



BAKU STATE UNIVERSITY

2nd INTERNATIONAL CONFERENCE

MODERN PROBLEMS OF THEORETICAL & EXPERIMENTAL CHEMISTRY

Dedicated to the
120th anniversary of
Academician
YUSIF MAMMADALIYEV

DECEMBER 18 - 19, 2025

BAKU STATE UNIVERSITY
BAKU, AZERBAIJAN

PROGRAMME

Scientific Collaboration:



120

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EXPERIMENTAL CHEMISTRY**

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ACADEMICIAN YUSIF MAMMADALIYEV

PROGRAMME

DECEMBER 18-19, 2025
BAKU, AZERBAIJAN

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Mukhtarjan Muhammadiyev	Professor of the Department of Polymer chemistry of National University of Uzbekistan named after M. Ulughbek, Uzbekistan
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DECEMBER 18-19, 2025
BAKU STATE UNIVERSITY | BAKU, AZERBAIJAN

December 18, Thursday

OPENING CEREMONY

Main Academic Building, 3rd Floor, Main Hall

[Link to session](#)

09:00 - 10:00 Registration

10:00 - 11:30 Opening Ceremony / Group Photo

11:30 - 12:00 Coffee Break / Poster session 1

PLENARY SESSION

Chairperson: Ulviyya Hasanova (Azerbaijan)

Main Academic Building, 3rd Floor, Main Hall

12:00 - 12:20 Yusif Mammadaliyev: Petrochemistry and petrochemical synthesis

Ibrahim Mamedov

Professor of Baku State University, Azerbaijan

12:20 - 12:40 Crystal engineering of anion...anion adducts via σ -hole bonds

Giuseppe Resnati

Professor of Politecnico di Milano, Italy

12:40 - 13:00 Functional surface-grafted polymer brushes

Szczepan Zapotoczny

Professor of Jagiellonian University, Poland

13:00 - 14:00 Lunch

December 18, Thursday

KEYNOTE SPEAKER'S SESSION

Chairperson: Kamran Mahmudov (Azerbaijan)

Main Academic Building, 3rd Floor, Main Hall

[Link to session](#)

14:00 - 14:15	Use of synthesized coumarines in application areas Bahattin Yalchin <i>Professor of Marmara University, Türkiye</i>
14:15 - 14:30	Range of specially performed polymeric composites based on industrially produced polypropylene Rinat Iskakov <i>Professor of Atyrau Oil and Gas University named after S. Utebayev, Kazakhstan</i>
14:30 - 14:45	Development of effective, safe and highly functional active vaccines and therapeutics against COVID-19, malaria, anthrax and new potentially pathogens "Desease-X" Tarlan Mammedov <i>Professor of Akdeniz University, Türkiye</i>
14:45 - 15:00	Functionalized nanocomposite materials based on polyvinyl chloride Davronbek Bekchanov <i>Professor of National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i>
15:00 - 15:15	New strategies for syntheses of halocyclitols Hasan Sechen <i>Professor of Atatürk University, Türkiye</i>
15:15 - 15:50	Coffee Break

December 18, Thursday

PARALLEL SESSIONS

Session 1-1: Alternative energy sources and petrochemical synthesis

**Chairpersons: Ibrahim Mamedov (Azerbaijan),
Rinat Iskakov (Kazakhstan)**

Academic Building II, 10th Floor, Student Development Centre

15:50 - 16:00	<p>Changes in the chemical composition and structure of natural heulandite-chabazite mixtures after uptake of copper and zinc ions</p> <p>Vladimer Tsitsishvili¹, Nanuli Dolaberidze², Nato Mirdzveli², Nagima Dzhakipbekova³, Manana Nijaradze², Zurab Amiridze², Bela Khutsishvili² <i>¹National Academy of Sciences of Georgia, Georgia</i> <i>²Institutoe of Physical & Organic Chemistry named after P. Melikishvili, Georgia</i> <i>³South Kazakhstan State University named after M. Auezov, Kazakhstan</i></p>
16:00 - 16:10	<p>Synthesis and investigation of polyfunctional pyridines based on benzyldenemalononitriles</p> <p>Aysun Humbatzada, Farid Naghiyev, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i></p>
16:10 - 16:20	<p>Deep eutectic solvents as extractive agents of fuels</p> <p>Sayad Niftullayeva, Yegana Mamedova, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i></p>
16:20 - 16:30	<p>Synthesis and study of a surfactant based on N-(2-aminoethyl)-1,2-ethanediamine dodecanic acid with epichlorohydrin</p> <p>Amina Alimova¹, Ilhama Zarbaliyeva^{1,2} <i>¹Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i> <i>²Baku Higher Oil School, Azerbaijan</i></p>

16:30 - 16:40	<p>Isomerization of a n-butane:n-heptane mixture over sulfated zirconium dioxide-based catalysts</p> <p>Ayten Iskenderova, Urfan Dursunov, Safa Abasov, Malahat Mammadova, Arzu Imanova <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p>
16:40 - 16:50	<p>Comparative study of resin compounds separated from crude and residue of the Garabagli field oil (> 450 °C)</p> <p>Balajakhanim Huseynova, Zaira Gasimova, Gultekin Guliyeva, Yegana Badavi <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p>
16:50 - 17:00	<p>Synthesis and anticorrosive properties of some chromene derivatives</p> <p>Aysu Gurbanova, Ofelia Javadova, Nargiz Azimova, Yegana Mamedova, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i></p>
17:10 - 17:20	<p>Additive technologies for the creation of automated reactor systems</p> <p>Alibek Khabiyev¹, Aidana Iskender² ¹<i>Institute of Mechanics and Engineering, Kazakhstan</i> ²<i>Satbayev University, Kazakhstan</i></p>
17:20 - 17:30	<p>Innovative 3D-printed reactor systems for green fuel synthesis in modern oil chemistry</p> <p>Aidana Iskender, Alibek Khabiyev <i>Satbayev University, Kazakhstan</i></p>
17:30 - 17:40	<p>Carbon-based catalysts in the transesterification reaction</p> <p>Gulben Mamedova, Yegana Mamedova, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i></p>
17:40 - 17:50	<p>Green energy transition to hydrogen from public customers perspective</p> <p>Lamia Gasimzada <i>Poznań University of Economics and Business, Poland</i></p>

17:50 - 18:00	<p>Docking study of novel vinylnaphthalene compounds targeting <i>mycobacterium tuberculosis</i> RV 1250 protein</p> <p>Fayozbek Abduxaliqov, Farangiz Shukurullayeva, Mirjalol Jalilov, Hamza Toshov <i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i></p>
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December 18, Thursday

PARALLEL SESSIONS

Session 1-2: Thin organic synthesis and coordination compounds

**Chairpersons: Kamran Mahmudov (Azerbaijan),
Vural Butun (Türkiye)**

Academic Building II, Room № 303

15:50 - 16:00	<p>Application of 1-(5-chloro (bromo)-2-pyridylazo)-2-hydroxy-4-mercaptophenol for the extractive spectrophotometric determination of nickel</p> <p>Zohra Asgarova¹, Ali Zalov¹, Elman Shirinov², Parvana Safarova² ¹<i>Azerbaijan State Pedagogical University, Azerbaijan</i> ²<i>Mingachevir State University, Azerbaijan</i></p>
16:00 - 16:10	<p>Theoretical studies on spectral characteristics and electronic properties of 1-(4- substituted benzylidene)-thiosemicarbazone derivatives</p> <p>Guventurk Ugurlu <i>Kafkas University, Türkiye</i></p>
16:10 - 16:20	<p>A fast and sustainable route to 3-amino-1,2,4-triazoles using microwave technology</p> <p>Mustafa Gumush¹, Mykola Gorobets² ¹<i>Science-Technology Research and Application Center, Türkiye</i> ²<i>Institute for Single Crystals, Ukraine</i></p>

16:20 - 16:30	<p>Optimization of germination processes in legume crops using weak radon mineral water: enhanced accumulation of biologically active compounds</p> <p>Irma Berulava¹, Fariz Amirli², Nargiz Sultanova², George Pkhakadze³, Maria Silagadze¹ ¹<i>Akaki Tsereteli State University, Georgia</i> ²<i>Azerbaijan State Oil and Industry University, Azerbaijan</i> ³<i>Georgian Agrarian University, Georgia</i></p>
16:30 - 16:40	<p>Specific conductivity and pH measurement of CH₃OH-H₂O-CO₂ mixtures</p> <p>Sadig Kuliyeu <i>Lentatek Space Aviation and Technology Inc., Türkiye</i></p>
16:40 - 16:50	<p>Thiadiazole-picolinic acid based mixed ligand cobalt complex: crystal structures and anticancer activity</p> <p>Gulnaz Khojabaeva, Aziza Erejepova, Batirbay Torambetov, Shakhnoza Kadirova <i>National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i></p>
16:50 - 17:00	<p>Study of complex formation of molybdenum with the reagent in the presence of antipyrine and 4-aminoantipyrine</p> <p>Sevil Magsudova, Mehriban Aghabeyli, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
17:00 - 17:10	<p>Interactions of palladium(II) and platinum(II) with organic disulfide</p> <p>Khudayar Hasanov¹, Asmat Azizova¹, Naila Quliyeva², Gunay Mansurova¹, Matanat Yusifova¹, Shmidt Qasimov¹ ¹<i>Azerbaijan Medical University, Research Center, Azerbaijan</i> ²<i>Western Caspian University, Azerbaijan</i></p>
17:10 - 17:20	<p>Synthesis of anthraquinone derivative based on secondary products of the pyrolysis process</p> <p>Gulnoza Shadiyeva, Suvankul Nurmanov <i>National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i></p>

17:20 - 17:30	<p>Crystalline and molecular structure of the compound $[\text{C}_2\text{H}_4\text{N}_3\text{S}]^+ \cdot \text{NO}_3^-$</p> <p>Guzal Nuraliyeva, Mushtari Aliyeva, Gulasal Xolmurodova, Mashhura Yunusova <i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i></p>
17:30 - 17:40	<p>Synthesis and investigation of nanocomposites based on the pyrolysis products of ion-exchange resins</p> <p>Aytac Mammadova¹, Eyyub Mammadov², Rasim Alosmanov¹ ¹<i>Baku branch of Moscow State University after M.V. Lomonosov, Baku, Azerbaijan</i> ²<i>Baku State University, Baku, Azerbaijan</i></p>
17:40 - 17:50	<p>Photometric determination of copper(II) ions based on pyrogallol</p> <p>Nubar Aliyeva, Lamiya Qurbanova, Farida Mammadova, Polad Mammadov <i>Baku State University, Azerbaijan</i></p>
17:50 - 18:00	<p>Synthesis of $[\text{Ni}(\text{C}_6\text{H}_6\text{N}_3\text{OS})_2] \cdot 2\text{CH}_3\text{OH}$ complex</p> <p>Gunay Mammadova, Samira Miriyeva, Abel Maharramov, Rustam Rustamov <i>Baku State University, Azerbaijan</i></p>
18:00 - 18:10	<p>A five-coordinate complex of copper bromide with 2-amino-5-allylthio-1,3,4-thiadiazole</p> <p>Batirbay Torambetov¹, Aziz Atashov², Gulmira Uzakhbergenova¹, Mukhammed Allaniyazov¹, Shakhnoza Kadirova¹ ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Karakalpak State University, Uzbekistan</i></p>

December 18, Thursday

PARALLEL SESSIONS

Session 1-3: Catalysis and material science

**Chairpersons: Elmir Babayev (Azerbaijan),
Orifjon Kadirov (Uzbekistan)**

Academic Building II, Room № 221

15:50 - 16:00	Synthesis of CdS nanoparticles within a matrix derived from plastic waste Fatima Babayeva, Elvin Malikov <i>Baku State University, Azerbaijan</i>
16:00 - 16:10	Isomerization of gas gasoline to high-octane Gasoline components Malahat Mammadova, Safa Abasov, Dilgam Tagiyev, Yegana Isayeva, Aytan Iskanderova, Arzu Imanova, Turaj Suleymanova <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i>
16:10 - 16:20	Effect of thermal treatment on In-Sb thin films Nazakat Aliyeva, Vusala Majidzade, Samira Jafarova, Sevinj Javadova, Dilgam Tagiyev <i>Institute of Catalysis and Inorganic Chemistry named after acad. M. Naghiyev, Azerbaijan</i>
16:20 - 16:30	The Influence of transition metals on the catalytic properties of HZSM-5 zeolite in the conversion of bioethanol to the BTX fraction Khanimbaji Mammadova¹, Fuad Kerimli¹, Eyyub Mammadov² <i>¹Baku State University, Azerbaijan</i> <i>²The Baku Branch of Lomonosov Moscow State University, Azerbaijan</i>
16:30 - 16:40	Formation of extracomplexes of metalloporphyrins Shafa Mammadova <i>Azerbaijan Pedagogical University, Azerbaijan</i>

16:40 - 16:50	<p>The effect of the silicate module and the nature of the modifying metal on the catalytic properties of high-silica zeolites in the alkylation of benzene with bioethanol</p> <p>Aynur Isgandarova¹, Aytan Mammadova², Sabit Mammadov¹, Eldar Akhmedov¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan State University of Oil and Industry, Azerbaijan</i></p>
16:50 - 17:00	<p>Optimization of the pyrolysis process of hydrocarbon feedstock using a zeolite-containing catalyst</p> <p>Aysu Ismayilova¹, Nadira Hasankhanova², Gulara Hasanova², Vusala Bakhshiyeva², Tarana Karayeva² ¹<i>Azerbaijan State University of Oil and Industry, Azerbaijan</i> ²<i>Institute of Petrochemical Processes, Azerbaijan</i></p>
17:00 - 17:10	<p>Application of green graphene oxide for adsorptive removal of Zn(II) ions</p> <p>Esmira Eyyubova, Tahir Salahov, Leyla Nagiyeva, Khalil Nagiyev, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
17:10 - 17:20	<p>Molecular modeling of ionic liquid systems and study of catalytic activity in the oligomerization process</p> <p>Khayala Seyidova^{1,2}, Reyhan Aliyeva^{1,2}, Elmina Guliyeva², Gunel Nadjafova-Aliyeva² ¹<i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i> ²<i>Azerbaijan State Oil and Industry University, Azerbaijan</i></p>
17:20 - 17:30	<p>Catalytic hydrogen production from methanolysis of NABH₄ using an azo-cross-linked polymer</p> <p>Ayshegul Ozbal¹, Kutalmis Gokkus², Vural Butun¹ ¹<i>Eskishehir Osmangazi University, Türkiye</i> ²<i>Kastamonu University, Türkiye</i></p>
17:30 - 17:40	<p>Synthesis of biodegradable adsorbent based on lignin and graphene oxide</p> <p>Sibel Hasanova¹, Alakbar Huseynzada¹, Famil Chiragov¹, Imamaddin Amiraslanov² ¹<i>Baku State University, Azerbaijan</i> ²<i>Institute of Physics, Azerbaijan</i></p>

17:40 - 17:50	<p>Preconcentration-based approaches for trace-level determination of Fe (III)</p> <p>Esmira Eyyubova <i>Baku State University, Azerbaijan</i></p>
17:50 - 18:00	<p>Reinvestigation of the phase diagram of the $Tl_2Se-Sb_2Se_3$ system</p> <p>Gunel Ganbarova, Rahila Mirzayeva, Samira Zeynalli, Yasin Jafarov <i>Baku State University, Azerbaijan</i></p>
18:00 - 18:10	<p>Physicochemical study of the $As_2Se_3 - AgSbSe_2$ system</p> <p>Shenay Mammadzadeh, Guntakin Shukurova <i>Baku State University, Azerbaijan</i></p>
18:10 - 18:20	<p>The role of cerium oxide in enhancing bioethanol transformation into high-quality hydrocarbons</p> <p>Aygun Asadova¹, Turana Babayeva¹, Eyyub Mammadov², Elmir Babayev³, Sabit Mammadov¹ <i>¹Baku State University, Azerbaijan</i> <i>²Branch of Moscow State University, Azerbaijan</i> <i>³Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>
18:20 - 18:30	<p>Production of bacterial cellulose from industrial waste</p> <p>Fidan Ismayilzada, Rasim Alosmanov <i>Baku State University, Azerbaijan</i></p>
18:30 - 18:40	<p>Adsorptive removal of diclofenac sodium from aqueous solution onto carbon nitride and graphene oxide</p> <p>Naida Agayeva¹, Samira Abbasova¹, Rasim Alosmanov², Vagif Akhmedov¹ <i>¹Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i> <i>²Baku State University, Azerbaijan</i></p>
18:40 - 18:50	<p>A new catalyst for the synthesis of cyclohexane by Diels-Alder reaction</p> <p>Orifjon Kodirov <i>National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i></p>

December 18, Thursday

PARALLEL SESSIONS

Session 1-4: Modern approaches in chemistry education

Chairperson: Khalil Nagiyev (Azerbaijan)

Academic Building II, Room № 307

15:50 - 16:00	Facilitation in chemistry education: innovative forms of group learning Madina Mammadova, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i>
16:00 - 16:10	Systems approach and classroom modeling of alkali metals in ecosystem and industrial contexts Arzu Pashayeva, Khalil Nagiyev, Maleyka Alakbarli <i>Baku State University, Azerbaijan</i>
16:10 - 16:20	Development of competency-based tasks in integrative chemistry teaching Fidan Aliyeva, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i>
16:20 - 16:30	The role of nonverbal communication in chemistry education Amina Aliyeva, Aytan Asgarova, Nazrin Musayeva, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i>
16:30 - 16:40	Innovative strategies for teaching the topic of halogens based on 21st-century skills Arzu Pashayeva, Khalil Nagiyev, Zahra Mammadova <i>Baku State University, Azerbaijan</i>

16:40 - 16:50	<p>Application of the STEAM teaching method in teaching the topic “Water” in 7th grade chemistry lessons</p> <p>Arzu Pashayeva, Khalil Nagiyev, Elmir Mammadov <i>Baku State University, Azerbaijan</i></p>
16:50 - 17:00	<p>Cluster technology in teaching chemistry in schools</p> <p>Arzu Aliyeva, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>
17:00 - 17:10	<p>Personality-oriented teaching of chemistry by including multi-level tasks</p> <p>Viktoriya Teymurova, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>
17:10 - 17:20	<p>Competence-based approach in the methodological training of future chemistry teachers in the context of digitalization</p> <p>Neyla Mammadova, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>
17:20 - 17:30	<p>The role of digital platforms in developing students’ communication and collaboration skills in chemistry lessons</p> <p>Madina Mammadova, Gulnar Mirbagirova, Arzu Pashayeva, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>
17:30 - 17:40	<p>Mentoring as the key to academic and emotional success</p> <p>Gulnara Duruskari, Elnara Mahmudlu, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>

December 19, Friday

KEYNOTE SPEAKER'S SESSION

**Chairpersons: Rasim Alosmanov (Azerbaijan),
Shakhnoza Kadirova (Uzbekistan)**

Academic Building I, 1st Floor, Round Hall

[Link to session](#)

10:00 - 10:15	Evaluation of the crystal structures of nicotinamide, isonicotinamide, <i>N,N'</i>-diethylnicotinamide adducts of <i>p</i>-substituted benzoates of zinc Hacali Necefoglu <i>Professor of Kafkas University, Türkiye</i>
10:15 - 10:30	Molecularly engineered polyvinylimidazole-based organic semiconductors for photo-responsive and hydrogen-sensitive application Nuritdin Kattaev <i>Professor of National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i>
10:30 - 10:45	Production, <i>In Vitro</i> and <i>In Vivo</i> Evaluation of therapeutic ion-doped bioactive glass-containing polymeric wound dressing membranes Sevil Yucel <i>Professor of Yildiz Technical University, Türkiye</i>
10:45 - 11:00	Polymer-filler interactions Rasim Alosmanov <i>Professor of Baku State University, Azerbaijan</i>
11:00 - 11:15	Pyrolysis as a sustainable pathway for waste valorization and alternative energy production Pinar Acar Bozkurt <i>Ass. Professor of Ankara University, Türkiye</i>
11:15-11:45	Coffee Break / Poster session 2

December 19, Friday

KEYNOTE SPEAKER'S SESSION

**Chairpersons: Elmir Babayev (Azerbaijan),
Hasan Sechen (Türkiye)**

Academic Building I, 1st Floor, Round Hall

[Link to session](#)

11:45-12:00	Furan based strategies for multifunctional five-membered heterocycles Ramazan Altundash <i>Dean of Faculty of Fundamental Sciencs of Gebze Technical University, Türkiye</i>
12:00-12:15	Effect of carbon-fiber precursor structure on the boundary size range of active palladium nanocatalysts Mukhtar Mukhamediev <i>Professor of National University of Uzbekistan, Uzbekistan</i>
12:15-12:30	Toward emerging two-dimensional GO and clay-based materials for biomedical and environmental application: Progress and perspectives Ulviyya Hasanova <i>Professor of Baku State University, Azerbaijan</i>
12:30-12:45	New type of functional copolymers and their self-assembled nanostructures for drug carrier and release systems Vural Butun <i>Professor of Eskishehir Osmanqazi University, Türkiye</i>
12:45-13:00	Resonance-assisted tetrel bonding Kamran Mahmudov <i>Ass.Professor of Baku State University, Azerbaijan</i>
13:00 - 14:00	Lunch

December 19, Friday

PARALLEL SESSIONS

Session 2-1: Alternative energy sources and petrochemical synthesis

Chairpersons: **Ibrahim Mamedov (Azerbaijan),
Pinar Acar Bozkurt (Türkiye)**

Academic Building II, 10th Floor, Student Development Centre

14:00 - 14:10	Antimatter as an alternative energy source for interstellar propulsion Aytaj Mammadli <i>Azerbaijan State University of Economics, Azerbaijan</i>
14:10 - 14:20	Anticorrosion properties of some polysubstituted cyclohexane derivatives Asmar Baxshaliyeva, Rahila Huseynova, Yegana Mamedova, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i>
14:20 - 14:30	New carbon-based catalyst in biodiesel synthesis Nazrin Nazirova, Ofelia Javadova, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i>
14:30 - 14:40	Investigation of the antistatic effectiveness of plant-based amidoethers in diesel distillate Elchin Nabiyeu, Sakit Rasulov, Leyla Mahmudova <i>Azerbaijan State Oil and Industry University, Azerbaijan</i>
14:40 - 14:50	Enhancement of thermo-oxidative stability of vegetable oils by thiourea modification and new lubricant compositions Vagif Farzaliyev², Sevgili Mammadova², Anar Agazada², Tayyar Askerov¹, Tura Jalilli¹ <i>¹Baku State University, Azerbaijan</i> <i>²Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i>

14:50 - 15:00	<p>Synthesis of sulfides containing two ester groups in their molecules</p> <p>Gasim Huseynov, Ilqar Huseynov <i>Baku State University, Azerbaijan</i></p>
15:00 - 15:10	<p>Research into biodiesel as an alternative energy source</p> <p>Aisha Suleymanova¹, Gulbaniz Mukhtarova² ¹<i>Institute of Bioresources, Azerbaijan</i> ²<i>Institute of Petrochemical Processes named after acad. Y. Mammadaliyev, Azerbaijan</i></p>
15:10 - 15:20	<p>Investigation of the oxidative dehydrogenation reaction of methanol</p> <p>Lala Maharramova¹, Adile Aliyeva², Arif Efendi², Eldar Akhmedov¹ ¹<i>Baku State University, Azerbaijan,</i> ²<i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>
15:20 - 15:30	<p>Liquid phase oxidation of individual isomers of methylcyclohexene with the participation of modified polyoxomolybdates</p> <p>Hafiz Alimardanov, Nemat Garibov, Farida Huseynova, Firdovsi Guliyev <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p>
15:30 - 16:00	Coffee Break
16:00 - 16:10	<p>Alternative energy technologies for sustainable chemical production</p> <p>Aytaj Mammadli <i>Azerbaijan State University of Economics, Azerbaijan</i></p>
16:10 - 16:20	<p>Natural oxygenates as additives to biodiesel-diesel mixtures</p> <p>Gulben Mamedova, Nargiz Azimova, Ofelia Javadova, Yegana Mamedova, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i></p>
16:20 - 16:30	<p>Phenolic compounds as additivity to biodiesel blend</p> <p>Mehin Bakhtiyarova, Nargiz Azimova, Farid Naghiyev, Ibrahim Mamedov <i>Baku State University, Azerbaijan</i></p>

16:30 - 16:40	<p>Theoretical calculations in ionic liquids: unraveling structure, reactivity and functionality</p> <p>Hamida Azizbayli^{1,2}, Zeynab Ganbarli¹, Minaver Ibrahimova¹</p> <p>¹<i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i> ²<i>Azerbaijan State Oil and Industry University, Azerbaijan</i></p>
16:40 - 16:50	<p>An Insight to morphological, structural and in vitro cytotoxicity properties of monodisperse, strontium doped bioactive glass with SiO₂-CaO-P₂O₅, SrO composition</p> <p>Yeshim Ayik^{1,2}, Esra Nur Tural², Doga Bershan Gunesh², Sinem Arslan², Sheref Yıldırım², Semanur Ercan³, Deniz Sakarya³, Cem Ozel^{2,4}, Merve Erginer^{3,4}, Ali Can Ozarslan^{3,4}, Sevil Yucel^{2,4}</p> <p>¹<i>Uskudar University, Türkiye</i> ²<i>Yıldız Technical University, Türkiye</i> ³<i>Istanbul University-Cerrahpasha, Türkiye</i> ⁴<i>Health Biotechnology Joint Research and Application Center of Excellence, Türkiye</i></p>
16:50 - 17:00	<p>The purification of diesel fuel by a new type of DESs</p> <p>Sayad Niftullayeva, Shargiya Gasimova, Yegana Mamedova, Ibrahim Mamedov</p> <p><i>Baku State University, Azerbaijan</i></p>
17:00 - 17:10	<p>Concurrent bidirectional differentiation in engineered cryogel microenvironments: implications for integrated tissue engineering</p> <p>Firuzza Idrisova, Tayfun Sengel, Sultan Butun Sengel</p> <p><i>Eskishehir Osmangazi University, Türkiye</i></p>
17:10 - 17:20	<p>Green synthesis of silver clusters stabilized by a polymer media</p> <p>Jamila Guliyeva, Nargiz Rahimli, Hacı Aslanova, Chichak Seyidova, Aytaj Javadzada</p> <p><i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>

17:20 - 17:30	<p>4-Bromoacetophenone based new chalcone synthesis and its biological activity investigation</p> <p>Konul Shahverdiyeva, Samira Ismayilova, Alakbar Huseynzade, Ulviyya Hasanova, Valeh Ismayilov <i>Baku State University, Azerbaijan</i></p>
17:30 - 17:40	<p>Synthesis and spectroscopic characterization of a novel vitamin B6-derived Schiff base</p> <p>Samira Ismayilova¹, Alakbar Huseynzada², Ulviyya Hasanova² ¹<i>Azerbaijan State Oil and Industry University, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p>
17:40 - 17:50	<p>The effect of imidazolines derived from animal-based solid fatty acids on sulfate-reducing bacteria</p> <p>Vaqif Abbasov, Narmin Mammadova, Eldar Mammadbayli, Durna Agamaliyeva, Afaq Azizbayli, Ulviyya Mehdizade <i>Institute of Petrochemical Processes name after acad. Y.Mammadaliyev, Azerbaijan</i></p>
17:50 - 18:00	<p>Interactions of Zn(II) complexes with SARS-CoV-2 spike protein: an evaluation of molecular approaches</p> <p>Fureya Elif Ozturkkan¹, Giray Bugra Akbaba¹, Mucahit Ozdemir², Hacali Necefoglu¹ ¹<i>Kafkas University, Türkiye</i> ²<i>Marmara University, Türkiye</i></p>
18:00 - 18:10	<p>Synthesis and structural characterization of a heterocyclic compound –based on malononitrile containing an aromatic substituent</p> <p>Ibadulla Mahmudov^{1,2}, Gunay Alizade³, Vagif Farzaliyev¹, Afsun Sujayev¹ ¹<i>Institute of Chemistry of Additives named after acad. A. Guliyev Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i> ³<i>Baku Higher Oil School, Azerbaijan</i></p>

18:10 - 18:20	<p>Green synthesis of heterocycles using diazabicyclo[2.2.2]octane-based ionic liquid and thier identification as β-lactamase inhibitors</p> <p>Maria Aqeel Khan <i>University of Karachi, Pakistan</i></p>
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December 19, Friday

PARALLEL SESSIONS

Session 2-2: Thin organic synthesis and coordination compunds

**Chairpersons: Kamran Mahmudov (Azerbaijan),
Vladimer Tsitsishvili (Georgia)**

Academic Building II, Room № 303

14:00 - 14:10	<p>Some structural characterization of cerium(III) β-diketonate complexes</p> <p>Feruza Fayzullayeva¹, Mushtariybegim Sunnatillayeva², Bakhtigul Ruzieva^{1,3}, Shakhlo Daminova^{1,2} <i>¹Uzbekistan - Japan Innovation Center of Youth, Uzbekistan</i> <i>²National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> <i>³Alfraganus University of Uzbekistan, Uzbekistan</i></p>
14:10 - 14:20	<p>Synthesis and biological evaluation of phenolic quinolinium derivatives</p> <p>Gullu Aliyeva¹, Musa Bayramov², Mahira Agayeva,² Gunay Mehdiyeva² <i>¹Khazar University, Azerbaijan</i> <i>²Baku State University, Azerbaijan</i></p>
14:20 - 14:30	<p>Complexes formed by silver nanoparticles with azo reagents</p> <p>Ayten Imamaliyeva, Flora Hajiyeva, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>

14:30 - 14:40	<p>Synthesis and structural characterization of a new α-keto ester-based aryl hydrazone derivative</p> <p>Peri Huseynova¹, Namig Shikhaliyev², Naila Mammadova² ¹<i>Nakhchivan State University, Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i></p>
14:40 - 14:50	<p>Synthesis, structure, and infrared spectroscopic analysis of a copper(II) coordination compound based on a benzimidazole derivative</p> <p>Farangiz Khujayeva^{1,2}, Mukhammad Turgunov², Shaxlo Daminova^{1,3} ¹<i>National University of Uzbekistan named after M.Ulughbeq, Uzbekistan</i> ²<i>Pharmaceutical Institute, Uzbekistan</i> ³<i>Uzbek-Japanese Youth Innovation Center, Uzbekistan</i></p>
14:50 - 15:00	<p>Schiff bases derived from 5-bromo- and 5-nitro-o-vanillin</p> <p>Ruslan Guliyev^{1,2}, Yasin Jafarov¹, Ulviyya Hasanova^{1,2} ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan State Oil and Industry University, Azerbaijan</i></p>
15:00 - 15:10	<p>Cytotoxic and anticancer activities of ZnO nanoparticles on DLD-1 and hela cells: Effect of particle size, morphology, synthesis method, and molecular pathways</p> <p>Giray Buğra Akbaba, Fureya Elif Ozturkkan <i>Kafkas University, Türkiye</i></p>
15:10 - 15:20	<p>Preconcentration of Ag(I) ions on some synthetic sorbents</p> <p>Narmin Afandiyeva, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
15:20 - 15:30	<p>Studies on the antibacterial properties of mixed-ligand complexes of 3d-metal ions with amides</p> <p>Bakhtiyor Ganiev, Uktam Mardonov, Gulyayra Kholikova, Rigina Babayeva, Zarina Jumayeva, Ulijan Talmakhanova <i>Bukhara State University, Uzbekistan</i></p>

15:30 - 16:00	Coffee Break
16:00 - 16:10	<p>Thermosensitive polymer for sorption application</p> <p>Sama Gasimova, Rasim Alosmanov, Irada Buniyat-zadeh <i>Baku State University, Azerbaijan</i></p>
16:10 - 16:20	<p>Study of the molecular state of valeric acid in d-α-pinene by the distribution method</p> <p>Kybira Iskenderova, Gunay Babayeva, Natavan Musaeva, Sabina Ojagverdiyeva, Yashar Shahverdiyev <i>Baku State University, Azerbaijan</i></p>
16:20 - 16:30	<p>Synthesis and properties of aminomethoxy derivatives with cyclohexane fragments</p> <p>Samira Ismayilova¹, Eldar Mammadbayli¹, Gulsum Hajiyeva², Chimnaz Salamanova¹, Kamala Efendiyeva¹, Kamila Hasanova¹ <i>¹Institute of Petrochemical Processes named after acad. Y. Mammadaliyev, Azerbaijan</i> <i>²SOCAR Oil and Gas Scientific-Research and Design Institute, Azerbaijan</i></p>
16:30 - 16:40	<p>Thermal properties of copolymers obtained from complex-radical copolymerization of <i>o</i>-, <i>m</i>-, <i>p</i>-carboxyphenylmaleimide–styrene–maleic anhydride</p> <p>Shahana Guliyeva¹, Aygun Alikhanova², Eldar Garaev¹, Bakhtiyar Mammadov² <i>¹Azerbaijan Medical University, Azerbaijan</i> <i>²Institute of Polymer Materials, Azerbaijan</i></p>
16:40 - 16:50	<p>Unveiling 1,2,3-triazole analogues as new and potent α-glucosidase inhibitors: an outlook for controlling diabetes</p> <p>Maria Aqeel Khan <i>University of Karachi, Pakistan</i></p>

16:50 - 17:00	<p>Synthesis and structural pyrazolyl –triazine – propanedinitrile hybrid containing a 3-ethoxysalicylaldehyde unit</p> <p>Bayim Isakova¹, Ibadulla Mahmudov^{1,2}, Vagif Farzaliev¹, Afsun Sujayev¹</p> <p><i>¹Institute of Chemistry of Additives named after acad. A. Guliyev, Azerbaijan</i></p> <p><i>²Baku Engineering University, Azerbaijan</i></p>
17:00 – 17:10	<p>Identification and structural characterization of new and novel carbonic anhydrase II inhibitors</p> <p>Saima Rasheed</p> <p><i>University of Karachi, Pakistan</i></p>
17:10 - 17:20	<p>Using organic antioxidants to protect against oxidative stress</p> <p>Kamala Badalova¹, Ramiz Axundov², Tariel Eyvazov², Tarana Ahmedova²</p> <p><i>¹Azerbaijan Medical University, Azerbaijan</i></p> <p><i>²Scientific Research Center, Azerbaijan</i></p>
17:20 - 17:30	<p>Synthesis of carbon dots from chitosan and dithizone for Cd²⁺ ion sensing</p> <p>Sevara Kiryigitova¹, Marat Sulonov¹, Nigora Qutlimurotova²</p> <p><i>¹Jizzakh State Pedagogical University, Uzbekistan</i></p> <p><i>²National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i></p>
17:30 - 17:40	<p>The formation of a substance containing a thiourea fragment from the reaction of benzothioisocyanate with 6-aminoquinazolin-4-one</p> <p>Ergashboy Abdurakhmanov¹, Shokhjakhon Suvonkulov¹, Fazliddin Zulpanov², Shokhista Salimova¹, Bakhromjon Juraev²</p> <p><i>¹Samarkand State University named after Sh.Rashidov, Uzbekistan</i></p> <p><i>²Institute of the Chemistry of Plant Substances named after akad. S. Yunusov, Uzbekistan</i></p>
17:40 - 17:50	<p>X-Ray structural analysis of a nickel complex</p> <p>Gunay Mammadova, Eldar Akhmedov, Rustam Rustamov</p> <p><i>Baku State University, Azerbaijan</i></p>

17:50 - 18:00	<p>Electrochemical synthesis of p-Br phenylacetic acid with high biological activity in the presence of H₂O₂</p> <p>Umida Matkarimova¹, Nigora Kutlimurotova² ¹Tashkent State Technical University, Uzbekistan ²National University of Uzbekistan named after M.Ulughbek, Uzbekistan</p>
18:00 - 18:10	<p>Synthesis of a new azo compound based on pyrogallol, determination of its application in photometric analysis</p> <p>Azad Mammadrzayev¹, Farida Aliyeva², Kanan Aghayev¹, Famil Chiragov¹ ¹Baku State University, Azerbaijan ²Ganja State University, Azerbaijan</p>
18:10 - 18:20	<p>Transition metal complexes of azo derivatives from 4-aminobenzoic and 4-amino-2-hydroxybenzoic acids: structural and spectral analysis</p> <p>Gulzeinep Begimova^{1,2}, Siroj Saparbayev², Muhabbat Yuldasheva² ¹Kazakh National Medical University named after S. Asfendiyarov, Kazakhstan ²National University of Uzbekistan named after M. Ulughbek, Uzbekistan</p>
18:20 - 18:30	<p>Synthesis of α-Cr₂O₃ catalyst and its application in oxidation</p> <p>Aygun Aliyeva¹, Sahib Yunusov¹, Ulviyya Kerimova¹, Ersin Kayahan², Lala Zamanova¹ ¹Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan ²Kocaeli University, Türkiye</p>
18:30 - 18:40	<p>Synthesis of oligomers resistant to aggressive environments and preparation of coating compositions based on them</p> <p>Turkan Mahmudova, Tamilla Naibova, Aytan Mammadova Azerbaijan State Oil and Industry University, Azerbaijan</p>

December 19, Friday

PARALLEL SESSIONS

Session 2-3: Catalysis and material science

**Chairpersons: Rasim Alosmanov (Azerbaijan),
Mukhtarjan Mukhammediev (Uzbekistan)**

Academic Building II, Room № 221

14:00 - 14:10	Transition metal complexes of thiadiazole-picolinic acid: synthesis, characterization and anticancer activity Shakhnoza Kadirova <i>Professor of National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i>
14:10 - 14:20	Synthesis of advanced polymer/graphene-based nanocomposites Kamran Mustafazada, Elvin Malikov <i>Baku State University, Azerbaijan</i>
14:20 - 14:30	Application of the SILAR synthesis method in the preparation of Polymer/CdS nanocomposites Elmaddin Gurbanov, Elvin Malikov <i>Baku State University, Azerbaijan</i>
14:30 - 14:40	FT-IR analysis of synthesized NaA zeolite from kaolin Feruza Dimetova¹, Eldor Abdurahmonov² <i>¹Institute of General and Inorganic chemistry, Uzbekistan ²Termez State Pedagogical Institute, Uzbekistan</i>
14:40 - 14:50	Green synthesis method of copper/copper oxide nanoparticles Narmin Imanova, Rasim Alosmanov, Irada Buniyat-zadeh <i>Baku State University, Azerbaijan</i>

14:50 - 15:00	<p>SrIn₂X₄(X-S.Se.Te) study of the electrophysical properties of ternary compounds</p> <p>Aytan Sultanova, Nagi Yagubov, Yasin Jafarov, Yegana Jafarova, Ilaha Mahammadova <i>Baku State University, Azerbaijan</i></p>
15:00 - 15:10	<p>Transition to green energy and the use of photovoltaic materials in Azerbaijan</p> <p>Amina Ahmedova, Nagi Yagubov, Yasin Jafarov, Malahat Bagiyeva, Humay Huseynova <i>Baku State University, Azerbaijan</i></p>
15:10 - 15:20	<p>Interplay between structural properties and photo-therapeutic efficiency in G-C₃N₄ nanocomposites</p> <p>Rashvin Mamedov, Irada Buniyat-zadeh <i>Baku State University, Azerbaijan</i></p>
15:20 - 15:30	<p>Synthesis of Ni-W-based electrocatalyst for water splitting</p> <p>Samir Safarov, Ruhangiz Huseynova, Ulviyya Gurbanova, Aygun Zeynalova Natavan Soltanova, Akif Aliyev <i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>
15:30 - 16:00	Coffee Break
16:00 - 16:10	<p>Influence of doping on the nonlinear optical and photoconductive properties of gallium selenide</p> <p>Aytan Sultanova, Nagi Yagubov, Yasin Jafarov, Kamala Aliyeva, Amina Ahmadova <i>Baku State University, Azerbaijan</i></p>
16:10 - 16:20	<p>A mixed-ligand Pb(IV) complex with orthocarboxybenzene azopyrocatechol and cetylpyridinium chloride</p> <p>Shahin Bayramov, Aydin Pashajanov, Zuleykha Mamedova <i>Institute of Catalysis and Inorganic Chemistry named after acad. M. Naghiyev, Azerbaijan</i></p>

16:20 - 16:30	<p>Selection of catalyst for the esterification reaction of dichloromaleic anhydrides (C₁-C₄) with aliphatic alcohols</p> <p>Sabina Mammadova, Yunusova Firuza, Arif Efendi, Irada Melikova <i>Institute of Catalysis and Inorganic Chemistry named after acad. M. Naghiyev, Azerbaijan</i></p>
16:30 - 16:40	<p>Integrative IN SILICO evaluation of sulfonamide derivatives as dual carbonic anhydrase I and ii inhibitors via molecular docking and ADME/T Profiling</p> <p>Harun Nalchakan¹, Gulbin Kurtay², Irem Sari¹, Musherref Onal¹ ¹Ankara University, Türkiye ²Hacettepe University, Türkiye</p>
16:40 - 16:50	<p>Nanodrug delivery systems and their clinical research stages</p> <p>Aykhan Aliyev, Aynura Karimova <i>Baku State University, Azerbaijan</i></p>
16:50 - 17:00	<p>Thermal analysis of modified nitrile rubber</p> <p>Jalil Aghayev¹, Fatma Kamranzadeh¹, Nurlana Binnetova², Rasim Alosmanov¹ ¹Baku State University, Azerbaijan ²Azerbaijan University of Architecture and Construction, Azerbaijan</p>
17:00 - 17:10	<p>Covalent organic frameworks: applications and properties</p> <p>Naila Taghiyeva, Rasim Alosmanov <i>Baku State University, Azerbaijan</i></p>
17:10 - 17:20	<p>Simultaneous adsorption of heavy metals and organic dyes by polymeric materials</p> <p>Darya Hasanova, Rasim Alosmanov <i>Baku State University, Azerbaijan</i></p>

17:20 - 17:30	<p>Antibacterial analysis of cotton fabric modified with Ag NP</p> <p>Narmin Imanova¹, Rasim Alosmanov¹, Tarana Suleymanova², Irada Buniyat-zadeh¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan Medical University, Azerbaijan</i></p>
17:30 - 17:40	<p>One-dimensional Ti₃C₂T_x MXene nanofiber anchored ultrafine iridium nanocrystals for alkaline hydrogen evolution</p> <p>Olim Ruzimuradov¹, Dong Fang² ¹<i>Turin Polytechnic University in Tashkent, Uzbekistan</i> ²<i>Kunming University of Science and Technology, China</i></p>
17:40 - 17:50	<p>Adsorption study of iron (III) ions by using black tea samples</p> <p>Esmira Eyyubova, Fatima Babayeva, Khalil Nagiyev, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
17:50 - 18:00	<p>Physicochemical properties of colloids obtained based on nematic liquid crystals and silver nanoparticles</p> <p>Gazanfar Bayramov, Lala Maharramova, Leyla Mirzaliyeva <i>Baku State University, Azerbaijan</i></p>
18:00 - 18:10	<p>EPR spectroscopic investigation of the anticorrosion efficiency of urea-based inhibitors</p> <p>Uktam Mardonov, Gulyayra Kholikova, Bakhtiyor Ganiev, Rigina Babayeva <i>Bukhara State University, Uzbekistan</i></p>
18:10 - 18:20	<p>Cobaltine is the main ore mineral of the cobalt-bearing ores at the dashkesan deposit</p> <p>Naila Yusifova, Aydin Pashadjanov <i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>

18:20 - 18:30	<p>Global trends and research hotspots in pvc-derived ion exchange materials: Bibliometric study (2000–2025)</p> <p>Hakimkhon Qurbonov¹, Dilfuza Gafurova¹, Maxammasidiq Rustamov², Mukhiddin Juliev^{3,4}</p> <p>¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i></p> <p>²<i>“Uzbekistan Technological Metals Complex” JSC, Uzbekistan</i></p> <p>³<i>National Research University, Uzbekistan</i></p> <p>⁴<i>Turin Polytechnic University, Uzbekistan</i></p>
18:30 - 18:40	<p>Rational design and IN SILICO profiling of novel bifunctional scaffolds for dual Integrin/PD-L1inhibition</p> <p>Harun Nalchakan¹, Musherref Onal¹, Gulbin Kurtay²</p> <p>¹<i>Ankara University, Türkiye</i></p> <p>²<i>Hacettepe University, Türkiye</i></p>
18:40 - 18:50	<p>Understanding the interaction between traditional triazole and modern β-pinene agrochemicals on the corrosion behavior of cobalt in H₂SO₄ solution</p> <p>Turan Yanardag¹, Yagmur Kahraman Yanardag^{1,2}, Nilseli Ozturk¹</p> <p>¹<i>Ankara University, Türkiye</i></p> <p>²<i>T.C. Directorate General of Agricultural Enterprises, Türkiye</i></p>
18:50 - 19:00	<p>Synthesis of substance 2-(4-amino-6-(2,4-dichlorophenyl)-5,6-dihydro-1,3,5-triazin-2(1H)-ylidene) malononitrile with biological and pharmacological properties</p> <p>Mir Ali Isakov¹, Bayim Isakova¹, Ibadulla Mahmudov^{1,2}, Afsun Sujayev¹, Jamila Ahmadova¹</p> <p>¹<i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p> <p>²<i>Baku Engineering University, Azerbaijan</i></p>

December 19, Friday

PARALLEL SESSIONS

Session 2-4: Modern approaches in chemistry education

Chairperson: Khalil Nagiyev (Azerbaijan)

Academic Building II, Room № 307

14:00 - 14:10	Use of computer technologies in teaching chemistry in Azerbaijan Be yaz Shafiyeva, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i>
14:10 - 14:20	Application of modern innovative technologies in chemistry teaching Arzu Pashayeva, Khalil Nagiyev, Parvin Mirzayeva <i>Baku State University, Azerbaijan</i>
14:20 - 14:30	Chemical experiment with food colourings in schoolchildren's project work Lala Jafarli, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i>
14:30 - 14:40	The role of technological and creative teaching approaches in the study of the topic "Nitrogen" Arzu Pashayeva, Khalil Nagiyev, Fidan Hasanzade <i>Baku State University, Azerbaijan</i>
14:40 - 14:50	Interdisciplinary learning as a means of mastering the concept of "Atomic structure" in chemistry lessons Arzu Pashayeva, Khalil Nagiyev, Esmira Heybatova <i>Baku State University, Azerbaijan</i>
14:50 - 15:00	Study of the level of residual chemical knowledge among first-year students Elmir Karimli, Aytan Asgarova, Khammed Asadov, Khalil Nagiyev <i>Baku State University, Azerbaijan</i>

15:00 - 15:10	<p>The role and development directions of the language of chemistry in scientific communication</p> <p>Khalil Nagiyev, Aysu Aliyeva, Esmira Rasulova <i>Baku State University, Azerbaijan</i></p>
15:10 - 15:20	<p>The challenges chemistry teachers face in planning STEAM-based lessons and the ways to overcome them</p> <p>Lala Nasibova, Lala Allahverdiyeva, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>
15:20 - 15:30	<p>The impact of the integrative teaching approach on the realization of students' creative potential</p> <p>Arzu Pashayeva, Shahla Azizli, Nezaket Malik-Yeganova <i>Baku State University, Azerbaijan</i></p>
15:30 - 16:00	Coffee Break
16:00 - 16:10	<p>Artificial intelligence and green chemistry integration for modeling sustainability-oriented chemistry lessons</p> <p>Arzu Pashayeva¹, Aysel Aliyeva² <i>¹Baku State University, Azerbaijan</i> <i>²Gazi University, Türkiye</i></p>
16:10 - 16:20	<p>Teaching the topic of "Phosphorus" in chemistry lessons through the integrative learning model</p> <p>Arzu Pashayeva, Khalil Nagiyev, Jale Elyasova <i>Baku State University, Azerbaijan</i></p>
16:20 - 16:30	<p>Applying critical thinking in chemistry teaching</p> <p>Sabina Shabanova, Nargiz Akhmedova, Khalil Nagiyev <i>Baku State University, Azerbaijan</i></p>

December 18, Friday

POSTER SESSION 1

10:00-14:00

Main Academic Building, 3rd Floor

1.	Similar and different reactions of thiophenols and mercaptoacetic acid esters Ilgar Huseynov, Gasim Huseynov <i>Baku State University, Azerbaijan</i>
2.	Ecological assessment of the environmental impact of heavy metals in the waste generated by the metallurgical industry Naila Jafarova, Sevinj Hajiyeva, Giyas Bayramov <i>Baku State University, Azerbaijan</i>
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25.	<p>Synthesis and study of corrosion inhibition property of 6-isodecyl substituted 1,3-benzoxazinium bromide in 0.5 N H₂SO₄</p> <p>Musa Bayramov¹, Gunay Mehdiyeva¹, Leman Azimli¹, Sevinch Ismayilova², Misir Javadov¹, Eldar Ahmadov¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>SOCAR, Oil and Gas Projects Institute, Azerbaijan</i></p>
26.	<p>Synthesis of 1-propargyloxy-2-morpholinomethyl-4-isohexylbenzene and a study of its anticorrosive properties in 0.5N H₂SO₄</p> <p>Musa Bayramov¹, Misir Javadov¹, Mahira Agayeva¹, Gunay Mehdiyeva¹, Zulfiya Javadova² ¹<i>Baku State University, Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i></p>
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31.	<p>Polymer additives with polyfunctional effect</p> <p>Fuad Aliyev, Aynura Hasanova <i>Ganja Branch of National Academy of Sciences, Azerbaijan</i></p>
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38.	<p>Study of azomethines nitrobenzylidene chloroacetamide and <i>n</i>-aminoacetophenone <i>N</i> (2hydroxyethyl) ethylenediamine as multifunctional additives</p> <p>Beyukkhanum Aminova, Tarana Ibragimova, Aygun Almammadova, Konul Qahramanova, Gulzar Mammadova, Gulshan Qasimli, Hidjran Babaeva <i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>
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40.	<p>Cotton and pomegranate waste: microbiological transformation into bioresources</p> <p>Konul Gahramanova¹, Elbey Babayev¹, Parvin Mamedova¹, Sabiya Osmanova^{1,2}, Tarana Ibragimova¹, Boyukchanim Aminova¹, Gulshen Kasymly¹ ¹<i>Institute of Chemistry of Additives named after acad. A. Guliyev, Azerbaijan</i> ²<i>Western Caspian University, Azerbaijan</i></p>
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42.	<p>Synthesis and study of corrosion inhibition property of 6-isooktyl substituted 3-bromophenyl-1,3-benzoxazinium bromide in 0.5 N H₂SO₄</p> <p>Musa Bayramov¹, Gunay Mehdiyeva¹, Sevinj Ismayilova², Misir Javadov¹, Mahira Agayeva¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>SOCAR, Oil and Gas Projects Institute, Azerbaijan</i></p>

43.	<p>8-Allyl- and 8-propenyl-substituted 1,3-benzoxazinium bromides as biocides and corrosion inhibitors in mineralized oil formation water saturated with H₂S and CO₂</p> <p>Gunay Mehdiyeva¹, Musa Bayramov¹, Famil Veliyev² ¹<i>Baku State University, Azerbaijan</i> ²<i>SOCAR, Oil and Gas Projects Institute, Azerbaijan</i></p>
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54.	<p>Production of biodiesel from waste biomass in georgia</p> <p>Natela Khetsuriani¹, Kakha Karchkhadze², ¹ <i>Institute of Physical and Organic Chemistry named after P.Melikishvili, Georgia</i> ² <i>Ilia State University, Georgia</i></p>
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59.	<p>Polymeric carriers as substrates for sensitive layers of optical sensors</p> <p>Zulaykho Smanova¹, Khilola Usmanova² ¹National University of Uzbekistan named after M. Ulughbek, Uzbekistan ²University of Public Security of the Republic of Uzbekistan, Uzbekistan</p>
60.	<p>Synthesis of tetracyclic benzoates</p> <p>Vusala Kadyrly, Minavar Ibrahimova, Rena Rasulova, Elnara Makhmudova, Khayala Mamedova, Irada Safarova, Jeyran Ismailova <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p>
61.	<p>Crystallographic and topological analysis of benzofuranone derivatives</p> <p>Ulviyya Askerova¹, Namiq Shikhaliyev², Abel Maharramov¹, Nigar Ahmadova¹, Shair Abdullazade¹ ¹Baku State University, Azerbaijan ²Baku Engineering University, Azerbaijan</p>
62.	<p>Investigation of the sorption of U(VI) ions using chelating polymer sorbents</p> <p>Fidan Bahmanova, Elnara Alirzayeva, Rahmina Mammadova, Nazim Shamilov, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
63.	<p>Sorption-photometric determination of palladium in a nickel anode</p> <p>Ulviya Abilova, Sevinj Hajieva, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
64.	<p>1-(Alkoxyethyl)benzimidazoline-2-thiones and their antimicrobial properties</p> <p>Vagif Farzaliyev, Malahat Abbasova, Garatel Kulieva, Leyla Safarova, Rena Babai, Leyla Shakhgeldieva, Rahima Mammadova, Garatel Eyvazova <i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>

65.	<p>Synthesis, crystal structure determination and DFT calculations of a Co(II) complex based on the ligand N²-(4-picolin-2-yl)-N⁶-(pyrazin-2-yl)pyridine-2,6-diamine</p> <p>Mansura Huseynova¹, Vaqif Farzaliyev¹, Afsun Sujayev¹, Rayyat İsmayilov², Sabina İsmayilova², Peng Shie-Ming³ ¹<i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i> ²<i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i> ³<i>National Taiwan University, Taiwan</i></p>
66.	<p>Study of complex formation of Cu (II) with (E)-2-hydroxy-3 - ((2hydroxybenzylidene)(amino)benzenesulfonic acid in the presence of a third components</p> <p>Chinara Mammadova, Fargana Aliyeva, Zarnishan Mustafayeva, Sevijn Hajiyeva, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
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68.	<p>Computational ADME–TOX profiling of halogenated dichlorodiazadiene derivatives: insights into fluorine, chlorine, and bromine substitution effects</p> <p>Teymur Sadikhli¹, Sevinc Mukhtarova², Gulnar Atakishiyeva¹, Samire Miriyeva¹, Namiq Shikhaliyev³ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan Technical University, Azerbaijan</i> ³<i>Baku Engineering University, Azerbaijan</i></p>
69.	<p>Bridging experiment and computation: in silico adme and toxicological analysis of halogenated dichlorodiazadiene derivatives</p> <p>Nigar Nagiyeva, Nurana Gurbanova, Gulnar Atakishiyeva, Shahnaz Gahramanova, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>

70.	<p>Synthesis, crystal structures, and bioactivity investigations of copper(II) complex with pyrazine-modulated long-chain oligo-α-aminopyridine ligand</p> <p>Sabina Ismayilova¹, Rayyat Ismayilov¹, Huseynova Mansura², Lala Guliyeva¹ ¹<i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i> ²<i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>
71.	<p>Synthesis, characterization and crystal structure of pyridine modulated tripyridyl diamide-Cu (II) and Zn(II) complexes</p> <p>Lala Guliyeva¹, Rayyat Ismayilov¹, Sabina Ismayilova¹, Huseynova Mansura² ¹<i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i> ²<i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>
72.	<p>Chemical interference of bilirubin in acid phosphatase (acp) assay: retrospective laboratory analysis</p> <p>Goncha Abbasova¹, Nijat Salimzade¹, Rugiyya Samedzade¹, Leyla Mammadova¹, Yaver Hacisoym², Ramin Bayramli² ¹<i>İnci Clinic, Azerbaijan</i> ²<i>Azerbaijan Medical University, Azerbaijan</i></p>
73.	<p>Comparative SWISSADME-based analysis of fluorinated, chlorinated and brominated dichlorodiazadiene derivatives</p> <p>Aytaj Rasulova, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>
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75.	<p>Nucleophilic coupling of amines to some thiranes</p> <p>Suraya Rzayeva, Rana Jafarova, Matanat Yusifova, İlhama Nuriyeva <i>Azerbaijan Medical University, Azerbaijan</i></p>

76.	<p>DFT study of the piperidinium-1,1-bis-(carboxymethylthio)-1-phenylethane</p> <p>Sabiya Osmanova^{1,2}, Malahat Kurbanova³ ¹<i>Institute of Chemistry of Additives named after acad.A. Guliyev, Azerbaijan</i> ²<i>Western Caspian University, Azerbaijan</i> ³<i>Baku State University, Azerbaijan</i></p>
77.	<p>Synthesis of 1h-pyrrolo[3,4-c]pyridine derivatives based on the reaction of (isoxazolyl)methylamines with ethyl 4-(chloromethyl)nicotinate</p> <p>Mahruza Shatirova, Ulduz Dzhafarova, Shahla Nagiyeva, Gulnur Mammadova <i>Institute of Polymer Materials, Azerbaijan</i></p>
78.	<p>Synthesis of imidazo[1,2-a]pyridine-3-amines based on a three-component system in the presence of perchloric acid</p> <p>Mahruza Shatirova, Aynur Karayeva, Shahla Sheydayeva, Lamiya Gadzhiyeva <i>Institute of Polymer Materials, Azerbaijan</i></p>
79.	<p>Structure of the Chitosan + Mn(II) complex</p> <p>Gunay Mammadova, Eldar Akhmedov <i>Baku State University, Azerbaijan</i></p>
80.	<p>Molecular design and critical ADME trade-offs in the series of (Z)-3-(2-phenylhydrazinylidene)benzofuran-2(3H)-one</p> <p>Ulviyya Askerova¹, Namiq Shikhaliyev², Abel Maharramov¹, Nigar Ahmadova¹, Maryam Isayeva¹, Gunel Karimova¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i></p>
81.	<p>DFT study of the 1,1-bis-(carboxymethylthio)-1-p-nitrophenylethane</p> <p>Sabiya Osmanova^{1,2}, Konul Kakhramanova¹, Malahat Kurbanova³ ¹<i>Institute of Chemistry of Additives named after acad.A.Guliyev, Azerbaijan</i> ²<i>Western Caspian University, Azerbaijan</i> ³<i>Baku State University, Azerbaijan</i></p>

82.	<p>Some transformations of γ-chlorobutyric acid chloride</p> <p>Hazra Amirova, Valeh Ismailov, Rakif Qasimov, Iskander Mamedov, Samira Miriyeva, Niftali Yusubov <i>Baku State University, Azerbaijan</i></p>
83.	<p>Synthesis based on 2-chloro-3-dichlorophosphoryl-4,5-dihydrofuran</p> <p>Aysel Amirova, Valeh Ismayilov, Rakif Qasimov, Iskander Mamedov, Mahira Cafarova, Niftali Yusubov <i>Baku State University, Azerbaijan</i></p>
84.	<p>A study of the effect of chitosan complexes on the post-oxidation of fermented milk</p> <p>Gunay Mammadova, Samira Miriyeva <i>Baku State University, Azerbaijan</i></p>
85.	<p>Bioavailability and metabolic stability optimization of halogenated dichlorodiazadiene derivatives: a SWISSADME-based computational study</p> <p>Aybeniz Khalilova, Nigar Ahmedova, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>
86.	<p>Design, synthesis, and computational characterization of halogen-substituted dichlorodiazadienes</p> <p>Fatima Majidzade¹, Gulnara Babayeva², Khatira Garazade¹, Gulnar Atakishiyeva¹, Namiq Shikhaliyev³ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan Technical University, Azerbaijan</i> ³<i>Baku Engineering University, Azerbaijan</i></p>
87.	<p>Structure–property relationship analysis of halogenated dichlorodiazadiene derivatives using swissadme platform</p> <p>Esmira Abdullayeva, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>
88.	<p>Spectrophotometric study of the complex compound formed by sm (III) with 4-Hydroxy-3-Nitrophenylazoacetone</p> <p>Ulviya Abilova, Farida Mammedova, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>

89.	<p>The study of antifungal properties of transition metal complexes</p> <p>Shahnaz Gahramanova, Rahman Fatullahzadeh, Gular Rahimli, Taleh Gahramanov <i>Baku State University, Azerbaijan</i></p>
90.	<p>Studying of Hirshfeld surface of the bis(4-phenylbutan-2-one-κ^2O,O') copper(II)</p> <p>Sardor Murodov^{1,2}, Soliha Rixsiboyeva¹, Shahlo Daminova^{1,2} ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i></p>
91.	<p>Influence of valine-based metal complexes on the growth and physiological performance of wheat seedlings</p> <p>Shahnaz Gahramanova¹, Tarana Asgarova², Rahman Fatullahzadeh¹, Gular Rahimli¹, Taleh Gahramanov¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>Institute of Catalysis and Inorganic Chemistry named after acad. M. Naghiyev, Azerbaijan</i></p>
92.	<p>Studying of X-Ray structure of the bis(acetato-κ^2O,O')(2-(phenylmethyl)-1H-benzimidazolyl)copper(II)</p> <p>Sardor Murodov^{1,2}, Gulnoza Babayeva¹, Gulbeka Mamatova^{1,2}, Lola Maxmudova¹, Shahlo Daminova^{1,2} ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i></p>
93.	<p>Predictive molecular design and safety assessment of halogenated dichlorodiazadiene derivatives using SWISSADME platform</p> <p>Fatima Agalarova, Seyran Kazimov, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>

94.	<p>PROTOX-III predicted toxicity profile of halogenated dichlorodiazadiene derivatives</p> <p>Shafiga İbrahimova¹, Sevinc Mukhtarova², Gulnar Atakishiyeva¹, Namiq Shikhaliyev³ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan Technical University, Azerbaijan</i> ³<i>Baku Engineering University, Azerbaijan</i></p>
95.	<p>IN SILICO target prediction and biological profiling of halogenated dichlorodiazadiene derivatives using swisstargetprediction platform</p> <p>Samira Zeynalli, Nurana Gurbanova, Aliyar Babazade, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>
96.	<p>IN SILICO bioavailability and permeation analysis of halogenated dichlorodiazadiene derivatives using the swissadme boiled-EGG model</p> <p>Jeyran Nuriyeva, Aliyar Babazade, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>
97.	<p>IN SILICO prediction of arrhythmia risk for selected halogenated dichlorodiazadiene derivatives: using WAY2Drug/ADVERPred service</p> <p>Nuriyeva Fidan¹, Aliyar Babazade¹, Gulnar Atakishiyeva¹, Namiq Shikhaliyev² ¹<i>Baku State University, Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i></p>
98.	<p>Computational prediction of ANTI-HIV activity using WAY2Drug HIVPred</p> <p>Ulkar Guliyeva, Aliyar Babazade, Nigar Ahmedova, Gulnar Atakishiyeva <i>Baku State University, Azerbaijan</i></p>
99.	<p>IN SILICO evaluation of anticancer potential of dihalogendiazabutadiene derivatives</p> <p>Fidan Almazova, Ayten Gajar, Aliyar Babazade, Gulnar Atakishiyeva, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>

100.	<p>Synthesis of (E)-2-methoxy-6-(((5-methylpyridin-2-yl)imino)methyl)phenol and its copper complex</p> <p>Gulu Abbasova¹, Ajdar Medjidov¹, Mustafa Sertçelik², Mansura Huseynova³</p> <p><i>¹Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p> <p><i>²Kafkas University, Türkiye</i></p> <p><i>³Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>
101.	<p>Computational prediction of cytotoxicity of dihalogendiazabutadiene derivatives using WAY2DRUG CLC-PRED</p> <p>Jala Elyasova, Nurana, Gurbanova, Aliyar Babazada, Gulnar Atakishiyeva</p> <p><i>Baku State University, Azerbaijan</i></p>
102.	<p>Study of rheological properties of hydrogels based on oxidized nanocellulose derivatives</p> <p>Fayruza Urishova, Makhliyo Kuzieva, Abdumutolib Atakhanov</p> <p><i>Institute of Polymer Chemistry and Physics, Uzbekistan</i></p>
103.	<p>Synthesis of new derivatives of N-substituted pyrroles</p> <p>Sebuhi Hagverdiyev, Elnur Huseyinov, Ayten Safarova, Farid Naghiyev</p> <p><i>Baku State University, Azerbaijan</i></p>
104.	<p>SWISSADME analysis of new pyrrole derivatives</p> <p>Sebuhi Hagverdiyev, Ayten Safarova, Elnur Huseyinov, Farid Nagiyev, Khammed Asadov</p> <p><i>Baku State University, Azerbaijan</i></p>
105.	<p>Thermal analysis of the [Ce(MAB)₂(BGK)₂NO₃] complex compound</p> <p>Bakhtigul Ruzieva^{1,2}, Feruza Fayzullayeva², Shahlo Daminova^{2,3}</p> <p><i>¹Alfraganus University, Uzbekistan</i></p> <p><i>²Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i></p> <p><i>³National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i></p>

106.	IN SILICO prediction of CYP3a4-mediated metabolic hotspots in halogenated dichlorodiazadiene derivatives
	<p>Ayten Gajar¹, Sevinc Mukhtarova², Gulnar Atakishiyeva¹ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan Technical University, Azerbaijan</i></p>
107.	Synthesis and structure of a new tetraazanaphthalene derivative
	<p>Ulkar Alizada, Afaq Zamanova, Hulya Eldarova, Jamila Annaghiyeva, Malahat Kurbanova <i>Baku State University, Azerbaijan</i></p>
108.	Studying of X-Ray structure of the bis(benzimidazole-2-carboxylato-κ²N,O)bis(2-aminobenzimidazole-κN)cobalt(II)
	<p>Farangiz Xojayeva¹, Rukhshona Muratkulova¹, Shakhzoda Allamurodova¹, Shahlo Daminova^{1,2} ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i></p>
109.	Studying of X-Ray structure of the bis(2-hydroxybenzoato)-bis(1-methyl-1H benzimidazol-2-amino)-cobalt
	<p>Salmon Mukhammadiev¹, Soliha Rixsiboeva², Shahlo Daminova^{1,2} ¹<i>Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i> ²<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i></p>
110.	Synthesis and investigation of analytical properties of azoschiff bases derived from acetylacetone
	<p>Famil Chragov, Kanan Aghayev <i>Baku State University, Azerbaijan</i></p>
111.	Synthesis, characterization and study of analytical properties of a compound derived from 4-aminoantipyrine and its complexes with metal ions
	<p>Kanan Aghayev¹, Famil Chragov¹, Fidan Taghiyeva¹, Afsun Sujayev² ¹<i>Baku State University, Azerbaijan</i> ²<i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>

112.	Determination of Pb (II) ions by complex formation with 2-(4-hydroxyphenylazo) benzoic acid
	<p>Yorqinoy Akhmadjonova, Zuxhra Yakhshieva, Khasan Zhuraev <i>Jizzakh State Pedagogical University, Uzbekistan</i></p>
113.	P-toluenesulfoallyltrithiocarbonate as an extreme pressure additive
	<p>Nelya Novotorzhina, Shafa Kazimzadeh, Yulduz Ramazonova, Mehpara Safarova, Gariba Gahramanova <i>Institute of Chemistry of Additives named after acad. A.Guliyev, Azerbaijan</i></p>
114.	Studying of DFT analysis of the bis(4-phenylbutan-2-one-κ^2O,O') copper(II)
	<p>Komila Ganiyeva¹, Shahlo Daminova^{2,3} ¹<i>Branch of D. I. Mendeleev University of Chemical Technology of Russia, Uzbekistan</i> ²<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ³<i>Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i></p>
115.	Synthesis and structural analysis of a triazine-containing compound derived from a pyrazole-based ligand, ortho-tolualdehyde, and malononitrile
	<p>Gamza Yahyayeva¹, Abel Maharramov², Ibadulla Mahmudov^{3,4}, Namiq Shikhaliyev³ ¹<i>Baku State University, Azerbaijan</i> ²<i>Azerbaijan University of Architecture and Construction, Azerbaijan</i> ³<i>Baku Engineering University, Azerbaijan</i> ⁴<i>Institute of Chemistry of Additives named after acad. A. Guliyev, Azerbaijan</i></p>
116.	X-Ray structural analysis of the crystal and molekular structure of the complex compound formed by cobalt (II) chloride with 1-methyl-2-(methylthio)-1H-benzo(d)imidazole
	<p>Gulnur Kurbanbaeva, Dilnoza Rakhmonova, Batirbay Torambetov, Guloy Alieva <i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i></p>

117.	<p>X-Ray structure investigation of metal complexes on the base of 2-aminobenzoxazole</p> <p>Sojida Sadullayeva, Akobir Toshov, Surayyo Razzoqova, Shakhnoza Kadirova <i>National University of Uzbekistan named after M.Ulugbek, Uzbekistan</i></p>
118.	<p>Drug-likeness and toxicological analysis of methyl (Z)-2-(4-fluorophenyl)-2-(2-(4-methoxyphenyl) hydrazinylidene) acetate</p> <p>Aliyar Babazade¹, Nigar Ahmedova¹, Gulshan Abdulova¹, Aysun Jafarguliyeva¹, Abel Maharramov¹, Namiq Shikhaliyev² ¹<i>Baku State University, Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i></p>
119.	<p>UV-VIS investigation of gelatin-based composite complexes</p> <p>Nargiz Rahimli, Elchin Babayev, Nigar Shikhverdiyeva, Konul Hasanova, Sara Jabiyeva, Rena Samadova <i>Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>
120.	<p>Interaction of the diethyl acetal of bromoacetic aldehyde with (thio)semicarbazide</p> <p>Aydin Mammadov, Valeh Ismailov, Niftali Yusubov, Nurlana Sadikhova <i>Baku State University, Azerbaijan</i></p>
121.	<p>Synthesis and crystal structure of a novel zinc(II) complex with 2-aminooxazole</p> <p>Akobir Toshov, Sojida Sadullayeva, Surayyo Razzoqova <i>National University of Uzbekistan named after M.Ulugbek, Uzbekistan</i></p>
122.	<p>Condensation of α-formyl furans with amines leading to the formation of Schiff bases</p> <p>Gunay Hajizada, Aydan Mammadzada, Valeh Ismayilov, Nurlana Sadikhova, Niftali Yusubov <i>Baku State University, Azerbaijan</i></p>

123.	<p>Sensory and docking properties of dibenzodiazepine crown esters, their application in analytical chemistry practice and pharmaceutical analysis</p> <p>Shahnaz Ismayilova¹, Kamala Badalova¹, Gulu Bagirzade¹, Elgul Abdullayeva² ¹<i>Azerbaijan Medical University, Azerbaijan</i> ²<i>Baku State University, Azerbaijan</i></p>
124.	<p>Interaction of γ-chlorobutyryl chloride with various amines</p> <p>Aydan Mammadzada, Gunay Hajizada, Valeh Ismayilov, Nurlana Sadikhova, Niftali Yusubov <i>Baku State University, Azerbaijan</i></p>
125.	<p>Results of sorption of maleimide-styrene-hepten-1 ternary copolymer with methylene green dye</p> <p>Mahammad Kazimov, Elchin Akberov, Fatma Kamranzadeh <i>Baku State University, Azerbaijan</i></p>
126.	<p>Spectrophotometric investigation of complexformation of germanium (IV) 2,3- dihydroxy-3-[2-hydroxy-3-sulfo-5-nitrophenylazo]-pentadione-2,4 in the presence of third compound</p> <p>Vusala Mardanova, Farida Mammadova, Fergana Aliyeva, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
127.	<p>Extraction-photometric determination of Cu(II) with 1-phenyl-2-(2-hydroxyphenylazo) butadione-1,3 in the presence of hydrophobic amines</p> <p>Chinara Mammadova, Farida Mammadova, Fargana Aliyeva, Sevinj Hajiyeva, Famil Chiragov <i>Baku State University, Azerbaijan</i></p>
128.	<p>Maleimide-styrene-heptene-1terpolymer as a potential adsorbent for dye removal</p> <p>Mahammad Kazimov, Elchin Akberov, Fatma Kamranzadeh <i>Baku State University, Azerbaijan</i></p>
129.	<p>Molecular docking analysis of the (E)-1-(1-(4-(tert-butyl) phenyl)-2,2-dichlorovinyl)-2-(4-methoxyphenyl)diazene with <i>E. coli</i> DNA gyrase B protein</p> <p>Gulnar Atakishiyeva, Ayten Gajar, Abel Maharramov <i>Baku State University, Azerbaijan</i></p>

130.	<p>Study of the in-silico ADMET and toxicological properties of methyl 2-(4-fluorophenyl)-2-(2-(p-tolyl) hydrazinylidene) acetate</p> <p>Aliyar Babazade¹, Nigar Ahmedova¹, Aida Kerimova¹, Farida Hacıyeva¹, Abel Maharramov¹, Namiq Shikhaliyev² ¹<i>Baku State University, Azerbaijan</i> ²<i>Baku Engineering University, Azerbaijan</i></p>
131.	<p>Hirshfeld surface analysis of 2-(2H-benzotriazol-2-yl)acetic acid</p> <p>Guloy Alieva¹, Shakhnoza Kadirova¹, Jamshid Ashurov² ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Institute of Bioorganic Chemistry, Uzbekistan</i></p>
132.	<p>Green chemistry-based environmentally clean methods of organic synthesis</p> <p>Arzu Mammadova, Aysura Guluzada, Bibixanim Mammadova, Salima Ovchiyeva, Zeynab Agazada <i>Sumgait State University, Azerbaijan</i></p>
133.	<p>Biological activity of furan compounds: their effectiveness against cancer and bacterial infections, synthesis processes, and practical significance</p> <p>Nodirabegim Alimova¹, Gozal Khudiyarova², Suvonqul Nurmanov¹, Asqar Parmanov¹ ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Institute of General and Inorganic Chemistry, Uzbekistan</i></p>
134.	<p>Optimization of alkyl-phenol based AKI-150 additive via central composite design</p> <p>Rahib Gasimov¹, Elmira Naghiyeva¹, Yusif Abdullayev² ¹<i>Institute of Chemistry of Additives named after acad. A. Guliyev, Azerbaijan</i> ²<i>Academician University of Texas at Austin, United States of America</i></p>

135.	<p>Crystal structure and supramolecular architecture of a new mixed-ligand copper (II) complex based on picolinate and thiadiazole derivative</p> <p>Gulnaz Khojabaeva, Batirbay Torambetov, Shakhnoza Kadirova <i>National University of Uzbekistan, Uzbekistan</i></p>
136.	<p>Study of furan-containing compounds: investigating antibacterial, antifungal, and antitumor activity</p> <p>Guzal Khudiyarova¹, Nodirabegim Alimova², Askar Parmanov,² Ganieva Sayyora¹ ¹<i>Institute of General and Inorganic chemistry, Uzbekistan</i> ²<i>National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i></p>
137.	<p>Analysis of macro- and microelement composition in the aerial parts of <i>atrappaxis spinosa</i></p> <p>Umida Yulchiyeva¹, Shavkat Abdullayev², Nodira Abdullajonova¹ ¹<i>Namangan State University, Uzbekistan</i> ²<i>Institute of Bioorganic Chemistry, Uzbekistan</i></p>
138.	<p>From crystal structure to docking: predicting the enhanced bioactivity of a benzotriazole-based Cu(II) Complex</p> <p>Guloy Alieva¹, Shakhnoza Kadirova¹, Jamshid Ashurov² ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Institute of Bioorganic Chemistry, Uzbekistan,</i></p>
139.	<p>Synthesis of a 1-methyl-3-methylthio-5-amino-1,2,4-triazole complex based on nickel (II) sulfate</p> <p>Shakhnoza Mavlonova, Shukhratjon Turgunov, Madina Ahmadova, Khayrullayev Giyosiddin, Shakhnoza Kadirova <i>National University of Uzbekistan named after M.Ulughbek, Uzbekistan</i></p>

140.	<p>Crystal structure of the complex bis(1,3-benzthiazole-2-thiolato)(1,10-phenanthroline)zinc</p> <p>Gulchekhra Abdullaeva¹, Shahlo Daminova^{1,2} ¹National University of Uzbekistan, named after M.Ulughbek, Uzbekistan ²Uzbek-Japanese Youth Innovation Center, Uzbekistan</p>
141.	<p>Biological activity of furan compounds: their effectiveness against cancer and bacterial infections, synthesis processes, and practical significance</p> <p>Nodirabegim Alimova¹, Gozal Khudiyarova², Suvonqul Nurmanov¹, Asqar Parmanov¹ ¹National University of Uzbekistan named after M.Ulughbek, Uzbekistan ²Institute of General and Inorganic Chemistry, Uzbekistan</p>
142.	<p>X-Ray structure investigation of metal complexes on the base of 2-aminobenzoxazole</p> <p>Sojida Sadullayeva, Akobir Toshov, Surayyo Razzoqova, Shakhnoza Kadirova National University of Uzbekistan named after M. Ulughbek, Uzbekistan</p>
143.	<p>Synthesis and crystal structure of a novel zinc(II) complex with 2-aminooxazole</p> <p>Akobir Toshov, Sojida Sadullayeva, Golibjon Yashnarov, Surayyo Razzoqova National University of Uzbekistan named after M. Ulughbek, Uzbekistan</p>
144.	<p>Determination of chromium (III) content using an organic reagent immobilized on a natural sorbent</p> <p>Zulaykho Smanova, Ayjamal Turambetova, Muborak Abdullayeva, Marjona Nasrullayeva National University of Uzbekistan named after M. Ulughbek, Uzbekistan</p>

145. **Spectrophotometric study of the complex formed by Gd(III) with 2,2',3,4-tetrahydroxy-3'-sulfo-5'-nitroazobenzene in the presence of a third component**

Fatali Huseynov¹, Lala Gurbanova, Minaya Mammadova¹, Fargana Khalilova¹, Farida Mammadova², Ismail Aliyev¹

¹*Baku State University, Azerbaijan*

²*Ganja State University, Azerbaijan*

December 19, Friday

POSTER SESSION 2

10:00-14:00

Academic Building II, 1st Floor

1. **Biomass-based catalytic synthesis of ethylvalerate in the presence Zr/SiO₂ catalyst**
- Konul Alakbarova¹, Sabina Ismikhanli², Miraye Hasanzade², Elmir Babayev^{1,2,3}, Adila Aliyeva¹, Arif Afandi¹**
- ¹*Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan*
- ²*Baku State University, Azerbaijan*
- ³*Baku Engineering University, Azerbaijan*
2. **Sb₂Se₃ photoelectrodes in the water splitting process**
- Gunel Khalilova¹, Vusala Majidzade²**
- ¹*Baku State University, Azerbaijan*
- ²*Institute of Catalysis and Inorganic Chemistry named after acad. M. Naghiyev, Azerbaijan*
3. **Hydrogen-free reforming of straight-run gasoline fraction in the presence of catalysts based on modified zsm-5 zeolite**
- Susen Shirinova¹, Aytan Mammadova², Sakina Mirzaliyeva¹, Sabit Mammadov¹**
- ¹*Baku State University, Azerbaijan*
- ²*Azerbaijan State Oil and Industry University, Azerbaijan*

4.	<p>Quantum-chemical study of sodium Bis(2-ethylhexyl) Sulfosuccinate (AOT): analysis of electronic structure and stability of micellar systems using the DFT method</p> <p>Abdulaziz Ubaydullayev¹, Oksana Ismailova^{1,2} ¹<i>Branch of D. I. Mendeleev University of Chemical Technology of Russia, Uzbekistan</i> ²<i>Uzbekistan-Japan Innovation Centre of Youth, Uzbekistan</i></p>
5.	<p>Sol-gel synthesis, structure and adsorption properties of Mg²⁺ modified Li-Mn spinels</p> <p>Sherzodbek Mirzaev¹, Shakhnoza Begimkulova², Olim Ruzimuradov³ ¹<i>Samarkand State University named after Sh. Rashidov, Uzbekistan</i> ²<i>Zarmed University, Uzbekistan</i> ³<i>Turin Polytechnic University in Tashkent, Uzbekistan</i></p>
6.	<p>Synthesis of composite materials based on epoxy polymers and investigation of their sorption properties</p> <p>Mavluda Khidirova^{1,2}, Muzaffar Mahkamov¹ ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Tashkent Medical University, Uzbekistan</i></p>
7.	<p>Synthesis and application of polyacrylonitrile-based sorbents for the removal of toxic and heavy metal ions from wastewater</p> <p>Hakimkhon Qurbonov¹, Dilfuza Gafurova¹, Maxammasidiq Rustamov² ¹<i>National University of Uzbekistan named after M. Ulughbek, Uzbekistan</i> ²<i>Uzbekistan Technological Metals Complex" JSC, Uzbekistan</i></p>
8.	<p>Oxidative desulfurization of a wide coking gasoline fraction with hydrogen peroxide over a heterogeneous catalyst</p> <p>Sahib Yunusov, Aygun Aliyeva, Zohra Babaeva, Khalida Talibova, Gulnar Gadjieva, Elena Batyukova <i>Institute of Petrochemical Processes named after acad. Y. Mammadaliyev, Azerbaijan</i></p>
9.	<p>Formation of extracomplexes of metalloporphyrins</p> <p>Shafa Mammadova <i>Azerbaijan Pedagogical University, Azerbaijan</i></p>

10.	<p>Metalloporphyrins' mono- and biligand extracomplexes</p> <p>Shafa Mammadova <i>Azerbaijan Pedagogical University, Azerbaijan</i></p>
11.	<p>Oil compositions based on oligomeric oil fractions and mineral oils</p> <p>Matlab Khamiyev, Minaver Ibrahimova, Reyhan Aliyeva, Shafaq Bagirova <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p>
12.	<p>Synthesis cetirizine substituted metal complexes and biological activities</p> <p>Aysel Rahimova, Orxan Qasimzade, Zakir Ismailov <i>Baku State University</i></p>
13.	<p>Study of the bactericidal effect of the nitrodicyclopentadiene-propylamine complex on the biocorrosion process</p> <p>Vaqif Abbasov¹, Durna Aghamaliyeva^{1,2}, Chira Musaeva¹, Aydan Kangarli¹ ¹<i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i> ²<i>Azerbaijan State Oil and Industry University, Azerbaijan</i></p>
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31.	<p>Effect of zinc oxide and fullerene C_{60/70} nanoparticles on the electro-optical properties of isotactic polypropylene</p> <p>Aida Dunyamalieva¹, Nushaba Kurbanova¹, Eldar Zeynalov², Asgar Huseynov²</p> <p><i>¹Institute of Polymer Materials, Azerbaijan</i> <i>²Institute of Catalysis and Inorganic Chemistry named after acad. M.Naghiyev, Azerbaijan</i></p>
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50.	<p>Glass formation and properties of glasses of the Er-As-S system</p> <p>Teymur Ilyasli, Rena Abbasova, Gunel Gakhramanova, Zakir Ismailov <i>Baku State University, Azerbaijan</i></p>
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57.	<p>Synthesis Co, Ni and Zn complexes and biological properties</p> <p>Aysel Rahimova, Humay Huseynova, Samina Sultanova, Sevda Ismayilova, Kamala Mustafayeva, Tarana Qurbanova <i>Baku State University, Azerbaijan</i></p>
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63.	<p>Oxidative dehydrodisproportionation of methylcyclohexane on modified zeolite catalysts</p> <p>Arzu Jalilova, Khafiz Alimardanov <i>Institute of Petrochemical Processes named after acad. Y.Mammadaliyev, Azerbaijan</i></p>
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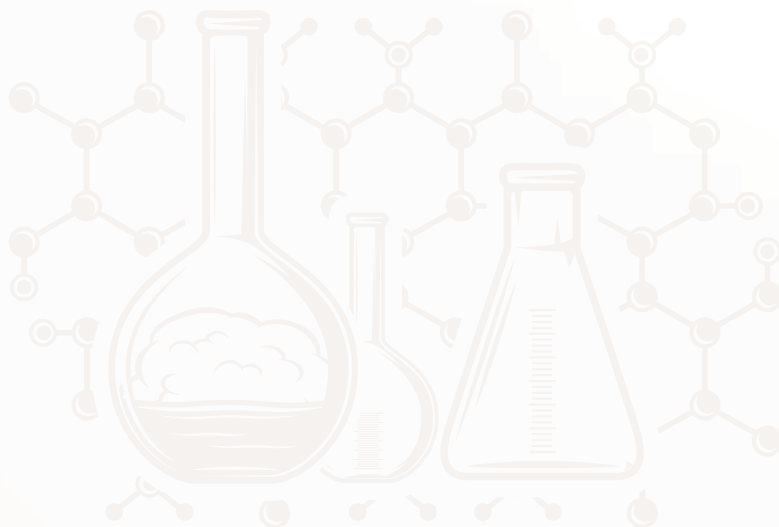
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