application of new technological solutions in the block opening scheme at the Semizbay uranium deposit
18:15-18:45	Closing of X International Conference-2022	
	SECTION 2	25.11.2022

## SECTION 2 Uranium mining and processing technologies INDEPENDENCE HALL

Baurzhan Orazovich Duissebayev - Doctor of Technical Sciences,
Academician of National Academy of Mining Sciences
Academic supervisor UKTB LLP
Kazakhstan
Sébastien Hocquet - PhD

Head of ISR R&D Program Orano Mining France

	Speaker/ Organization	Report
09:00-09:15	Gaukhar Kozykeevna Bishimbayeva Chief Researcher D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry JSC	New efficient organophosphorus extractants of heavy metals, including uranium and accompanying rare-earth metals
09:15-09:30	Kayrat Adyrbekovich Kadirbekov Laboratory manager A B. Bekturov Institute of Chemical Sciences JSC	The method of reagentless reduction of the acidity of technological solutions in hydrometallurgical stages, with the possibility of returning the acid to the production cycle of enterprises
09:30-09:45	Nurlan Nurdildayevich Aldabergenov Head of the repair and restoration area of the Karamurun mine RU-6 LLP	The status of the implementation of the long-term optimization plan for the repair and restoration area of RU-6 LLP
09:45-10:00	Yerkin Kaldybayuly Bektai Professor Satbayev University	Bioactivation of the leaching solution for in-situ uranium leaching
10:00-10:15	Nazira Makhmutovna Seidakhmetova Engineer-technologist of the production and technical service of the Irkol branch Semizbay-U LLP	Improving the denitration process in KI-2000 of the Irkol branch
10:15-10:30	Azamat Dyusyungaliyevich Kurmashev Head of technical engineering department APPAK LLP	Modernization of SDK-1.5M columns: implementation results
10:30-10:45	Mariya Petrovna Kopbaeva Head of the Laboratory of Uranium Technology Institute of High Technologies LLP	Obtaining U3O8 by the method of ammonia precipitation at the enterprises of NAC Kazatomprom JSC

10:45-11:00	Danilov Andrey Alexandrovich Chief LTS Project Engineer Institute of High Technologies LLP	Conducting an experiment on additional acidification of promising cells on blocks with a high degree of mining (with an extraction of 85% and higher)
11:00-11:15	Denis Sergeyevich Antonov Operator of the 6th category of the pregnant solutions processing plant of Central Mynkuduk mine MC Ortalyk LLP	Investigation of gel structure ion exchangers and the possibility of their application in uranium hydrometallurgy
11:15-11:30	COFFEE BREAK	
11:30-11:45	<b>Aκmurat Duisenbayuly Altynbek</b> Chief Manager of the Department of Strategic Development and Communications Semizbay-U LLP	The use of ultrasonic generators with emitters in the sulfuric acid desorption of uranium in the conditions of the pregnant solutions processing plant of the Semizbay mine
11:45-12:00	Galina Vasilievna Gusakova Lead Research Engineer, Uranium Laboratory Science Center Ulba Metallurgical Plant JSC	Experience of industrial processing of uranium-containing materials in UMP JSC
12:00-12:15	Abdrakhman Sabdenbekovich Bukenov Head of technology service JV Katco LLP	Membrane nanofiltration of commercial uronic desorbate
12:15–12:30	Artyom Sergeevich Fomenko Researcher Institute of High Technologies LLP	The study of the possibility of industrial use of micromesh anion exchangers at Central Mynkuduk mine
12:30-12:45	Zekail Maratovich Tyulyubaev Deputy General Director for Production Karatau LLP	Concentration of uranium in technological solutions using membrane methods
12:45–13:00	Abay Yerseitovich Omarov Research scientist Institute of High Technologies LLP	Development of an innovative combined method for well regeneration in underground well leaching of uranium
13:00-14:00	LUNCH	
14:00-14:15	Anvar Bakhtiyarovich Saparov Chief Geotechnologist Navoiyuran Uzbekistan	Development of the uranium industry of the Republic of Uzbekistan: history of formation, development and future prospects
14:15-14:30	Kanat Baizakovich Yerzhanov Head of Geological and Geotechnological Department MC Ortalyk LLP	Additional extraction of hard-to-recover reserves at the block completion stage (on the example of the Central Mynkuduk uranium deposit)
14:30-14:45	Nikolai Alekseyevich Prinzin Lead Engineer of Technical Engineering Department KAZAKHMYS SMELTING LLP	Electrochemical activation in the technology of mining and processing of uranium

14:45-15:00	<b>Bagdat Abzhappauly Aiduissenov</b> Deputy General Director for Production Issues JV Khorasan-U LLP	Development of a software product for technological processes of processing pregnant solutions to obtain rich eluate based on calculations of mathematical modeling of processes in the PSPP of the Khorasan-1 mine
15:00-15:15	<b>Yerkenaz Oraltaykyzy Zholymbayeva</b> Project manager JV Katco LLP	Effect of Resin Saturation on Nitrate Consumption
15:15-15:30	Maksat Makhmudovich Myrzakhanov Research scientist KBTU JSC	Microstructure of Solutions: Problems of Corrosion
15:30-15:45	Almira Tursbekovna Kumarbekova Senior Research scientist Institute of High Technologies LLP	Study of the possibility of using alternative reagents for the process of desorption extraction of uranium from anion exchanger
15:45-16:00	Anton Valeriyevich Kononov Researcher Uranium Technology Laboratory. Institute of High Technologies LLP	Method for purification of uranium concentrate from phosphorus compounds
16:00–16:30	COFFEE BREAK	
16:30-16:45	<b>Yessen Aidarovich Akhataev</b> Head of technology service Karatau LLP	Technological re-equipment of boiler installations of the shift settlement of Karatau LLP
16:45-17:00	Tlevkhan Kuromzhanovich Akhmedzhanov Nuranbayeva B. M. Caspian University	Ways to improve the efficiency of heap leaching of ores using uranium industry waste and quarry waste
17:00-18:15	Round table, discussion of reports	
18:15-18:45	Closing of X International Conference-2022	

## SECTION 3

25.11.2022

energy landscape for small modular reactors

Technologies and topical problems of the pre-reactor nuclear fuel cycle - conversion, nuclear fuel production

	Jorshan Choi - PhD	
Lawrence Livermore National Laboratory		
	retired nuclear scientist	
	USA	
<b>Moderators</b> :	Baurzhan Mukhtarkhanovich Ibrayev - Doctor of Physics and Mathematics,	
	Academician of the Academy of Natural So	ciences of the Republic of Kazakhstan
	Chair of the Management Board	
	NECS LLP	
	Speaker/Organization	Report
	Jorshan Choi	Challenges to the uranium industry as the
09:00-09:30	Lawrence Livermore National Laboratory	most impactful driver in a changing nuclear-

retired nuclear scientist

USA

09:30-09:45	Ilham Ismailovich Sadikov Director Institute of Nuclear Physics of the Academy of Sciences of the Republic of Uzbekistan	Neutron activation analysis of pure uranium and its compounds
09:45–10:00	<b>Josef Běláč</b> CEO, Chairman of The Board ALVEL Co. Czech Republic	Qualification of Cr coating based ATF claddings for VVER&PWR fuel
10:00–10:15	Alexander Grigoriyevich Karengin Senior lecturer Tomsk National Research Polytechnic University Russian Federation (online)	Study of the Plasma-Chemical Synthesis of Oxide Compositions for Uranium Dispersion Nuclear Fuel
10:15–10:30	<b>Ilya Georgievich Simakov</b> Deputy Head of SPR Alexandra-Plus LLC	Experience and prospects for the use of ultrasonic technologies in the nuclear industry
10:30–10:45	Alexander Grigoriyevich Karengin Senior lecturer Tomsk National Research Polytechnic University Russian Federation (online)	Plasma-chemical synthesis and study of nanostructured oxide compositions imitating uranium-thorium dispersion nuclear fuel
10:45–11:00	Alexander Grigoriyevich Karengin Senior lecturer Tomsk National Research Polytechnic University Russian Federation	Study of the process of plasma-chemical synthesis of oxide compositions for uranium-plutonium dispersion nuclear fuel
11:00–11:15	(online)  Artem Leonidovich Kozlovsky  Head of the Laboratory of Solid State Physics  Astana branch of RSE on REM "Institute of Nuclear Physics"	Synthesis and characterization of thermophysical parameters of lithium ceramics - materials for blankets of thermonuclear reactors
11:15–11:30	COFFEE BR	FAK
11:30–11:45	Andrey Ivanovich Rudnikov Chief expert for the development of conversion production Siberian Chemical Combine JSC Russian Federation	Handling of circulating products of conversion production
11:45–12:00	Alexander Grigoriyevich Karengin Senior lecturer Tomsk National Research Polytechnic University Russian Federation (online)	Study of the process of plasma-chemical synthesis of oxide compositions for plutonium-thorium dispersion nuclear fuel

13:00-14:00	4:00 LUNCH	
12:45–13:00	Irina Alexandrovna Pastukhova Chief Specialist of SPR Alexandra-Plus LLC	Ultrasonic Technologies and Equipment for Nuclear Fuel Fabrication
12:30–12:45	Galina Vasiliyevna Gusakova Leading Research Engineer of the Uranium Laboratory Science Center Ulba Metallurgical Plant JSC	Contribution of UMP JSC to strengthening the nuclear non-proliferation regime
12:15–12:30	Vitaly Vasilievich Guzeyev Professor National Research Nuclear University, Seversky Technological Institute (STI NRNU MEPHI) Russian Federation (online)	Possible methods of denitration of uranyl nitrate
12:00–12:15	Baqdaulet Muhametuly Deputy Chief Engineer of the complex of the research reactor WWR-K. RSE on REM "Institute of Nuclear Physics"	Experimental capabilities of the WWR-K reactor

## SECTION 4

25.11.2022

Resources and efficient technologies for the production of rare, rare earth metals and high-techproducts based on them

AL-FARABI HALL

	<b>Eshmurat Azimovich Pirmatov</b> - Doctor of Technical Sciences, Academician of the Eurasian Academy of Mining Sciences Chief Engineer ISL Metals Group LLP
Moderators:	PAUTZ Andreas - PhD Head of Research Division Nuclear Energy and Safety Paul Scherrer Institute Switzerland

0	Speaker/Organization	Report
09:00-09:15	Yerbol Meyramkhanovich Karmanov Director Angstrem LLP	Technological research to justify a cost-effective and economically safe method of processing industrial waste - phosphogypsum
09:15-09:25	Magzum Zhanarstanovich Sadykov Chief technologist Angstrem LLP	Development of a technology for the associate extraction of gallium from aluminum-alkaline solutions of Aluminum of Kazakhstan JSC
09:25-09:35	Magzum Zhanarstanovich Sadykov Chief technologist Angstrem LLP	Laboratory tests of the technology of associate extraction of rhenium from solutions of underground leaching of uranium
09:35-10:50	Kairat Atazhanovich Kuterbekov Professor L.N. Gumilyov, Eurasian National university	Decarbanization of the uranium industry, hydrogen energy and the use of rare earth elements

	Nurlan Bektasovich Ryspanov Chief Researcher	Extraction of rare, rare earth and precious metals from technogenic mineral
10:50–11:00	Research Design Institute "Kaztekhproekt"	formations, ash and slag wastes and commo minerals
11:00–11:15	Talkybek Kozhatayevich Dzhumadilov Doctor of Chemistry, professor A.B. Bekturov Institute of Chemical Sciences JSC	Features of the sorption of scandium and europium ions by interpolymer systems
11:15–11:30	COFFEE BRE	EAK
11:30–11:40	Vladimir Nikolaevich Malikov Senior lecturer Federal State Budgetary Educational Institution of Higher Education "Altai State University" Russian Federation (online)	X-Ray Phase and Microstructural Analysis of Hardening Coatings Produced in the Self-propagating high-temperature synthesis Process Together with High- Frequency Heating of an Al+B 2 O 3 Mixture
11:40–11:55	Gaukhar Kozykeyevna Bishimbayeva Doctor of Chemistry, Professor, Chief Researcher D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry JSC	Creation of high-tech lithium products for modern energy storage systems based on domestic spodumene raw materials
11:55–12:10	Saule Bolatzhanovna Dyussembekova Junior Research scientist Joint Institute for Nuclear Research	Synthesis and study of perovskite structures for their use in optoelectronic devices
12:10–12:20	Mukhtar Auezovich Yeleuov Researcher RSE on REM "Institute of Combustion Problems"	Synthesis and investigation of porous carbon and transition-metal-oxides for electrochemical energy storage applications
12:30–12:40	Khalipa Ryskulovna Sadyieva Senior Lecturer M. Kh. Dulaty Taraz Regional University	Synthesis and use of zinc-containing nanosorbents from Karatau phosphorites
12:40-12:50	Vitaly Vasilievich Guzeyev Professor National Research Nuclear University, Seversky Technological Institute (STI NRNU MEPhI) Russian Federation (online)	Extraction of hydrogen fluoride from azeotropic and low-centered solutions by extraction
12:50-13:00	Discussion of reports	
12.50-15.00	LUNCH	

#### 25.11.2022

### **SECTION 5**

## Safe operation of nuclear industry enterprises and management industrial waste AL-FARABI HALL

	Yury Mitrofanovich Fedorchuk - Doct Professor Tomsk National Research Polytechnic Univ Russian Federation	
Moderators	Manas Myrzashevich Iskakov Managing Director for HSE NAC Kazatomprom JSC Kazakhstan	
	Speaker/Organization	Report
14:00–14:30	Yuri Mitrofanovich Fedorchuk Professor of the Department of General Technical Disciplines of the School of Basic Engineering Training Tomsk National Research Polytechnic University Russian Federation	Improvement of the technology for the neutralization and disposal of solid wastes of hydrofluoric acid at UMP JSC, Ust-Kamenogorsk
14:30–14:40	Valery Vladislavovich Adodin Technical Director NECS LLP	A cascade method has been developed for water purification from low concentrations of tritium, as well as cesium and strontium isotopes
14:40-14:50	Violetta Valeriyevna Chikhireva Tomsk National Research Polytechnic University Russian Federation	Features of the insulating properties of bentonite clays in the creation of barrier systems for radioactive waste disposal
14:50–15:00	<b>Aitkhazha Bigalievich Bigaliyev</b> Director of the National Center Ecotechnologies Al-Farabi KNU	To the issue of restoration of polluted territories and burial of radioactive waste on the example of Koshkar-ata tailing dump
15:00–15:10	Nurzhan Beisenkhanovich Beisenkhanov Dean of the School of Materials Science and Green Technology KBTU	Synthesis of crystalline silicon carbide on a silicon surface by atom substitution
15:10–15:20	Vladimir Nikolaevich Malikov Senior lecturer Federal State Budgetary Educational Institution of Higher Education "Altai State University " Russian Federation (online)	Prospects for the use of eddy current testing methods for detecting defects in fuel element claddings of nuclear reactors
15:20–15:30	Nariman Askaruly Baubek Director Baiterek Engineering LLP	Parameters of the transition of radionuclides into livestock products under conditions of r adionuclide contamination. Main results and prospects
15:30-15:40	Yegor Grigorievich Yazikov Professor, Department of Geology, School of Natural Resources Engineering	International practice of radioactive waste management

Tomsk Polytechnic University

Russian Federation

management

15:40–15:50	Alexander Viktorovich Dvoryanchikov Chief technologist Siberian Chemical Combine JSC Russian Federation	Waste management of BFV production of the sublimation plant of Siberian Chemical Combine JSC
15:50–16:00	Alexander Nikolayevich Nefyodov Head of the Competence Center for Corrosion Problems, D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry JSC	Corrosion of metal equipment in the production of sulfuric acid
16:00–16:30	COFFEE BREAK	
16:30–16:40	Wang Cailun Graduate student Tomsk National Research Polytechnic University Russian Federation (online)	Study of barrier properties of structurally heterogeneous minerals montmollironite and vermiculite
16:40-16:50	Nariman Askaruly Baubek Director Baiterek Engineering LLP	The transfer of 137Cs and heavy metals to the tissues of snails' organs
16:50–17:00	Igor Vladimirovich Pokrovsky Director Instruments Kazakhstan LLP	Portable high resolution gamma spectrometer with automatic identification of radionuclides
17:00–17:10	Panova Elena Nikolaevna Senior Researcher Institute of High Technologies LLP	Improving the quality of forecasting and monitoring impacts during the mining and processing of natural uranium by in-situ leaching
17:10–17:20	Bolatbek Zhakypbekovich Toksanbayev Chief Project Engineer Institute of High Technologies LLP	Study of the process of thermal destruction of spent ion-exchange resins
17:20–17:30	Oles Alexandrovich Agapov Senior Research scientist Institute of High Technologies LLP	Methodological approaches to conducting integrated environmental studies at uranium deposits NAC Kazatomprom JSC
17:30–17:40	Dana Valikhanovna Nikhanova General manager of Department of Accounting and Control of Nuclear Materials Aybope Erbolatkyzy Davletiyarova Manager Department of Accounting and Control of Nuclear Materials NAC Kazatomprom JSC	Nuclear world: yesterday, today, tomorrow
17:40–17:50	Laura Talgatkyzy Tasbolatova Satbayev University (online)	Issues of Ensuring Electromagnetic Compatibility in the Construction of Nuclear Power Plants
17:50–18:00	Yulia Yurievna Baklanova Branch " Institute of Atomic Energy" RSE on REM " National Nuclear Center of the Republic of Kazakhstan"	Handling Irradiated Highly Enriched Fuel from the IGR Reactor
18:15-18:45	Closing of X Internation	onal Conference-2022

**SECTION 6** 25.11.2022

## Issues of sustainable development (ESG), legal, macroeconomic and educational aspects of the functioning of the nuclear industry 777 HALL

<b>Mojtaba Mirzaeian</b> – Doctor of Chemistry
Associate Professor (Senior Lecturer) in Chemical Engineering
University of the West of Scotland
United Kingdom

#### **Moderators:**

**Aliya Kabievna Kaymuldina** - Dr. of Physics , professor General manager of Scientific and Technical Projects Department NAC Kazatomprom JSC Kazakhstan

	Speaker/ Organization	Report
09:00-09:30	Mojtaba Mirzaeian Associate Professor Chemical Engineering, University of the West of Scotland Scotland	The development of functional materials for the removal of heavy metals from industrial waste waters
09:30-09:45	Abdilda Atamuratovich Shamenov Chair of the Management Board Science Fund JSC (online)	The contribution of science to the sustainable development and functioning of the nuclear industry on the example of the projects of Science Fund JSC
09:45-10:00	Zaure Orynbekovna Orynbekova Branch director Branch of RSE "National Institute of Intellectual Property"	Patenting of inventions in the field of mining and processing of uranium ores in Kazakhstan
10:00-10:15	Oleg Nikolaevich Kokorev Acasemic Secretary Tomsk Regional Branch of the Russian Geological Society, Tomsk Russian Federation (online)	Disadvantages of legal regulation of monitoring exogenous geological processes, during the operation of buildings and structures, at the enterprises of the nuclear industry of the Siberian Federal District
10:15-10:30	Chingiz Lepsibaev National Consultant United Nations Partnership for Action on Green Economics	Education and challenges of radiophobia in modern Kazakhstan
10:30-10:45	Askhat Nametsha CEO Central Asian Institute for Development Studies	Using Kazatomprom's Strategic Trade Control Internal Compliance Policy Experience for Enterprises in Nuclear Energy
10:45-11:00	Alexander Petrovich Blynsky Executive Director Scientific and Technical Center "Safety of Nuclear Technologies"	Regulatory base for NPP construction in the Republic of Kazakhstan
11:00-11:15	Alexander Khaidarovich Klepikov Project Manager Scientific and Technical Center "Safety of Nuclear Technologies"	Problems of rehabilitation of objects and territories contaminated with radioactive substances
11:15-11:30	COFFEE	BREAK

11:30-11:45	Armanbek Kasymuly Omirgali Scientific and Technical Projects Director NAC Kazatomprom JSC	Employee idea and suggestion management system
11:45–12:00	Beisen Abdigapparovich Otynshiev Head of the Section of RS and Environmental Protection, Section of Radiation Safety and Environmental Protection Kazatomprom-SaUran LLP	Issues of sustainable development (ESG), legal, macroeconomic and educational aspects of the functioning of the nuclear industry
12:00–12:10	Olga Alexandrovna Stepanova Shakarim University of Semey (online)	On the issue of personnel training for the nuclear industry
12:10–12:20	Natalia Nikolaevna Bokovaya Director of Department of Accounting and Control of Nuclear Materials NAC Kazatomprom JSC	Contribution of NAC Kazatomprom JSC to the maintenance of the nuclear non-proliferation regime
12:20–12:30	Ardak Bagdatovich Bekkuliev Chief Expert of the Production Department NAC Kazatomprom JSC	Analysis and mechanisms for the implementation of the Decarbonization program of the group of companies of NAC Kazatomprom JSC until 2060
12:30-12:40	Konstantin Alekseнevich Dissel Leading Specialist Central experimental and methodical Expedition Branch of Volkovgeology JSC	Brief historical background (according to published data)
12:40–12:50	Maria J. Espona STCU – Project Manager Argentina (online)	Strategic Trade Control Research and Education Implementation in Kazakhstan
12:50-13:00	Discussion of repor	ts
13:00-14:00	LUNCH	

## SECTION 7 25.11.2022 Digitalization, automation and robotization in the nuclear industry 777 HALL

Moderators:	Ikeda Hajime - PhD Assistant professor Akita University Japan	
	Sayat Ibrayev - Doctor of Technical Scien U.A. Dzholdasbekov Institute of Mechanics Kazakhstan	
	Speaker/Organization	Report

	Speaker/Organization	Report
14:00–14:15	Lagneau Vincent Director Centre Geosciences MINES ParisTech France	Reactive transport simulation: an operational decision-making tool for ISR exploitation and post-exploitation
14:15–14:25	Oleg Yurievich Belousov Senior technical consultant Honeywell	Honeywell High Tech Solutions

14:25–14:35	Dmitry Olegovich Sukhamera Director of Business Development	Developing industry solutions using ML technologies
14.25-14.55	Terralink-Global LLP	
14:35–14:45	Anatoliy Yevgenyevich Serov Director of SPA Development Department KAP Technology LLP	Software algorithm for controlling downhole pumping equipment
14:45–14:55	Nikita Veretelnikov Chief Manager of the Setion of Technical Regulation and Metrology of the Department of Scientific and Technological Projects NAC Kazatomprom JSC	TQM as a tool for sustainable enterprise development
14:55–15:05	Askhat Sembayevich Kydyrbayev Leading specialist in geology geological and geophysical works department Volkovgeology JSC	Development of digital technology for geological support of search, exploration and calculation of reserves of uranium deposits in Kazakhstan
15:05–15:15	Yevgeny Vladimirovich Bobrovny Head of technical engineering department Southern Mining and Chemical Company LLP	Reducing the labor intensity of the mining section of an in-situ leaching mine through the use of digital technologies
15:15–15:30	Kirill Viktorovich Trubanyev  JSC Krastsvetmet  Russian Federation	Solutions for production management, safety and automation of a chemical and metallurgical enterprise
15:30–15:40	Viktor Sergeevich Milokumov Weighing Equipment Specialist Sartorius RUS Russian Federation	Digitalization trends in laboratory practice
15:40-15:50	Laura Salamatkyzy Zhumanalieva Head of Digital Transformation Directorate of QazIndustry KIEC JSC	Promoting the digital transformation of Kazakhstan industry
15:50–16:00	Timur Ildusovich Samigulin Engineer instructor Honeywell Laboratory KBTU	Development of a strategy for managing complex objects based on a digital twin
16:00-16:30	COFFEE BR	EAK
16:30–16:45	Sayat Muratuly Ibraev Traveling Research scientist U.A. Dzholdasbekov Institute of Mechanics and Engineering	Integrated robotization of technological processes of uranium production (on the example of the IRKOL branch of SEMIZBAY-U LLP)
16.45 16.55	Askar Zhunisuly Seidahmet Lead Researcher	Design of a robotic complex for leveling, compacting uranium concentrate into a transport packaging container TUK-118
16:45–16:55	U.A. Dzholdasbekov Institute of Mechanics and Engineering	Design of a robotic complex for sampling uranium concentrate from a transport packaging container TUK-118
	Askar Zhunisuly Seidahmet	Design of an autooperator for lifting and lowering the lid of the transport packaging container TUK-118
16:55–17:05	Lead Researcher U.A. Dzholdasbekov Institute of Mechanics and Engineering	<ul> <li>Designing a control system for robotic complexes for lifting and lowering the hatch cover of the transport packaging container TUK-118, leveling, compacting, sampling uranium concentrate</li> </ul>

18:15-18:45	Closing of X Internati	onal Conference-2022
18:00–18:15	Timur Nurzhanovich Uezbaev  「Chief Manager  Mining Department  Miras Muratuly Ausat  General Manager  IT Department  NAC Kazatomprom JSC	Introduction of a unified corporate geoinformation service "KAP MAP" at NAC Kazatomprom JSC
17:50–18:00	Telman Khamzaevich Shuriyev Chief Expert Production Department NAC Kazatomprom JSC	Digital system for predictive optimization and efficiency improvement of pumping and compressor equipment based on Big Data technology and machine learning (Predictive Maintenance)
17:35–17:50	Serikbol Takeyuly Digital Solutions Engineer Siemens Kazakhstan	Artificial intelligence in production
17:20–17:35	Anton Sergeyevich Slatin Head of project department findexIT LLP	Laboratory information system and genealogy of finished products. Production reporting constructor
17:05–17:20	Adiya Baltabekkyzy Azbergenova Category 1 software engineer Branch "Institute of Atomic Energy" RSE on REM "National Nuclear Center of the Republic of Kazakhstan"	Automated System for Processing Experimental Data on Simulation of Severe Accident Processes at LWR

#### STAND SESSION PROGRAM

# X Anniversary International Conference "Topical problems of the uranium industry", dedicated to the 25th anniversary of NAC Kazatomprom JSC and the 20th anniversary of the Institute of High Technologies LLP

### https://uranconference.kz/

Almaty, Republic of Kazakhstan November 24 - 26, 2022, Kazakhstan-British Technical University JSC

### **DAY ONE - NOVEMBER 24, 2022**

From 11:00 - 16:30

Geology, Geotechnolog	SECTION 1 yy and Mining and Preparatory Works
Tatiana Valeriyevna Razuvaeva Senior Research scientist Gulnaz Mukhtarkyzy Kalykova Senior Research scientist Institute of High Technologies LLP	Possibilities of 3D modeling using the Software package for studying the process of uranium mining by the ISR method
Rustem Alisherovich Mussayev Chief Project Engineer Institute of High Technologies LLP. Mikhail Anatolievich Milaylenko Technical Director Purolite	Eisites of the Karatube Mountains Sources of Radioactive Mineralization of the Ulus-Jam Trough (Western Uzbekistan)
Maxim Petrovich Volnenko Deputy Director of the Department of Mining Development JV Inkai LLP	Development and manufacture of a complex downhole tool combined with an inclinometer and a caliper KSP-GK-60IK
Yuliya Avisovna Latypova  1st Category Engineer of the Party of New Drilling Technologies Central experimental and methodical Expedition of Volkovgeology JSC	Stepwise development of technological wells in in-situ leaching
Maxim Petrovich Volnenko  Deputy Director of the Department of  Mining Development  JV Inkai LLP	Development, manufacture and pilot operation of a facility for collection and disposal of solutions from well development
Nazerke Asirbekkyzy Asirbek Engineer-geophysicist Volkovgeology JSC, Central experimental and methodical Expedition Branch	Comparative interpretation of the results of the geoelectric properties of the section in reservoir-infiltration fields (on the example of AKDALA-MYNKUDUK)
Assel Aitzhanovna Tolybayeva Deputy Head of the Department of Physical and Chemical Laboratory JV Inkai LLP	Determination of uranium in core samples in the conditions of the mine of JV INKAI LLP

#### **Alibek Mukhtaruly Abeuov**

School of Mining and Geosciences, Nazarbayev University The abundance of Muscovite in Uranium Bearing Paleocene-Eocene Strata: Preliminary Characterization and Sedimentological Significance, Chu Sarisu Basin, Southern Kazakhstan

#### **DAY 2 - NOVEMBER 25, 2022**

From 11:00 - 16:30

		SEC	CTION 2	
<b>Uranium</b>	mining	and	processing	technologies

<b>Tileu Berdihalyh</b> Lead Research Engineer Institute of High Technologies LLP	Determination of the lipid structure of phospholipids using synchrotron X-ray diffraction
<b>Altynai Aziarovna Sharipova</b> Samruk-Kazyna Ondeu LLP	High-Performance Ion-Exchange Resins for the Extraction of Uranium Compounds from Solutions
<b>Yerlan Muratbekovich Shadymanov</b> Director of Research Department AsiaGeoProject LLP	Extraction of uranium from productive solutions by the method of liquid extraction

#### **SECTION 4**

Resources and efficient technologies for the production of rare, rare earth metals and high-tech products based on them

Duisebayeva Tolkyn Sabyrzhankyzy Leading Specialist of the Scientific and Organizational Department of Central experimental and methodical Expedition Branch of Volkovgeology JSC Volkovgeology JSC	Prospects for use of chlorine-containing leaching solutions for extraction of associated useful components from spent ores of uranium deposits
Aliya Tursunovna Umiraliyeva Chief geologist GGC LLP	Geochemical features of ore-controlling epigenetic zonality and satellite elements of uranium mineralization at the Budyonovskoye deposit

#### **SECTION 6**

Issues of sustainable development (ESG), legal, macroeconomic and educational aspects of the functioning of the nuclear industry

Armanbek Kasymuly Omirgali	Management of research and development works:
Director of the Department of Scientific	financing and innovation management,
and Technical Projects	world practices
NAC Kazatomprom JSC	

### **DAY THREE - NOVEMBER 26, 2022**

## Cultural program (Team building) - by invitation

## Venue: "Fazenda at Mikhalych" recreation zone

08:30	Gathering, KBTU (parking on Kazybek Bi street)
09:00	Departure to the location
10:30	Arrival, breakfast
11:00	Free time
11:15	Kara Zhorga master class
11:30	Warm-up, division into teams
11:45	Team building
13:30	Archery
13:30	Lunch
15:00	Gathering, departure to the city

