

MINISTRY OF SCIENCE AND HIGHER EDUCATION
OF THE REPUBLIC OF KAZAKHSTAN
AL-FARABI KAZAKH NATIONAL UNIVERSITY
FACULTY OF CHEMISTRY AND CHEMICAL TECHNOLOGY
DEPARTMENT OF PHYSICAL CHEMISTRY, CATALYSIS AND PETROCHEMISTRY

PROGRAM

X INTERNATIONAL RUSSIAN-KAZAKHSTANI
SCIENTIFIC-PRACTICAL CONFERENCE

"CHEMICAL TECHNOLOGIES OF FUNCTIONAL MATERIALS",

devoted to the 90th anniversary of Education

al-Farabi Kazakh National University

April 25-26, 2024

ALMATY - 2024

THE ORGANIZING COMMITTEE

Chairman of the Organizing Committee

Tuimebayev Zh.K. – Chairman of the Board – Rector of NJSC «KazNU named after al-Farabi», Almaty, Kazakhstan

Deputy Chairman of the Organizing Committee

Galeyeva A.K. – Ph.D of Chemical Sciences, Associate Professor, Dean of the Faculty of Chemistry and Chemical Technology of Al-Farabi Kazakh National University, Almaty, Kazakhstan

Aubakirov Ye.A. – Doctor of Chemical Sciences, Professor, Head of the Department of Physical Chemistry, Catalysis and Petrochemistry of Al-Farabi Kazakh National University, Almaty, Kazakhstan

Uvarov N.F. – Doctor of Chemical Sciences, Professor of the Department of Chemistry and Chemical Technology of Novosibirsk State Technical University Novosibirsk, Russia

Members of the Organizing Committee

Bataev A.A. - Doctor of Technical Sciences, Professor, Rector of NSTU, Novosibirsk, Russia

Otto A.I. - Candidate of Technical Sciences, Vice-rector of NSTU, Novosibirsk, Russia

Lyakhov N.Z. – Academician of the Russian Academy of Sciences, Advisor of the Russian Academy of Sciences, IHTTM SB RAS, Novosibirsk, Russia

Nemudry A.P. – Doctor of Chemical Sciences, Corresponding Member of the Russian Academy of Sciences, Director of IHTTM SB RAS, Novosibirsk, Russia

Bannov A.G., Doctor of Chemical Sciences, Professor, Novosibirsk, Russia

Krutsky Y.L. - Doctor of Chemical Sciences, Professor, Novosibirsk, Russia

Zagoruiko A.N. – Doctor of Technical Sciences, SB RAS, Novosibirsk, Russia

Aparnev A.I. – Ph.D., Associate Professor, Head of the Department of CCT NSTU, Novosibirsk, Russia

Qamar Abbas – PhD, Associate Professor, Technical University of Graz, Austria

Rachid Amrousse - PhD, Associate Professor, UCD, University of Chouaib Doukkali, Faculty of Sciences, Morocco

Akbarov H.I. - Doctor of Chemical Sciences, Professor, Head of Department of Physical chemistry, National University of Uzbekistan named after Mirzo Ulugbek, Tashkent, Uzbekistan

Ospanova A.K. – Doctor of Chemical Sciences, Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Tungatarova S.A. – Doctor of Chemical Sciences, Professor, D.V. Sokolsky ITKE, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Akbayeva D.N. – Doctor of Chemical Sciences, Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Tashmukhambetova J.H. – Candidate of Chemical Sciences, Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Sassykova L.R. – Ph.D., Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Toshtay K. – PhD, Associate Professor, Al-Farabi Kazakh National University, , Kazakhstan

Bakirova B.S. – PhD, Senior Lecturer, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Local Committee

Smagulova N.T. – Candidate of Chemical Sciences, ass. prof., Al-Farabi Kazakh National University, Almaty, Kazakhstan

Zhaksylykova G.Zh. - Candidate of Chemical Sciences, Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan

Zhusupova A.K.- Candidate of Chemical Sciences, Associate Professor, Al-Farabi Kazakh National University Almaty, Kazakhstan

Usypbekova Ye.J. - PhD, Acting Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan
 Alisheva Zh.N.- PhD, Acting Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan
 Supieva Zh.A. – PhD, Senior Lecturer, Al-Farabi Kazakh National University, Almaty, Kazakhstan
 Kanapiyeva F.M. - Candidate of Chemical Sciences, Acting Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan

SECTIONS OF THE CONFERENCE

Section 1. “Technologies of functional materials” – (1.1. Scientific basis for obtaining functional materials. Development of processes for the synthesis, modification and production of functional materials. 1.2 Study of the properties of functional materials and the possibility of their practical use. 1.3 Green technologies in chemical production).

Section 2. “General chemical technologies” – (2.1 Processes and apparatuses of chemical technologies. 2.2 Catalytic processes in petrochemistry, oil refining and processing of organic materials).

Poster presentations

Time limit for speeches:

at the plenary session – up to 30 minutes;

at breakout sessions – 5 minutes;

discussion of the presentation (questions and answers) - 5 minutes

Thursday, April 25, 2024

Almaty time (GMT+5)

Opening of the conference at 10 : 00

Welcome address

- ✚ **Galeyeva A.K.** – PhD, Associate Professor, Dean of the Faculty of Chemistry and Chemical Technology of Al-Farabi Kazakh National University, Kazakhstan
- ✚ **Bataev A.A.** – Doctor of Technical Sciences, Professor, Rector of NSTU, Russia
- ✚ **Uvarov N.F.** – Doctor of Chemical Sciences, Professor of the Department of Chemistry and Chemical Technology of Novosibirsk State Technical University Novosibirsk, Russia
- ✚ **Aubakirov Ye.A.** – Doctor of Chemical Sciences, Professor, Head of the Department of Physical Chemistry, Catalysis and Petrochemistry of Al-Farabi Kazakh National University, Almaty, Kazakhstan

PLENARY LECTURES

Moderator is Doctor of Chemical Sciences, Professor Ye.A. Aubakirov

10 : 30	Akbarov H.I., Kattaev N.T. Physico-chemical and thermodynamic properties of nanomaterials and nanocompositions <i>Mirzo Ulugbek National University of Uzbekistan, Tashkent, Uzbekistan</i>
11 : 00	Rachid Amrousse. Advancements in green propellants and catalysts: a sustainable shift from conventional hydrazine propellants <i>UCD, University of Chouaib Doukkali, Faculty of Sciences, Morocco</i>
11 : 30	Savdenbekova B.E., Ospanova A.K. Conditions for obtaining and

	characteristics of antibacterial coatings on implants <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
12 : 00	^{1,2} Askaruly K., ¹ Azat S., ² Serikbol A.A. Production of silicon dioxide for use as an anode of lithium-ion batteries ¹ <i>Kazakh National Research Technical University named after K. I. Satpayev, Almaty, Kazakhstan</i> ² <i>Gumarbek Daukeev Almaty University of Energy and Communications, Almaty, Kazakhstan</i>
12 : 30	Bannov A.G. Carbon nanomaterials and composites based on them for gas sensors <i>Novosibirsk State Technical University, Novosibirsk, Russia</i>

12:50-14:00 Break

SECTION 1. TECHNOLOGIES OF FUNCTIONAL MATERIALS

The chairman of the section - Doctor of Chemical Sciences, Professor N.F. Uvarov

14 : 00	Shaikhova Zh.E., Abilkasova S.O., Kalimoldina L.M. Development of cellulose materials with antibacterial properties based on copper nanoparticles <i>Almaty Technological University, Almaty, Kazakhstan</i>
14 : 10	Sheina O.D., Damdinov A.S., Yukhin Y.M. Production of bismuth oxide and cuprate from bismuth lead <i>I Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
14 : 20	Gudyma T. S., Krutsky Yu. L Manufacture of composite ceramics based on boron carbide modified with titanium diboride additives <i>Novosibirsk State Technical University, Novosibirsk, Russia</i>
14 : 30	Makhpirova R.N. ¹ , Rakhmatullayeva D. T. ¹ , Seidulayeva A.A. ¹ , Ospanova A.K. ¹ Development of antibacterial coatings on the surfaces of surgical suture materials <i>¹Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
14 : 40	Kunarbekova M.S. ¹ , Sapargali I.O. ¹ , Seimukhanova L.N. ¹ , Kudaibergenov K.K. ¹ , Zhantikeev U.E. ¹ , Azat S. ¹ . Synthesis of nanocomposite sorbent modified with nitrogen groups from walnut and buckwheat husk biomass by chemical activation <i>¹ Laboratory of Engineering Profile, Satbayev University, Almaty, Kazakhstan</i>
14 : 50	Drozdova A.V. ^{1,2} , Gorodetsky D.V. ² , Okotrub A.V. Investigation of the interaction of graphite fluoride with hydrogen at elevated pressures and temperatures <i>¹ Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>² A.V. Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia</i>
15 : 00	Dan A.A., Zima T.M. Formation of one-dimensional structures of α-MoO₃ during hydrothermal treatment of proxy molybdenum complexes <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i> <i>Novosibirsk State Technical University, Novosibirsk, Russia</i>
15 : 10	Gladyshev I.I., Zima T.M. Formation of ultrathin layers TiO₂ on the surface of one-dimensional molybdenum trioxide structures

	<i>Institute of Solid State Chemistry and Mechanochemistry SB RAS Novosibirsk State Technical University, Novosibirsk, Russia</i>
15 : 20	Suleimenova G.A., Usypbekova Ye.J., Seilkhanova G.A. Composite polymer electrolytes based on polyvinylidene fluoride and the study of their ionic conductivity <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
15 : 30	^{1,2} Sidorov I.E., ¹ Ponomareva V.G. A new type of medium-temperature proton polymer electrolyte based on CsH₂PO₄ - SKF-32 <i>State Technical University ¹ Novosibirsk, Russia IHTTM SB RAS ² Novosibirsk, Russia</i>
15 : 40	Miller Y.A. Obtaining nanoscale cerium oxide by laser treatment of a precursor <i>Novosibirsk State Technical University, Novosibirsk, Russia</i>
15 : 50	Akhmadulina Yu.A. ^{1,2} , Sysoev V.I. ¹ Sensory characteristics of films based on nitrogen-modified single-walled carbon nanotubes <i>¹A.V. Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia ²Novosibirsk State Technical University, Novosibirsk, Russia</i>
16 : 00	Kusainova Zh.K., Suyundykova G. Synthesis and investigation of the electrical properties of silicon carbide <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
16 : 10	Alimbek A.E., Otegenova B.O., Bekissanova Zh.B., Ospanova A.K.* Synthesis of antibacterial composites based on clay minerals <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
16 : 20	Riedel N. S., Gusev A. A. Mechanochemical synthesis of Pb₂MgWO₆ doped with Zn <i>Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
16 : 30	Krasnov D.A., Zhdanov A.A., Berdnikova L.K., Korotaeva Z.A., Kuznetsov V.A., Tolochko B.P. Investigation of the effect of high-temperature treatment modes on the properties of lanthanum hexaboride <i>Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
16 : 40	Gainutdinov I.I. Uvarov N.F. Ion mobility in organic salts N(C_nH_{2n+1})₄BF₄: Molecular dynamics simulation <i>Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>

SECTION 2. GENERAL CHEMICAL TECHNOLOGIES

Moderator – *Doctor of Chemical Sciences, Associate Professor Akbayeva D.N.*

14 : 00	Sultanaeva A.A., Kalimoldina L.M., Abilkasova S.O. Research of catalysts for the oxidation of hydrocarbons <i>Almaty Technological University, Almaty, Kazakhstan</i>
14 : 10	Nikulina V.S., Rassokha E.V., Krutsky Y.L. Investigation of the reactivity of petroleum coke used to produce graphite products <i>Novosibirsk State Technical University, Novosibirsk, Russia ²Analytical laboratory El 6.</i>
14 : 20	Ilyasova O.S. ¹ , Baizhumanova T.S. ^{1,2} , Tungatarova S.A. ^{1,2} , Zhumabek M. ² , Kasymkhan K. ² , Murzin D.Yu. ³ The involvement of greenhouse carbon dioxide in the reduction conversion to obtain components of synthetic fuels and chemicals

	<p>¹<i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p> <p>²<i>D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry, Almaty, Kazakhstan</i></p> <p>³<i>Abo Akademi University, Turku, Finland</i></p>
14 : 30	<p>Assylbekov Y.B.¹, Kassymkhan K.², Tungatarova S.A.^{1,2} Process of catalytic reforming of methanol into hydrogen-containing fuel mixtures</p> <p>¹<i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p> <p>²<i>D.V. Sokolsky Institute of fuel, catalysis and electrochemistry, Almaty, Kazakhstan</i></p>
14 : 40	<p>Zhilkibek M., Baizhumanova T.S., Tungatarova S.A., Xandopulo G.G. Regularities of stabilization of active component phase of oxide catalysts in deep oxylation of methane</p> <p><i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p> <p><i>D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry, Almaty, Kazakhstan</i></p> <p><i>College of Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p> <p><i>National Center for Scientific Research "Democratos", Athens, Greece</i></p>
14 : 50	<p>Talasbayeva N.S.^{1,3}, Baizhumanova T.S., Tungatarova S.A., Xandopulo G.G., Sarsenova R., Zheksenbayeva Z.T., Ametova M.A. Catalytic determination of methane in synthesis-gas on Co-Mn-Mg-Al-catalysts</p> <p><i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p> <p><i>D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry, Almaty, Kazakhstan</i></p> <p><i>College of Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p> <p><i>National Center for Scientific Research "Democratos", Athens, Greece</i></p>
15 : 00	<p>Zelentsov, D.O., Povalyaev, P.V., Nasyrbaev, A., Francina, E.V., Petrova, Yu.Yu.. Stabilization of nanoparticles in aqueous dispersions by surfactants</p> <p><i>Surgut State University, Russia</i></p> <p><i>Tomsk Polytechnic University, Russia</i></p>
15 : 10	<p>Yelzhas N.B., Aubakirov E.A. Optimization of delayed coking for processing of heavy oil residues with used motor oil</p> <p><i>al-Farabi Kazakh National University, Almaty, Republic of Kazakhstan</i></p>
15 : 20	<p>Akanova Z.B., Baykenov M.I. Donor ability of a high-molecular compound in the process of catalytic hydrogenation of phenanthrene</p> <p><i>Karaganda University named after Academician E.A. Buketov, Karaganda, Kazakhstan</i></p>
15 : 30	<p>Koreshkova D.A., Simakova I.L. Study of citral hydrogenation into unsaturated alcohols geraniol/nerol on Pt catalysts</p> <p><i>Novosibirsk State Technical University, Novosibirsk, Russia</i></p> <p><i>Boreskov Institute of Catalysis of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i></p>
15 : 40	<p>Mikhailenko M.A., Sharafutdinov M.R., Antonov I.M., Tolochko B. P., Alekhine A. S., Korobeynikov M.V. Investigation of the effect of electron beam treatment on the thermal stability of polylactide.</p> <p><i>Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i></p> <p><i>Budker Institute of Nuclear Physics SB RAS, Novosibirsk, Russia, Center for Collective Use "Siberian Ring Photon Source" Institute of Catalysis SB RAS, Novosibirsk, Russia</i></p>
15 : 50	<p>Bespaeva G.S., Kadirbekov K.A. Methods of synthesis of photocatalysts based on titanium dioxide for air purification</p> <p><i>A.B.Bekturov Institute of Chemical Sciences, Almaty, Kazakhstan</i></p> <p><i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p>
16 : 00	<p>Petrova Yu.Yu., Bulatova E.V., Dubov P.V., Mateishina Yu.G. Phloroglucin-melamine formaldehyde resins with molecular imprints for sorption concentration of quercetin</p>

	<i>Surgut State University, Russia Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
16 : 10	Stebnitsky I.A., Mateishina Yu. G., Uvarov Nu F. Investigation of the effect of the nature of a heterogeneous additive on the transport properties of (H-C₄H₉)₄NBF₄ <i>Novosibirsk National Research State University, Novosibirsk, Russia Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
16 : 20	Zhamantay N.K. ¹ , Toshtay K. ¹ Upconversion photocatalyst for h₂ production by water splitting <i>¹Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
16 : 30	Kalenov G.M., Alieva Zh.N., Panfilova I.V., Kerimbekova D.S., Sapobekova D.D Improvement of the method of using surfactants to enhance oil recovery <i>al-Farabi Kazakh National University, Almaty, Kazakhstan University of Lorraine, Laboratory of Energy and Theoretical and Applied Mechanics, A-54000 Nancy, France K. I. Satpayev Kazakh National Research Technical University, Almaty, Kazakhstan</i>
16 : 40	Akanova Z.B., Baykenov M.I. Donor ability of a high-molecular compound in the process of catalytic hydrogenation of phenanthrene <i>Karaganda University named after Academician E.A. Buketov, Department of Chemical Technology and Petrochemistry, Almaty, Kazakhstan</i>
16 : 50	Kurmanaliev M.K., Shakhova Zh.E., Alimkulova Zh.D. New supramolecular receptors for palladium ion binding <i>Almaty Technological University, Almaty, Kazakhstan</i>
17 : 00	Zazhigalov S. V., Zagoruiko A. N. Mathematical modeling of the catalytic reverse process in reactors with different locations of supply pipes <i>Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia</i>
17 : 10	Matkir Zh.M., Toshtay K. Promising additive materials in lubricating oils. <i>Al-Farabi Kazakh National University, Society of Petroleum Engineers, Almaty, Kazakhstan</i>
17 : 20	Kasenova Zh.M., Tastambek K.T., Ermagambet B.T., Slamiya M.G., Imbaeva D.S., Saulebekova M.E., Purification of oil-contaminated soil with humic substances using microorganisms <i>Institute of Coal Chemistry and Technology LLP, Almaty, Kazakhstan</i>
17 : 30	Sibae Mohamed, V.B. Kharitonov , A.N. Zagoruiko, A.V. Elyshev Ni-containing fiberglass catalyst for propane hydrogenolysis: the relationship of activity and methods of preparation of catalysts <i>Tyumen State University, Tyumen, Russia Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia</i>
17 : 40	Orzbekova R.S. ^{1,2} , Baizhumanova T.S. ^{1,2} , Tungatarova S.A. ^{1,2} , Sadykiv B.A. ³ , Zhymabek M. ² Catalytic processing of renewable raw materials into hydrogen-containing fuel mixtures <i>¹Al-Farabi Kazakh National University, Almaty, Kazakhstan ²D.V. Sokolsky Institute of Fuel, Catalysis and Electrochemistry, Almaty, Kazakhstan ³Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia</i>
17 : 50	Legkhaya I.V., Ybaykhan A.M., Smagulova N.T. Production of coke from the anthracene fraction of coke chemical resin <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
18 : 00	Bulybayev M.E., Zhaksylykova G.Zh. New Efficient Pd(II)/Fe(III) Catalytic System in the Hydroalcoxycarbonylation of 1-octene <i>Kazakh Al-Farabi National University</i>

Friday, April 26, 2024.

PLENARY LECTURES

Moderator- Doctor of Chemical Sciences, Professor Ye.A. Aubakirov

10 : 00	Zagoruiko A.N. Dynamic catalysis: purposeful creation of non-stationary conditions in catalyst layers as an approach to the development of new technologies <i>Institute of Catalysis named after Boreskova, Novosibirsk, Russia</i>
10 : 30	Sotirios Longinos. Amino acids as kinetic inhibitors in gas hydrates <i>School of Mining and Geosciences, Nazarbayev University, Astana, Kazakhstan</i>
11 : 00	Vasilina G.K. Enhanced Ethanol Production <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> <i>University of Westminster, School of life Sciences, London, UK, Researcher</i>
11 : 30	Kağan Benzeşik. Production of Li₄SiO₄ Powders with Combustion Synthesis and Thermodynamic Investigations <i>Department of Metallurgical and Materials Engineering, Istanbul technical university, Istanbul, Turkey</i>
12 : 00	Uvarov N.F. Hybrid composite solid electrolytes <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
12:30	Mohammad Khalid. Overview of MXene and its potential applications <i>Sunway Materials Smart Science & Engineering Research Cluster, Sunway University, Malaysia</i>

12:50-14:00 Break

SECTION 1. TECHNOLOGIES OF FUNCTIONAL MATERIALS

The chairman of the section - Doctor of Chemical Sciences, Professor N.F. Uvarov

14 : 00	Iskakov N.R., Gorbunov F.K., Bulgakov V.V., Lapin A.V. Investigation of the influence of binder on the characteristics of composites based on secondary refractory raw materials <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
14 : 10	Amantaiuly K. Toshtay K. Solvent extraction of zinc from the ammonium chloride leaching solution of zinc processing ash using cyanex 272 <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
14 : 20	Sheboltasov A. G., Vernikovskaya N. V., Chumachenko V. A. Investigation of the scaling conditions of a microstructured reactor for exothermic processes using the example of nitrous oxide synthesis <i>Institute of Catalysis SB RAS, Novosibirsk, Russia</i>
14 : 30	Glazov N.A., Zagoruiko A.N. Quantitative estimation of uncertainty of parameters of stochastic molecular reconstruction of complex hydrocarbon mixtures <i>Boreskov Institute of Catalysis, Novosibirsk, Russia</i>

14 : 40	Umrikhin M.V., Plyusnin P.E., Shubin Yu.V. Investigation of the electrochemical activity of bimetallic alloys in the Ni Pt $_{1-x}$Ir$_x$ system in the methanol oxidation reaction <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>A.V. Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
14 : 50	Elmira Amanzhola, Qaiser khana, Masoud Riazia Enhancing Oil Recovery in Sandstone Reservoirs through Wettability Alteration: A Simulation Study with Low Salinity Water Flooding Using CMG GEM. <i>Nazarbayev University, Kazakhstan, School of Mining and Geosciences.</i>
15 : 00	Otegenova B.O., Alimbek A.E., Bakyt R., Bekissanova Zh.B., Ospanova A.K Investigation of the conditions for obtaining hemostatic composites based on Kazakhstan kaolinite <i>al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
15 : 10	Orazova Z.B., Rakhmatullaeva D.T., Sailau A.G., Ospanova A.K. The effectiveness of multi-layer assembly for obtaining antibacterial coatings on the surface of textile materials <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
15 : 20	Koledova E.S. Yukhin Y.M. Preparation of the pharmaceutical substance bismuth tricalium dicitrate for the domestic anti-ulcer drug vitridinol <i>Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
15 : 30	Kyzlasova D.A.; Ulikhin A.S.; Mukhina A.V.; Uvarov N.F. The triple system [N13pip]ClO$_4$-LiClO$_4$-Al$_2$O$_3$ as an electrolyte for solid-state lithium-ion current sources <i>Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i> <i>Novosibirsk National Research State University, Novosibirsk, Russia</i>
15 : 40	Kozhamuratova U.M., Kazankapova M.K., Yermagambet B.T. Preparation and use of carbon adsorbents for hydrogen gas storage <i>«Institute of Coal Chemistry and Technology» LLP, Astana, Kazakhstan</i>
15 : 50	Elsukova S. N., Nischakova A.D., Fedoseeva Yu.V. Electrochemical properties of supercapacitors with electrodes made of brominated nanotubes and carbon porous material <i>A.V. Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i> <i>Novosibirsk State Technical University, Novosibirsk, Russia</i>
16 : 00	Zhaksybai B.B., Ibraimov Z.T., Dyusenkulova B.J., Tokpaev R.R. Analysis of the chemical profile of volatile components of Centifolia rose essential oils obtained by supercritical CO$_2$ extraction <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>

SECTION 2. GENERAL CHEMICAL TECHNOLOGIES

Moderator – *Doctor of Chemical Sciences, Associate Professor Akbayeva D.N.*

14 : 00	Aubakirov Ye.A., Tashmukhambetova J.H, Nurtazina N.D., Imanbaev E.I., Kenzheev B.J. Assessment of the prospects of coal dust from the Kulanskoye deposit for joint pyrolytic processing of carbon-containing waste
---------	---

	<i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> <i>Republican state Enterprise on the right of economic management "Institute of Gorenje problemy" , Almaty, Kazakhstan</i>
14 : 10	Ilmuratova ¹ M.S., Sassykova ¹ L.R., Dossumova ² B.T., Shakieva ² T.V., Dzhatkambayeva ² U.N. Oxidation of p-xylene with oxygen over the magnetic composite fe₃o₄/ polyvinylpyrrolidone ¹ <i>Faculty of Chemistry and Chemical Technology, Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> ² <i>Al-Farabi Kazakh National University, Center of Physical-Chemical Methods of Research and Analysis, Almaty, Kazakhstan</i>
14 : 20	Egorova V.V., Povalyaev P.V. High-temperature processing of technological asphalt in an open air environment <i>Surgut State University, Russia</i> <i>Tomsk Polytechnic University, Russia</i>
14 : 30	Izbastenova D.S., Aitbekova D.E., Balabekova D.A., Baykenov M.I. Hydrodemetallization of a mixture of a heavy fraction of low-temperature resin and coal shale JSC "Shubarkol Komir" <i>Karaganda Research University named after Academician E.A. Buketov, Karaganda, Kazakhstan</i>
14 : 40	Abildin T.S., Dosumova B.T., Iskakova R.A., Narenova S.M. Hydrogenation of mononitriles of different nature on Ni-Nb-sc. catalyst in an alkaline alcohol medium <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> <i>Research Institute of New Chemical Technologies and Materials, Almaty, Kazakhstan</i>
14 : 50	Baranov D.V., Lopatin S.A., Zagoruiko A.N. Oxidation of various hydrocarbons in a catalyst based on fiberglass carriers <i>G.K. Borekov Institute of Catalysis Novosibirsk, Russia</i>
15 : 00	Zhusupov I.N. Baykenov M.I. Catalytic hydrogenation of a mixture of benzothiophene and anthracene <i>Department of Chemical Technology and Petrochemistry, Karaganda University named after Academician E.A. Buketov, Karaganda, Kazakhstan</i>
15 : 10	Shoganbek D.E. ^{1,3} , Tungatarova S.A. ^{1,3} , Baizhumanova T.S. ^{1,3} , Zhumabek M. ³ , Manabayeva A.M. ³ , Murzin D.Yu. ² , Mäki-Arvela P. ² Reforming of light hydrocarbon raw materials for the synthesis of "blue" hydrogen and fuel compositions enriched with it ¹ <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> ² <i>ÅboAkademi University, Turku, Åbo, Finland</i> ³ <i>D.V. Sokolsky Institute of Fuel Catalysis and Electrochemistry, Almaty, Kazakhstan</i>
15 : 20	Serikkyzy A. ¹ , Maksotova K.S. ^{1,2} , Akbayeva D.N. ^{1,2} , Bakirova B.S. ^{1,2} , Lesbaev B. ¹ Preparation and catalytic activity of copper nanoparticles ¹ <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i> ² <i>Institute of Polymer Materials and Technology, Almaty, Kazakhstan</i>
15 : 30	Anuar A., Kusayynova N.N., Nurtazina N.D., Azhigulova R.N. Bacterial leaching of copper-silver ore in the presence of aspartic acid in an acidic medium <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i>
15 : 40	Petrova Yu.Yu., Bulatova E.V., Dubo P.V., Mateishina Yu.G. Phloroglucin-melamine-formaldehyde resins with molecular imprints for sorption concentration of quercetin

	<i>Surgut State University, Russia Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
15 : 50	Dogadina A.A. Investigation of the effect of pre-heat treatment of starch on the esterification reaction with citric acid and the physico-chemical properties of the resulting resistant starches of type 4 <i>Novosibirsk National Research State University, Novosibirsk, Russia Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>

Poster presentations / poster

Date: 04/26/24

Time: 16:00-18:00

Format: offline (lobby 4th floor)

online (ZOOM platform, for foreign participants)

An example and folder for downloading a poster presentation is available here:

<https://drive.google.com/drive/folders/1lCEirtBYrqWrZb8pgn9PBVjT1bizEEvd?usp=sharing>

1	S.S. Krutskikh, D.V. Kochelakov, D.P. Pishchur, E.S. Vikulova, L.N. Zelenina. Synthesis, structures and thermal properties of asymmetric magnesium β-diketonates <i>A.V. Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia Novosibirsk State Technical University, Novosibirsk, Russia</i>
2	Barysheva A.S., Vikulova E.S., Sukhoi T.S., Ilyin I.Yu., Pishchur D.P., Morozova N.B. Synthesis and investigation of silver complexes with With β-diketonate and N-donor ligands <i>Novosibirsk State Technical University, Novosibirsk, Russia A.V. Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
3	A.V. Strigunovskaya, E.A. Richter, T.S. Sukhoi, E.S. Vikulova. Synthesis, structure and thermal properties of volatile precursors for MgO deposition by the MOCVD method <i>INX SB RAS, Novosibirsk, Russia NSTU Novosibirsk, Russia NSU, Novosibirsk, Russia</i>
4	Kyzlasova D.A., Khusnutdinov V.R., Ulikhin A.S., Uvarov N.F. Synthesis of magnesium-manganese spinel $MgMn_2O_4$ <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk National Research State University, Novosibirsk, Russia</i>
5	N.A. Fedorov, N.F. Uvarov. Polymer electrolytes based on polyurethane elastomer and lithium tetrafluoroborate <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
6	Ivannikov V.V., Uvarov N.F. Investigation of transport properties of Ag-Ag-Al_2O_3 composites by impedance spectroscopy <i>Novosibirsk State Technical University, Novosibirsk, Russia Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
7	Timakova T.E., Panov E.D., Timakova E.V., Afonina L.I. Preparation of high purity β-Bi_2O_3 by oxidative thermolysis of solid precursors

	<i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
8	Sinelnikova Yu.E. Production of mesoporous carbon materials of supercapacitors <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
9	Yagodina I.V., Timakova T.E., Timakova E.V. Features of syntheses BiFeO₃ and their development prospects <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
10	A.I. Zabelina, L.I. Afonina. Preparation of metal complexes with amino acids and their application <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
11	Lovenyak A.S., Timakova T.E., Timakova E.V., Afonina L.I. Synthesis High purity Bi₂CuO₄ in solution <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
12	Shcheglov I.D., Chernukha N.S., Podgornova O.A., Sinelnikova Yu.E., Uvarov N.F. Installation for capacitive deionization of water <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>
13	Samadun A.I., Tausarova B.R., Daribayeva G.T. Application of copper oxide nanoparticles for food packaging. <i>Almaty Technological University, Almaty, Kazakhstan.</i>
14	Malgazhdarova A.B¹, Kazankapova M.K², Yermagambet B.T², Jakupova Zh.E¹. Isolation and purification of fulvic acid from oxidised brown coal <i>L.N. Gumilyov Eurasian National University, «Institute of Coal Chemistry and Technology» LLP, Astana, Kazakhstan</i>
15	Umrikhin M.V., Plyusnin P.E., Shubin Yu.V. Investigation of the electrochemical activity of bimetallic alloys in the Ni Pt_{1-x}Ir_x system in the methanol oxidation reaction <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>A.V. Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia</i>
16	Kozhamuratova U.M¹, Kazankapova M.K², Yermagambet B.T², Jakupova Zh.E¹. Preparation and properties of composite carbon-containing adsorbents based on organic residues ¹ <i>L.N. Gumilyov Eurasian National University, Astana, Kazakhstan</i> ² <i>«Institute of Coal Chemistry and Technology» LLP, Astana, Kazakhstan</i>
17	Adilbekkyzy K.N., Yerbosynkyzy N.J., Kalieva B.K., Kabulova G.K. Sorption of cobalt (II) ions by sulfocationites based on vegetable raw materials <i>Secondary school No. 2 of the village. Dzhambul, Almaty region, Kazakhstan</i> <i>Almaty Technological University, Almaty Kazakhstan</i>
18	Kazankapova M.K¹, Yermagambet B.T¹, Samatkyzy A¹, Malgazhdarova A.B¹, Mendaliyev G.K¹. Synthesis and research of carbon nanomaterials using the electric discharge method ¹ <i>«Institute of Coal Chemistry and Technology» LLP, Astana, Kazakhstan</i>
19	Alexandrova T.A., Timakova T.E., Timakova E.V., Afonina L.I. Application of Bismuth (III) Tartrates in medical practice <i>Novosibirsk State Technical University, Novosibirsk, Russia</i> <i>Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia</i>

20	<p>Visurkhanova Ya. A., Ivanova N.M., Soboleva E.A. Synthesis, structure and electrocatalytic properties of ultrafine Cu-Ag particles <i>Institute of Organic Synthesis and Carbon Chemistry of the Republic of Kazakhstan, Karaganda, Kazakhstan</i></p>
21	<p>Tyutenov K.S. Mechanism of action of platinum catalysts in the hydrogenation-dehydrogenation process of condensed polycyclic aromatic compounds for hydrogen storage <i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p>
22	<p>Mikhailov Ya.A., Grigoriev M.V., Motaev K.A., Matigorov A.V., Lopatin S.A., Zagoruiko A.N., Elyshev A.V. Optimization of NiO reduction on a fiberglass catalyst with a secondary porous SiO₂ carrier for the CO₂ methanation process <i>Tyumen State University, Tyumen, Russia</i> <i>Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia</i></p>
23	<p>Prokopets V.D., Bitsadze Sh., Baykenov M. I. Investigation of the effect of the wave effect of conversion on the properties of an oil fraction with a boiling point from 200°C to 320°C, taking into account the catalytic additive <i>Karaganda University named after Academician E.A.Buketov, Karaganda, Kazakhstan</i></p>
24	<p>Buzayev N.A.^{1,2}, Kadirbekov K.A.^{1,2} Study of kinetics and optimisation of the synthesis of isonicotinic acid from 4-methylpyridine on V₂O₅-Fe₂O₃ catalyst ¹<i>A.B. Bekturov Institute of Chemical Sciences, Almaty, Kazakhstan</i> ²<i>Al-Farabi Kazakh National University, Almaty, Kazakhstan</i></p>
25	<p>Zhukovskaya S.A., Aparnev A.I., Loginov A.V. Hydrothermal synthesis of cerium stannate <i>Novosibirsk State Technical University, Novosibirsk, Russia</i></p>
26	<p>Kazankapova M.K.^{1,2}, Sandybay M.A.² Obtaining porous –carbon material from «Shoptykol» brown coal ¹<i>LLP «Institute of Coal Chemistry and Technology»,</i> ²<i>Eurasian National University named after. L.N. Gumileva, Astana, Kazakhstan</i></p>

18:00 General meeting, discussion, summary of the conference