

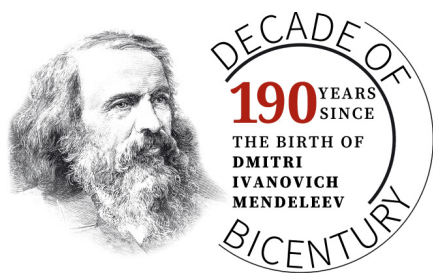


MENDELEEV 2024

XIII International Conference on Chemistry
for Young Scientists

CONFERENCE PROGRAM

DEDICATED TO



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Dr. **Svetlana Baykova**

Georgii Misikov

Troyana Kissler

Liya Arkaniya

Elina Alikparova

Mark Kaplanskiy

PLENARY SPEAKERS



Dr. Sci., Prof. Yulia Gorbunova

Academician of the Russian Academy of Sciences (RAS), Vice-President of the Mendeleev Russian Chemical Society, Dean of the Faculty of Lomonosov Moscow State University, Head of the Group, Kurnakov Institute of General and Inorganic Chemistry of the RAS, Moscow, Russia

The Molecular Basis of Tetrapyrrole Action as Nanophototheranostic Agents

Dr. Sci., Prof. Alexander Terent'ev

Corresponding Member of the Russian Academy of Sciences (RAS), Director, N. D. Zelinsky Institute of Organic Chemistry Russian Academy of Sciences, Moscow, Russia

The Wonderful World of Organic Peroxides



Dr., Prof. Ping Xu

Vice Dean, School of Chemistry and Chemical Engineering, Harbin, China

Magnetic Field-Assisted Electrocatalysis

Dr., Prof. Rongxin Su

Vice Dean, School of Chemical Engineering and Technology, Tianjin University, Tianjin, China

Green Production and Application of Nanocellulose



Dr., Prof. Daniel Pasquini

Universidade Federal de Uberlândia, Uberlândia, Brazil

Lignocellulosic Biomass as a Source to Produce Biofuels, Chemicals, and Polymers, in the Context of Biorefinery



Dr. Sci., Prof. Sergei Shtykov

Honored Scientist of the Russian Federation, Saratov State University, Saratov, Russia

Nanoanalytics – a Reply of Analytical Chemistry to the Era of Nanotechnology

Dr. Sci., Prof. Artem Oganov

Professor of the Russian Academy of Sciences (RAS), Skolkovo Institute of Science and Technology, Moscow, Russia

Structure and Composition of Crystals and Molecules: Novel Phenomena and Their Explanation



Dr. Sci., Prof. Olga Korableva

Member of the International Association Enterprise Architecture/ Open Group, Entrepreneurship and Innovation, St. Petersburg State University, St. Petersburg, Russia

Science-intensive Economy and Systemic Technological Transformation in the Modern Development of the Chemical Industry

KEYNOTE SPEAKERS

Dr. Sci., Prof. Alexei Volkov

Professor of the Russian Academy of Sciences, A.V. Topchiev Institute of Petrochemical Synthesis Russian Academy of Sciences, Moscow, Russia

Polymers for Separation on Molecular Level



Dr. Sci., Prof. Pavel Postnikov

Research School of Chemistry & Applied Biomedical Sciences, Tomsk Polytechnic University, Tomsk, Russia

Plasmon-Assisted Chemistry: From Mechanisms to Application



Dr. Sci., Chief Researcher, Vladimir Apyari

*Division of Analytical Chemistry, Department of Chemistry,
Lomonosov Moscow State University, Moscow, Russia*

**Gold and Silver Nanoparticles in
Spectrophotometric/Colorimetric Analysis:
Behavior, Peculiarities, Opportunities**

Dr. Sci., Prof. Leonid Fershtat

*N.D. Zelinsky Institute of Organic Chemistry Russian Academy of
Sciences, Moscow, Russia*

**Nitrogen-Oxygen Heterocyclic Systems: Novel
Synthetic Approaches and Emerging Trends**



Dr. Sci., Prof. Irina Goryacheva

*Head of the Department of General and Inorganic Chemistry,
Director of the Institute of Chemistry, Saratov State University,
Saratov, Russia*

Semiconductor Quantum Dots for Bioanalysis

Dr. Sci., Prof. Konstantin Lyssenko

*Professor of the Russian Academy of Sciences, Lomonosov Moscow
State University, Moscow, Russia*

**Experimental Charge Density Studies of Crystalline
Solids as the Inexhaustible Source of Data on
Interatomic Interactions**



Dr. Evgeniya Zhalskaya

Head of the Analytics Department, Solopharm, Russia

**Organization of the Process of Import Substitution
in the Pharmaceutical Market of Russia**

Dr., Prof. Lei Wang

Harbin Institute of Technology, Harbin, China

Construction of Artificial-Cell-Based Micromotors and the Investigation of Their Life-Like Behaviors



INVITED SPEAKERS



Dr., Prof. Jianmin Sun

Harbin Institute of Technology, Harbin, China

Design of Lewis Acid-Base Bifunctional Catalyst for Chemical Conversion of CO₂ to Cyclic Carbonate

Dr., Prof. Jefferson L. Ferrari

Institute of Chemistry, Federal University of Uberlândia, Uberlândia, Brazil

The Conversion of Energy into Inorganic Materials Containing Rare Earths for Possible Use in Photodynamic Therapy



Dr. Sci., Prof. Dmitry Perekalin

A.N. Nesmeyanov Institute of Organoelement Compounds of Russian Academy of Sciences, Moscow, Russia

Synthesis of Chiral Boranes by Asymmetric Insertion of Diazoacetates into B-H Bonds

Dr. Sci., Prof. Dmitry Dar'in

St Petersburg University, St. Petersburg, Russia

New Ligands of the Ubiquitin Ligase Cereblon for Targeted Proteasomal Protein Degradation





Dr., Prof. Denis Sabirov

Institute of Petrochemistry and Catalysis – Subdivision of the Ufa Federal Research Centre of the Russian Academy of Sciences, Ufa, Russia

Information Entropy in Theoretical Chemistry

Dr. Kirill Grzhegorzhevskii

Head of Laboratory of Nanocluster Polyoxometalates Functional Design, Institute of Natural Sciences and Mathematics, Ural Federal University named after the First President of Russia B.N. Yeltsin, Yekaterinburg, Russia

Hybrid Nanocluster-Embedded Hydrogels For The Controlled Drug Release and Bioink Application



Dr. Sci., Assoc. Prof. Andrey Mereshchenko

St Petersburg University, St. Petersburg, Russia

Luminescent Heterometallic Rare Earth Based Terephthalate MOFs

Dr. Andrey Kulsha

Belarusian State University, Minsk, Belarus

Strong Bases Design: Key Techniques and Stability Issues



Dr. Tatiana Plisko

St Petersburg University, St. Petersburg, Russia

Influence of Molecular Weight and Concentration of Poly(Diallyldimethylammonium Chloride) Added to Coagulant on the Structure and Performance of Thin Film Composite Membranes for Nanofiltration



Dr., Prof. Andrey Shishov

St Petersburg University, St. Petersburg, Russia

Deep Eutectic Solvents in Microextraction Methods of Analysis

Dr., Assoc. Prof., Olga Osmolovskaya

St Petersburg University, St. Petersburg, Russia

Inorganic Nanosorbents for Solid-Phase Microextraction: Preparation, Most Important Parameters and Examples of Application

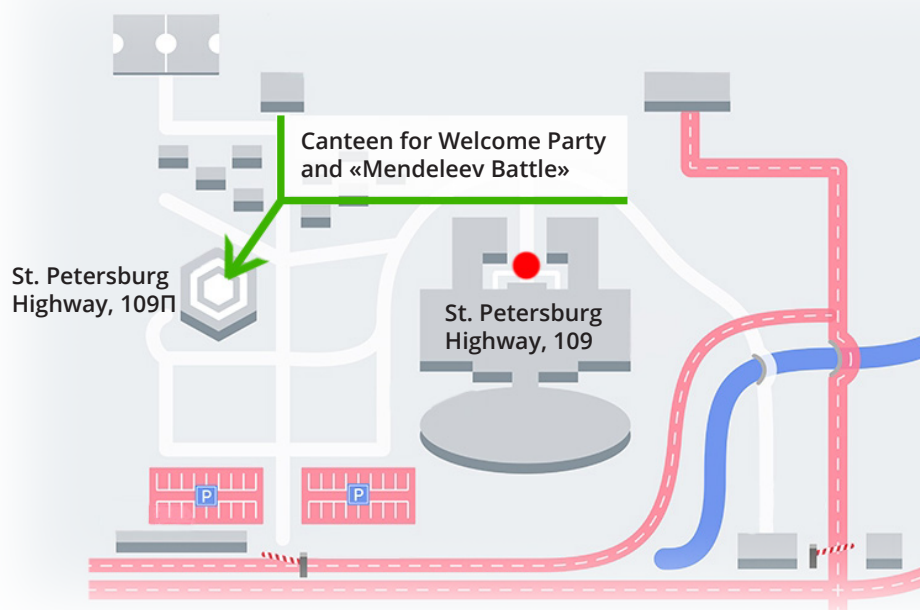
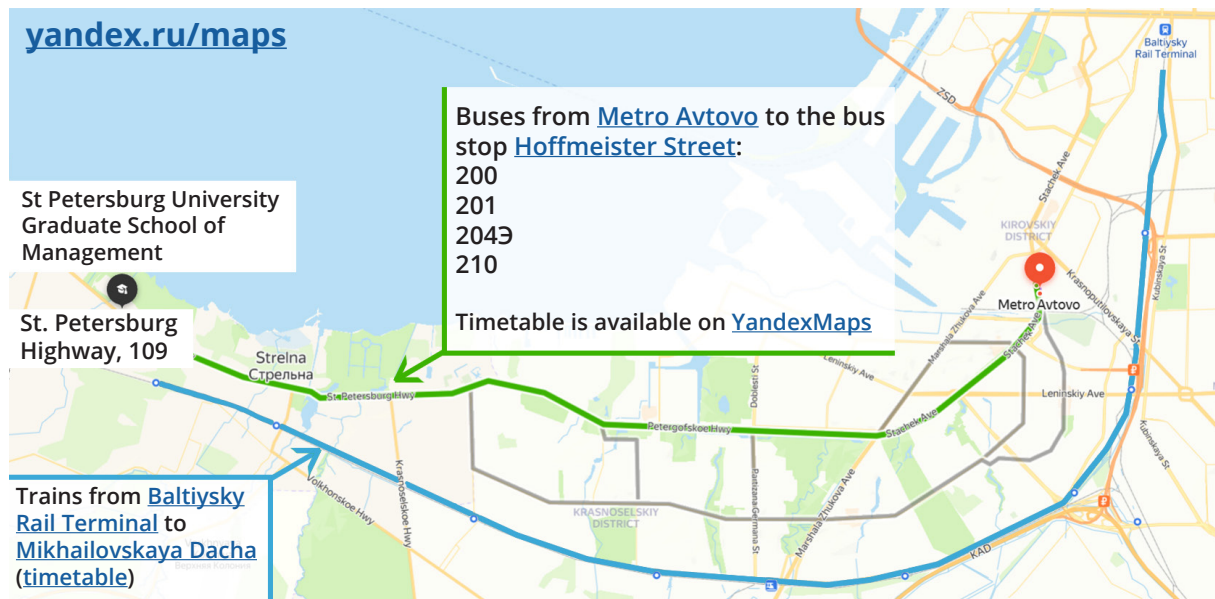


Dr. Sci., Prof. Dmitry Kirsanov

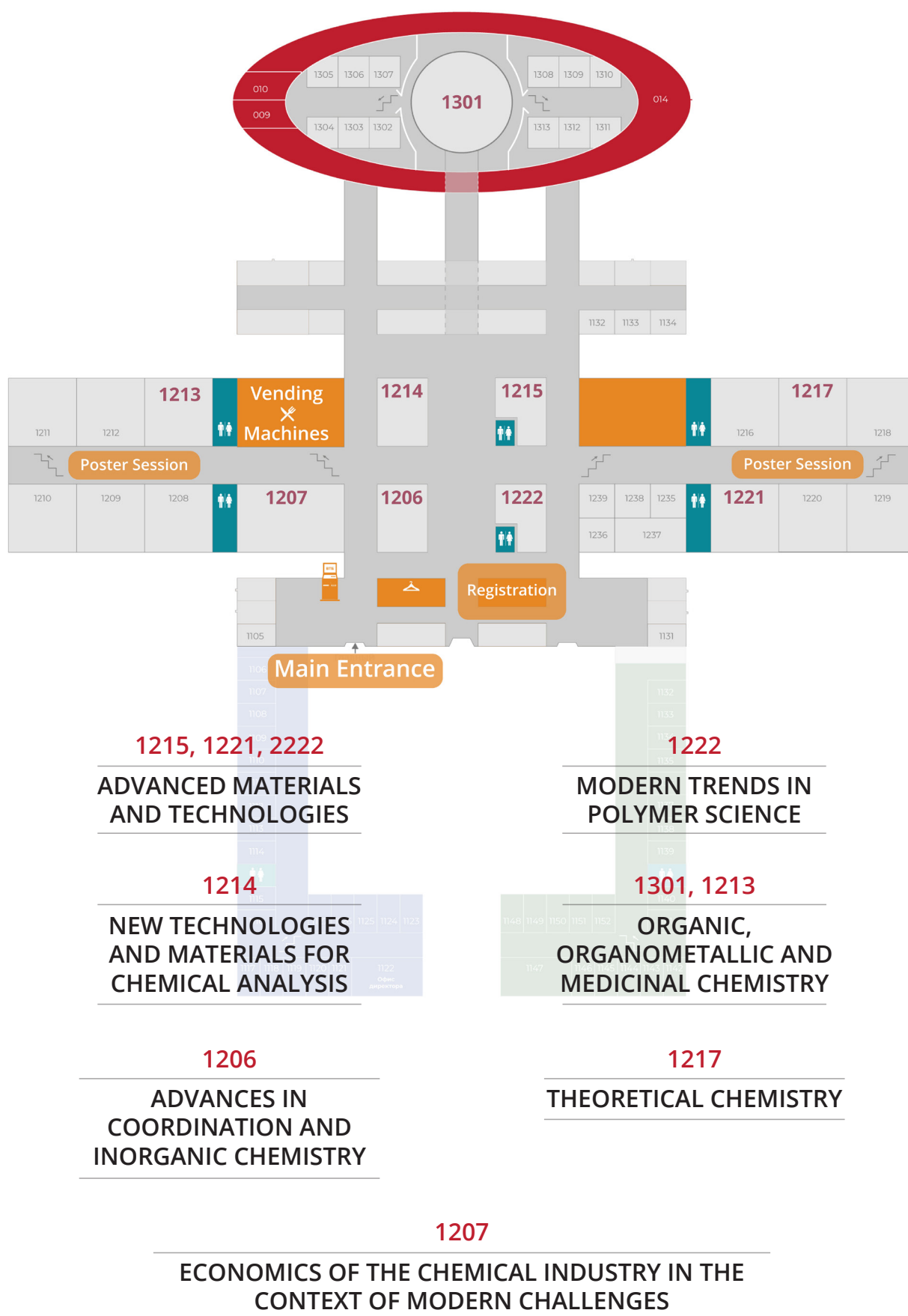
St Petersburg University, St. Petersburg, Russia

Machine Learning, Artificial Intelligence and Chemometrics in Analytical Chemistry - What's the Difference?

LOCATION



BUILDING PLAN





SCIENTIFIC PROGRAM

MONDAY, 02.09

St. Petersburg Highway, 109, Peterhof, St. Petersburg

16:00 - 18:00 Registration

TUESDAY, 03.09

CHAIRMAN: Dr. Sci. Irina Balova

9:00 - 10:00 Registration
Poster Placement

10:00 - 10:30 Opening Ceremony **1301**
The Speech of the General Sponsor
The Speech of Dr. Sci. Irina Balova
The Speech of Invited Guests

CHAIRMAN: Dr. Sci. Anastasia Penkova

10:30 - 11:15 Academician of the RAS, Dr. Sci. **Yulia Gorbunova**

11:15 - 11:30 Coffee Break

11:30 - 12:15 Corr. Member of the RAS, Dr. Sci. **Alexander Terent'ev**

12:15 - 13:00 **Dr. Rongxin Su**

13:00 - 13:45 Dr. Sci **Olga Korableva**

13:45 - 15:00 Lunch Time

15:00 - 16:45 Poster Session

17:00 - 20:00 Welcome Party **See page 10**

WEDNESDAY, 04.09

9:00 - 10:00 Registration

9:00 - 11:00 Section Presentations

1215, 1221
ADVANCED MATERIALS AND
TECHNOLOGIES

1222
MODERN TRENDS IN POLYMER
SCIENCE

1214
NEW TECHNOLOGIES AND
MATERIALS FOR CHEMICAL
ANALYSIS



1301, 1213 ORGANIC, ORGANOMETALLIC AND MEDICINAL CHEMISTRY	1206 ADVANCES IN COORDINATION AND INORGANIC CHEMISTRY	1217 THEORETICAL CHEMISTRY	1207 ECONOMICS OF THE CHEMICAL INDUSTRY IN THE CONTEXT OF MODERN CHALLENGES
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11:00 - 11:20	Coffee Break	
11:20 - 13:20	Section Presentations	
11:20 - 16:05	Bilateral Forum «Sino-Russian Joint Research Center for Chemistry»	2222
11:20 - 13:20	Master Class of ChemistryEasy	1207
13:20 - 14:20	Lunch Time	
14:20 - 15:20	Panel Discussion «Bridging the Gap: Science and Industry in Conversation»	1301
16:30 - 20:00	Excursion to the Dmitri Mendeleev Museum and Archives Sightseeing tour of Saint Petersburg Excursion to the St Petersburg University Research Park	

THURSDAY, 05.09

9:00 - 10:00	Registration
9:30 - 11:30	Section Presentations

1215, 2222 ADVANCED MATERIALS AND TECHNOLOGIES	1222 MODERN TRENDS IN POLYMER SCIENCE	1214 NEW TECHNOLOGIES AND MATERIALS FOR CHEMICAL ANALYSIS	
1301, 1213 ORGANIC, ORGANOMETALLIC AND MEDICINAL CHEMISTRY	1206 ADVANCES IN COORDINATION AND INORGANIC CHEMISTRY	1217 THEORETICAL CHEMISTRY	1207 ECONOMICS OF THE CHEMICAL INDUSTRY IN THE CONTEXT OF MODERN CHALLENGES

11:30 - 11:50	Coffee Break
11:50 - 13:50	Section Presentations
13:50 - 14:50	Lunch Time



14:50 - 16:50

Section Presentations

16:50 - 17:10

Coffee Break

17:00 - 18:30

Poster Session
Sponsors' Presentations

1222

18:30 - 20:00

«Mendeleev Battle» from 

A90B.COM

See page 10

FRIDAY, 06.09

CHAIRMAN: Dr. Sci. Andrey Shishov

10:00 - 10:45

Dr. Sci. **Sergei Shtykov**

1301

10:45 - 11:30

Dr. **Ping Xu**

11:30 - 12:15

Dr. **Daniel Pasquini**

12:15 - 13:00

Dr. Sci. **Artem Oganov**

13:00 - 13:30

Coffee Break

13:30 - 14:30

Best Speakers Awarding Ceremony
Closing Ceremony



SPONSORS PROGRAM

THURSDAY, 05.09, 1222

17:00 - 17:20

LABTEST

Cooperation of RCC «LABTEST» with Scientific and Control Laboratories. Experience and Opportunities

17:20 - 17:40

AXELPHARM

Skornyyakov Yu.V.

Modern Requirements of the Pharmaceutical Industry for the Quality of Peptide and Low-Molecular Organic Compounds

1. ADVANCED MATERIALS AND TECHNOLOGIES

CHAIRMAN: Dr. Sci. **Alina Manshina**, Institute of Chemistry, SPbU

SECRETARY: Dr. **Anna Vasileva**, Institute of Chemistry, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1215

9:00 - 9:40
**KEYNOTE
SPEAKER**

Dr. Sci. Pavel Postnikov

Plasmon-Assisted Chemistry: From Mechanisms to Application

9:50 - 10:00

Lobanova E.M., Bochenkov V.E., Bahratov I.A.

CHIRAL PLASMONIC NANOCRESCENTS FOR SENSING: SYNTHESIS AND OPTICAL PROPERTIES

10:00 - 10:10

Murausky D.I., Artem'ev M.V.

USING DIELECTRIC MIE-RESONANCES IN SEMICONDUCTOR NANO HETEROSTRUCTURES FOR PHOTOCATALYSIS ENHANCING

10:10 - 10:20

Del Carpio Rocha A., Soldatova D.A.

THE ROLE OF THE SHELL IN HYBRID MOLECULAR-PLASMONIC NANOSTRUCTURES

10:20 - 10:30

Tkachenko D.S., Meshina K.I., Zheltova V.V., Bobrysheva N.P., Osmolowsky M.G., Voznesenskiy M.A., Osmolovskaya O.M

DISTINCTIVE FEATURES OF THE Fe_3O_4 @ZnO CORE-SHELL NANOPARTICLE FORMATION, THEIR STRUCTURE AND PHOTOCATALYTIC ACTIVITY

10:30 - 10:40

Golovin M.S., Mironova A.T., Zakharchenkova V.P., Bulatova E.A., Bol'shakov O.I.

PROMISING PHOTOCATALYSTS BASED ON POLY(TRIAZINE IMIDE)

10:40-10:50

Kharina S.N., Kurenkova A.Yu., Kozlova E.A.

MODIFIED GRAPHITIC CARBON NITRIDE-BASED COMPOSITES AS PHOTOCATALYSTS FOR HYDROGEN PRODUCTION UNDER VISIBLE LIGHT

10:50 - 11:00

Matsenko R.O., Silyukov O. I., Kurnosenko S.A.

PREPARATION OF NANOCOMPOSITES BASED ON EXFOLIATED ORGANIC-INORGANIC DERIVATIVES OF LAYERED DOUBLE HYDROXIDES AND LAYERED PEROVSKITE-LIKE OXIDES

11:20 - 11:40
**INVITED
SPEAKER**

*Dr. Kirill Grzhegorzhevskii, Levchenko A.E., Kopchuk D.S.,
Nikonov I.L., Valieva M.I., Borovykh D.V.*

**Hybrid Nanocluster-Embedded Hydrogels For The
Controlled Drug Release and Bioink application**

11:50 - 12:00

*Podurets A.A., Skripkin E.V., Bobrysheva N.P., Osmolowsky M.G.,
Voznesenskiy M.A., Osmolovskaya O.M.*

**DESIGN OF THE PHOTOCATALYTIC PROPERTIES OF TIN
DIOXIDE NANOPARTICLES THROUGH STRUCTURAL
PARAMETERS AND SHAPE**

12:00 - 12:10

Galaeva Z.R., Khramtsov P.V.

**SYNTHESIS OF FLUORESCENT ALBUMIN NANOPARTICLES
BY DESOLVATION METHOD**

12:10 - 12:20

Doroshenko A.V., Tomina E.V., Jujukin K.V.

**COMPARISON OF PHOTOCATALYTIC PROPERTIES OF
 CoFe_2O_4 , MgFe_2O_4 AND $\text{Co}_{0.5}\text{Mg}_{0.5}\text{O}_4$**

12:20 - 12:30

Fazliev T.R., Selishchev D.S.

**FORMATION OF PEROXIDE SPECIES DURING
PHOTOCATALYTIC WATER SPLITTING OVER TiO_2 -BASED
PHOTOCATALYSTS**

12:30 - 12:40

Shumilkin A.S., Vernaya O.I., Semenov A.M., Shabatina T.I.

**CRYOCHEMICAL SYNTHESIS OF MAGNETIC IRON OXIDE
NANOPARTICLES AND THEIR HYBRID SYSTEMS WITH
CHLORAMPHENICOL**

12:40 - 12:50

Arbanas S., Kolesnik I.V.

**PHOTOPROTECTIVE AND PHOTOCATALYTIC PROPERTIES
OF COMPLEX CERIUM AND TITANIUM OXIDES**

12:50 - 13:00

Aleksandrov Yu.D., Sergeyev V.G., Karpushkin E.A.

**SIZE AND STABILIZER - DEPENDENT CATALYTIC BEHAVIOR
OF GOLD NANOPARTICLES**

13:00 - 13:10

*Lolaeva A.V., Zhivchikova A.N., Tepliakova M.M., Akkuratov A.V.,
Kuznetsov I.E.*

**NOVEL THIAZOLOTHIAZOLE-BASED CONJUGATED
POLYMER FOR THE INDOOR PHOTOVOLTAIC
APPLICATIONS**



13:10 - 13:20

Petrova V.I., Kozlov S.S., Alexeeva O.V., Nikolskaia A.B.,
Shevaleevskiy O.I.

**OPTIMIZATION OF DYE SENSITIZED SOLAR CELLS FOR
EFFICIENT OPERATION UNDER LOW-LIGHT CONDITIONS
AND ARTIFICIAL INDOOR ILLUMINATION**

WEDNESDAY, 04.09, Room 1221

9:50 - 10:00

Agapitova M.M., Tepliakova M.M.

**DESIGN OF ELECTRONE-TRANSPORT MATERIALS FOR
WIDE-BANDGAP PEROVSKITE SOLAR CELLS**

10:00 - 10:10

Beklemyshev V.E., Zvereva I.A., Magomedova A.G.,
Orudzhev F.F.

**SYNTHESIS AND STUDY OF PHOTOCATALYTIC AND
PIEZOPHOTOCATALYTIC PROPERTIES OF PEROVSKITE-
TYPE LAYERED OXIDE $\text{Bi}_3\text{NbTiO}_9$**

10:10 - 10:20

Boldyreva A.G., Tepliakova M.M., Novikov A.V., Petrov V.G.,
Parfenova O., Vasilev A., Saranin D., Stevenson J.K

**EFFECT OF GAMMA-RAYS ON RECOMBINATION
DYNAMICS AND DEFECT CONCENTRATION IN A WIDE
BANDGAP PEROVSKITE**

10:20 - 10:30

Dzhouse-Ivanina S.A., Parfenova O.R.

**BI-SOLVENT ENGINEERING METHOD FOR IMPROVING
THE EFFICIENCY AND STABILITY OF A WIDE-BANDGAP
PEROVSKITE**

10:30 - 10:40

Sideltsev M.E., Zhivchikova A.N., Kuznetsov I. E., Piryazev A.A.,
Nikitenko N.G., Akkuratov A.V.

**THE DESIGN OF ALKYLSTYLIL-SUBSTITUTED HOLE
TRANSPORT MATERIALS FOR PEROVSKITE SOLAR CELLS**

10:40 - 10:50

Rashitova K.I., Gerasimov S.A., Bobrysheva N.P.,
Osmolowsky M.G., Osmolovskaya O.M.

**MULTIFUNCTIONAL SORBENT/PHOTOCATALYST
MATERIALS BASED ON Mg-Al LAYERED DOUBLE
HYDROXIDES**

10:50 - 11:00

Novikov S.S., Silyukov O.I.

**STUDY OF THE EXFOLIATION OF LAYERED DOUBLE
HYDROXIDES IN AQUEOUS MEDIA AND THEIR
PHOTOCATALYTIC ACTIVITY**



11:50 - 12:00	<u>Prytkov V.A.</u>, Osipova A.M., Hannanov A.A., Kuznetsov I.V., Kutyreva M.P. ONE-STEP SYNTHESIS OF SILVER-CONTAINING NANOCOMPOSITES BASED ON FUNCTIONALIZED HYPERBRANCHED POLYESTERS USING SYNTHETIC GREEN CHEMISTRY APPROACHES
12:00 - 12:10	<u>Ananina A.A.</u>, Nartova A.V., Semikolenov S.V., Kovtunova L.M., Dmitrachkov A.M., Kvon R.I., Sobolev V.I., Bukhtiyarov V.I. THE EFFECT OF SIBUNITE TREATMENT IN NO ON THE CATALYTIC PROPERTIES OF Pd/C CATALYSTS IN THE FORMIC ACID DECOMPOSITION
12:10 - 12:20	<u>Dobrovolskii A.A.</u>, Mikhaylov A.A., Platonov V.B., Rumyantseva M.N., Prikhodchenko P.V. GENERATION OF A SENSOR SIGNAL TO REDUCING GASES IN NANOCRYSTALLINE SnO₂, SYNTHESIZED BY PEROXIDE ASSISTED SOL GEL METHOD
12:20 - 12:30	<u>Kuchkaev Aidar M.</u>, Kuchkaev Airat M., Yakhvarov D.G. NEW APPROACHES FOR THE FUNCTIONALIZATION OF FEW-LAYER BLACK PHOSPHORUS WITH THE FORMATION OF COVALENT P-C BONDS
12:30 - 12:40	<u>Kuznetsov I.E.</u>, Piryazev A.A., Sagdullina D.K., Anokhin D.V., Zhivchikova A.N., Sideltsev M.E., Tepliakova M.M., Ivanov D.A., Akkuratov A.V. EFFECT OF PROCESSING SOLVENT ON THE HOLE TRANSPORT IN ORGANIC SEMICONDUCTOR SMALL MOLECULES
12:40 - 12:50	<u>Asharchuk A.A.</u>, Kubarkov A.V., Sergeyev V.G. POLYMER / CARBON NANOTUBES COMPOSITES AS WATER-PROCESSABLE BINDERS FOR Li ION BATTERY ELECTRODES
12:50 - 13:00	<u>Kyzlasova D.A.</u>, Ulihin A.S., Uvarov N.F. N-METHYL-N-PROPYLPIPERIDINIUM PERCHLORATE DOPING BY LITHIUM PERCHLORATE AS ELECTROLYTE FOR LITHIUM-ION BATTERIES
13:00 - 13:10	<u>Veselova V.O.</u>, Gajtko O.M. EFFECT OF SOLVENT AND CATALYST ON THE HYDROLYSIS RATE OF GERMANIUM ALKOXIDES – KEY STEP IN THE PRODUCTION OF GeO₂ AEROGELS
13:10 - 13:20	<u>Skrypnik M.U.</u>, Platonov V.B., Vasiliev R.B. NANOCOMPOSITES WITH CHARGE TRANSFER FOR RECOGNITION ORGANIC MOLECULES IN GAS PHASE BASED ON PHOTOCATALYSIS



THURSDAY, 05.09, Room 1215

9:30 - 10:10
**KEYNOTE
SPEAKER**

Dr. Wang Lei

Construction of Artificial-Cell-Based Micromotors and the Investigation of Their Life-Like Behaviors

10:20 - 10:30

Skripkin E.V., Podurets A.A., Osmolowsky M.G., Bobrysheva N.P., Voznesenskiy A.M., Osmolovskaya O.M.

ENHANCING ANTIBIOTIC REMOVAL FROM WASTEWATER USING TIN DIOXIDE NANOPARTICLES OF VARIOUS SHAPE: INVESTIGATING THE IMPACT OF STRUCTURAL PARAMETERS ON PHOTOCATALYSIS

10:30 - 10:40

Fedorov V.S., Likhomanova R.B., Yudintceva N.M., Ziganshin R.H., Bobkov D.E., Kolesnichenko Yu.V., Botalova D.P., Shevtsov M.A.

NANOSCALE SYSTEM FOR THE HSP70 INTERACTOME ISOLATION FROM TUMOR CELLS

10:40 - 10:50

Wan Zhao, Xiaojun Han

CONSTRUCTION OF HOLLOW ARTIFICIAL TISSUES BASED ON MAGNETIC ARCHIMEDES EFFECT

10:50 - 11:00

Boyu Yang, Shubin Li, Wei Mu, Zhao Wang and Xiaojun Han

LIGHT-HARVESTING ARTIFICIAL CELLS CONTAINING CYANOBACTERIA FOR CO₂ FIXATION AND FURTHER METABOLISM MIMICKING

11:00 - 11:10

Presnyakov K.Yu., Kuprianova V.L., Lenivaya A.A., Pidenko P.S.

BIOINORGANIC SORBENT BASED ON IMPRINTED BOVINE SERUM ALBUMIN FOR EXTRACTION OF ECOTOXICANTS

11:10 - 11:20

Shmykov B.D., Zaborova O.V.

STRUCTURAL FEATURES OF CATIONIC LIPIDS FOR LIPID NANOPARTICLES FORMATION

11:20 - 11:30

Chao Li, Xiaojun Han

REVERSIBLE DEFORMATION OF ARTIFICIAL CELL COLONIES TRIGGERED BY ACTIN POLYMERIZATION FOR MUSCLE BEHAVIOR MIMICRY

11:50 - 12:10

**INVITED
SPEAKER**

Dr. Sun Jianmin, Lin Liang, Yifei Ye

Design of Lewis Acid-Base Bifunctional Catalyst for Chemical Conversion of CO₂ to Cyclic Carbonate

12:20 - 12:30

Zverev S.A., Selivanova A.A., Zvereva A.S., Vinogradova Ya. V.

ALUMINA AND ZIRCONIA AS NANOCONTAINERS FOR REPELLENT DELIVERY AND PROTECTIVE CLOTHING DEVELOPMENT

12:30 - 12:40

Shneiderman A.A., Komkova M.A., Karyakin A.A.

NANOZYMES «ARTIFICIAL PEROXIDASE» FOR THE SUPPRESSION OF REACTIVE OXYGEN SPECIES

12:40 - 12:50

Muravev A.A., Botnar A.A., Skorb E.V.

CRYSTALLIZATION CONTROL OF ANIONIC THIACALIXARENES ON SILICON SURFACE COATED WITH CATIONIC POLY(ETHYLENEIMINE)

12:50 - 13:00

Lyashchuk V.K., Kladko D.V.

MAGNETIC CILIA PLATFORM FOR pH SENSING BY FLEXIBLE SENSOR

13:00 - 13:10

Dubov L.A., Karyakin A.A., Komkova M.A.

ELECTROANALYTICAL SYSTEM FOR DIRECT H₂O₂ DETECTION IN EXHALED AEROSOL

13:10 - 13:20

Levshakova A.A., Khairullina E.M., Ninayan R.G., Popov A.Yu., Kalinichev A.A., Manshina A.A.

HIGHLY EFFICIENT LASER-INDUCED SYNTHESIS OF ELECTRODE MATERIALS FROM DEEP EUTECTIC SOLVENTS FOR BIOGENIC AMINE DETERMINATION

13:20 - 13:30

Solovyeva M.I., Zhuravlev E.S., Stepanov G.A., Kozlova Y.N., Morozova V.V., Richter V.A., Kozlov D.V., Selishchev D.S.

PHOTOACTIVE SELF-CLEANING MATERIALS MODIFIED WITH TiO₂-N FOR DESTRUCTION OF CONTAMINANTS UNDER VISIBLE LIGHT

13:30 - 13:40

Svakhina Ya.A., Titova M.E., Pyagay I.N.

INVESTIGATION OF THE POSSIBLE APPLICATION OF TECHNOGENIC SILICA GEL FOR HYDROTHERMAL SYNTHESIS OF LTA-TYPE ZEOLITES



13:40 - 13:50

Amdur A.M., Fedorov S.A., Kurmacheva V.S.

PHYSICO-CHEMICAL FEATURES OF PULVERIZED COAL FUEL FOR BLAST FURNACES

14:50 - 15:00

Chekuryaev A.G.

PHYSICO-MECHANICAL PROPERTIES AND MICROSTRUCTURE OF CERAMICS MADE OF COMPOSITE MATERIALS OF DIAMOND-SILICON CARBIDE COMPOSITION

15:00 - 15:10

Ermakova L.V., Smyslova V.G., Karpyuk P.V., Saifutytarov R.R., Sokolov P.S.

MICROSTRUCTURE OF GYAGG:Ce CERAMICS OBTAINED VIA DLP 3D-PRINTING

15:10 - 15:20

Kuznetsova P.D., Mukhanova E.A.

LUMINESCENT PROPERTIES OF CALCIUM TUNGSTATE DOPED WITH RARE EARTH ELEMENTS

15:20 - 15:30

Medvedev V.A., Mikhailov M.D., Manshina A.A.

SYNTHESIS AND STUDY OF OXIDE CERAMICS Al_2O_3 STRUCTURES BY LASER SINTERING

15:30 - 15:40

Dyuskina D.A.

STUDY OF THE PHYSICAL AND MECHANICAL CHARACTERISTICS OF «IDEAL» CERAMICS (DIAMOND - SILICON CARBIDE COMPOSITE)

15:40 - 15:50

Sitnikova L.A., Dolzhikova E.A., Savina A.A., Abakumov A.M.

SURFACE-MODIFIED HIGH ENERGY DENSITY Ni-RICH LAYERED CATHODE MATERIALS FOR ADVANCED LITHIUM-ION BATTERIES

15:50 - 16:00

Pan Wang, Xijiang Han, Yunchen Du

PREPARATION AND ELECTROMAGNETIC WAVE ABSORPTION PROPERTIES OF Ni/C COMPOSITE AEROGELS

16:00 - 16:10

Wei Zhang, Yongping Bai, Zhen Yang, Ruolin Wang, Linghui Meng, Yu Wang

SYNTHESIS OF UV-CURABLE DISULFIDE FUNCTIONALIZED POLYSILOXANE FOR STRETCHABLE GOLD ELECTRODES WITH MICROCRACK

16:20 - 16:30

Deev V.A., Panchuk V.V., Kirsanov D.O.

**APPLICATION OF CONVOLUTIONAL NEURAL NETWORKS
FOR PROCESSING OF MÖESSBAUER SPECTROSCOPY DATA**

THURSDAY, 05.09, Room 2222

12:20 - 12:30

Menshchikov I.E., Grinchenko A.E., Shelyakin I.D., Chugaev S.S.,
Shkolin A.V.

**LONG-TERM ADSORPTION STORAGE OF LIQUEFIED
NATURAL GAS VAPORS BASED ON THE CAPILLARY
CONDENSATION EFFECT IN NOVEL MICRO-MESOPOROUS
CARBON COMPOSITES**

12:30 - 12:40

Neupokoev A.I., Minich I.A., Zvereva I.A., Kruchkova T.A.,
Sheshko T.F.

**MESOPOROSITY DEVELOPMENT IN ZEOLITES AND STUDY
OF GLYCEROL SORPTION AND CATALYTIC PROPERTIES OF
MICROPOROUS AND MESOPOROUS ZEOLITES MODIFIED
WITH TRANSITIONAL METALS**

12:40 - 12:50

ONLINE

Mrachkovskaya D.A., Gudkova E.G., Kuryakov V.N.

**PREPARATION AND STUDY OF PHYSICOCHEMICAL
PROPERTIES OF PARAFFIN NANO-SIZED AQUEOUS
DISPERSIONS. DEVELOPMENT OF PHASE CHANGE
MATERIALS BASED ON PARAFFINS**

12:50 - 13:00

Leonchuk S.S., Falchevskaya A.S., Morozova P.A., Gromov N.V.,
Vinogradov V.V.

**TEMPLATE-FREE SYNTHESIS OF POROUS METAL- AND
METALLOID-BASED NANOMATERIALS WITH THE USE OF
THE EUTECTIC SODIUM-POTASSIUM ALLOY AS A REAGENT**

13:00 - 13:10

Gradov A.E.

**APPLICATION OF 3d TRANSITION METAL-CONTAINING
SILICA IN SYNTHESIS OF CARBON NANOTUBES**

13:10 - 13:20

Garifullin K.Z., Mezentsev I.A., Losev T.V., Bashirov I.I.,
Salimov R.G., Klikushin A.S., Podryabinkin E.V., Malyshev V.I.,
Chaliy V.A., Novikov I.S., Shapeev A.V., Medvedev M.G.

**MACHINE-LEARNED INTERATOMIC POTENTIAL FOR
MODELING ICP-CVD**



13:20 - 13:30

Sheshkovas A.Z., Veselovskaya J.V., Rogov V.A., Kozlov D.V.

CO₂ ABSORPTION BY COMPOSITE MATERIALS BASED ON POLYETHYLENIMINE

13:30 - 13:40

ONLINE

Preobrazhenskiy I.I., Klimashina E.S., Putlyaev V.I.

BIORESORPTION OF MAGNESIUM-BASED CERAMIC

13:40 - 13:50

ONLINE

Zagorovskaya K.D., Boldyreva A.G.

PARYLENE-N THIN FILM ENCAPSULATION FOR ENHANCED PEROVSKITE SOLAR CELLS STABILITY

14:50 - 15:00

ONLINE

Baghali M., Ziyadi H., Ghaffarimoghadam M., Sadri D.

PREPARATION OF NANOFIBROUS MATS AND THEIR IN-VITRO ASSESSMENTS IN THE TREATMENT OF PARKINSON'S DISEASE

15:00 - 15:10

Jiarui Du, Guanying Chen

MOF-COATED UPCONVERSION NANOPARTICLE AGENTS ENABLE SYNERGISTIC PHOTODYNAMIC THERAPY AND IMMUNOTHERAPY

15:10 - 15:20

Kornienko A.I., Ivanov V.E., Popova N.R.

INVESTIGATION OF CERIUM FLUORIDE NANOPARTICLES MODIFIED WITH FLAVIN MONONUCLEOTIDE FOR PHOTODYNAMIC THERAPY APPLICATION

15:20 - 15:30

Weichen Wang, Xiaojun Han

CONSTRUCTION OF ARTIFICIAL PHOTOSYNTHETIC ORGANELLES

15:30 - 15:40

Tao Jia, Guanying Chen

MONITORING HYDROGEN PEROXIDE IN TUMOR METASTASIS: ACHIEVING TARGETED AND PERSISTENT LUMINESCENT SURVEILLANCE

15:40 - 15:50

Aliyu B.O., Tracey C.T., Krivoschapkin P.V., Krivoschapkina E.F.

CARBON DOT/CHITOSAN NANOCRYSTAL HYBRID FOR WASTEWATER DYE REMOVAL

15:50 - 16:00

Mediantsev E.S., Lobova N.A., Ivanov I.I.

EXPLORING DAST MICROCRYSTALS: ADVANCES IN OPTICAL MATERIALS SCIENCE

16:00 - 16:10

ONLINE

Saihe Yang, Yifei Zhang

A TYPE II PHOTOINITIATOR FOR ACHIEVING EFFICIENT PHOTOCURING IN A SINGLE-COMPONENT SYSTEM

16:10 - 16:20

*Shilov N.R., Aga-Tagiyeva S.E., Ni V.A., Magomedov K.E.,
Sobolev K.V., Rodionova V.V.*

**APPLICATION OF $\text{Ti}_3\text{C}_2\text{T}_x/\text{Fe}_3\text{O}_4$ @PAA NANOCOMPOSITE
FOR WATER PURIFICATION FROM METHYLENE BLUE DYE**

16:20 - 16:30

ONLINE

Kurtsevich E.A., Kogolev D.A., Fatkullin M.I., Postnikov P.S.

**LASER-INDUCED CARBONIZATION OF SURFACE-GROWN
Ni-BDC FOR THE CREATION OF THE BEND SENSOR FROM
PET WASTE**

POSTER SESSION

TUESDAY, 03.09, 15:00 - 16:45

1-1. *Volik K.K., Kuznetsova P.D., Mukhanova E.A.*

**OPTIMIZATION OF NANOSIZED CAF2:EU SYNTHESIS VIA EXPERIMENTAL
DESIGN**

1-2. *Voskanyan L.A., Morokhovets M.A., Tkachenko D.S., Bobrysheva N.P.,
Osmolowsky M.G., Voznesenskiy, M.A., Osmolovskaya O.M.*

**SYNTHETIC APPROACHES TO OBTAIN A GREEN PALETTE OF
MULTIFUNCTIONAL PIGMENTS BASED ON CHROMIUM-DOPED
HYDROXYAPATITE NANOPARTICLES**

1-3. *Agapov I.V., Podurets A.A., Osmolowsky M.G., Bobrysheva N.P., Voznesenskiy M.A.,
Osmolovskaya O.M.*

**Cr-DOPED SnO_2 NANOPARTICLES: INFLUENCE OF SYNTHESIS CONDITIONS
AND STRUCTURAL PARAMETERS ON PHOTOCATALYTIC ACTIVITY**

1-4. *Bystrevsky I.D., Gatina E.N.*

**MODIFICATION OF NANOTUBULAR NICKEL HYDROSILICATE BY COBALT
COMPOUNDS IN SITU AND BY HYDROTHERMAL TREATMENT**

1-5. *Goryacheva E.A., Strokin P.D., Goryacheva O.A., Popova N.P., Goryacheva I.Y.*

ANALYSIS OF THE PROPERTIES OF CERIUM OXIDE NANOPARTICLES

1-6. *Kotova J.O., Kovshova T.S., Vinokurov E.G., Gelperina S.E.*

**DEVELOPMENT OF CURCUMIN-LOADED PLGA NANOPARTICLES WITH
OPTIMIZED RELEASE RATE USING FACTORIAL DESIGN OF EXPERIMENT**

1-7. *Kurguzkina M.E., Ugolkov V.L.*

**STUDY OF THERMAL DECOMPOSITION OF HYDROSILICATE NANOSCROLLS ON
THE BASIS OF THE SYSTEM $\text{Mg}_3\text{Si}_2\text{O}_5(\text{OH})_4$ - $\text{Ni}_3\text{Si}_2\text{O}_5(\text{OH})_4$**



1-8. Makeeva A.A., Vernaya O.I., Semenov A.M., Shabatina T.I.

GREEN SYNTHESIS OF SILVER NANOPARTICLES AND CRYOFORMATION OF THEIR HYBRID NANOSYSTEMS WITH DIOXIDINE

1-9. Statsenko T.G., Golubkov S.S., Koltsov S.I., Morozova S.M.

DOUBLE SENSORS FOR MONITORING FREEZING AND SPOILAGE OF PRODUCTS BASED ON LATEX NANOPARTICLES AND CURCUMIN

1-10. Frais M.S., Minich I.A., Zvereva I.A.

SYNTHESIS AND STUDY OF PHYSICAL-CHEMICAL AND FUNCTIONAL PROPERTIES OF A COMPOSITE ORGANIC-INORGANIC PHOTOCATALYST BASED ON COMPLEX TANTALUM OXIDE WITH A LAYERED STRUCTURE TYPE

1-11. Meshina K.I., Barabanov N.M., Tkachenko D.S., Bobrysheva N.P., Osmolovsky M.G., Voznesensky M.A., Osmolovskaya O.M.

THE CONTROL OF ZnO ORIENTED ATTACHMENT PROCESSES AS A TOOL FOR REGULATING ITS PHOTOCATALYTIC ACTIVITY

1-13. Syukkalova E.A., Kolokolova N.D., Voskanyan L.A., Sadetskaya A.V., Osmolovsky M.G., Bobrysheva N.P., Voznesenskiy M.A., Osmolovskaya O.M.

DIRECTED MODIFICATION OF HYDROXYAPATITE-BASED BIOCOMPATIBLE MATERIAL AS A WAY TO REGULATE ITS PROPERTIES

1-14. Bridenko L.A., Nishanbaev I. Zh., Moskalenko I. V., Skorb E. V.

ENCAPSULATION OF TEA POLYPHENOLS INTO MELAMINE BARBITURATE SUPRAMOLECULAR ASSEMBLY

1-16. Bikbaeva G.I., Pilip A.G., Egorova A.V., Medvedev V.A., Kolesnikov I.E., Pankin D.V., Mamonova D.V., Manshina A.A.

PHOTOPHARMACOLOGY: EXPLORING THE POTENTIAL OF LUMINESCENT NANOPARTICLES AND PHOTOSWITCHABLE PHOSPHONATES IN DISEASE TREATMENT

1-17. Egorova V.V., Povalyaev P.V., Frantsina E.V., Petrova Yu.Yu.

RECYCLING OF ASPHALTENE SEDIMENTS IN A PLASMA REACTOR AT DIFFERENT DISCHARGE INITIATION TIMES

1-18. Kudymov V.K., Dermenji A. , Zemtsova E.G. , Smirnov V.M.

THE EFFECT OF THE REINFORCING PHASE PARTICLE SIZE ON THE MECHANICAL PROPERTIES OF COMPOSITE MATERIALS WITH A NICKEL MATRIX

1-19. Maliavina Y.M., Silaeva A.A. , Romakhina T.R., Kukushkina E.A., Snimshchikova Y.O., Rodnikov D.T.

INVESTIGATION OF THE PERMEABILITY OF PAINT COATINGS FILLED WITH BASALT PRODUCTION WASTE

1-20. Markarian A.A., Podurets A.A., Voznesenskiy M.A.; Bobrysheva N.P., Osmolowsky M.G., Osmolovskaya O.M., Sokolov I.A.

BOEHMITE NANOPARTICLES-BASED MATERIAL AS A SORBENT FOR TETRACYCLINE ANTIBIOTICS UTILIZATION FROM WASTEWATER

1-21. Petropavlovskii K.S., Novicenkova T.B., Kalyaskin P.A., Sulman M.G.

SELF-REINFORCEMENT EFFECT IN THE PROCESS OF SYNTHESIS OF GYPSUM COMPOSITES BASED ON FLY ASH WITH A HIGH CONTENT OF FREE CALCIUM OXIDE

1-23. Sharapova E.K., Murashova N.M.

EXTRACTANT-CONTAINING MICROEMULSIONS BASED ON SODIUM DODECYL SULFATE FOR LEACHING OF NON-FERROUS METALS FROM ORE RAW MATERIALS

1-24. Sheichenko E.D., Tronev I.V., Vasilyeva D.N., Kozlova T.O.

SYNTHESIS OF CRYSTALLINE CERIC PHOSPHATES OF A GIVEN MICROSTRUCTURE

1-25. Solodovnikova P.A., Telegin T.E., Ugrumova M.V., Vostretsova D.A.

SYNTHESIS AND STUDY OF THE THERMOSTABLE ALUMINUM OXIDE PROPERTIES FOR USAGE IN THREE-WAY CATALYSTS

1-26. Steshenko A.A., Murashova N.M.

CHEMICAL POLISHING OF COPPER USING INVERSE MICROEMULSION CONTAINING NITRIC ACID

THURSDAY, 05.09, 17:00 - 18:30

1-27. Vinogradova E.A., Molchanov V.P.

INVESTIGATION OF THE PROPERTIES OF TETRAMETHYLENEDIETHYLENETETRA MINE FOR THE DEVELOPMENT OF AN ANTICORROSIVE COATING



1-28. Zdretsov I.M., Gerasimov A.M.

OPTIMISATION OF ZEOLITE LTA SYNTHESIS FROM KAOLIN VIA RESPONSE SURFACE METHODOLOGY

1-29. Abakumova E.V., Bedarkova A.O., Tarasova N.A., Animitsa I.E.

ION TRANSPORT OF 3D-METAL DOPED LAYERED PEROVSKITES BASED ON BaLaInO_4

1-30. Davydov N.A., Gubanov A.N., Silyukov O.I., Rodionov I.A.

INVESTIGATION OF PHOTODEPOSITED PLATINUM LOCALIZATION AT THE LAYERED OXIDES $\text{HCa}_2\text{Nb}_3\text{O}_{10}$, $\text{H}_2\text{La}_2\text{Ti}_3\text{O}_{10}$ AND THEIR ORGANO-INORGANIC HYBRIDS

1-31. Gabdrakhmanov R.R., Minich I.A., Zvereva I.A.

SYNTHESIS AND EXFOLIATION OF ORGANIC-INORGANIC HYBRIDS OF PEROVSKITE-LIKE BISMUTH NIOBATE BY TOPOCHEMICAL REACTIONS

1-32. Ustinova A.I., Voitovich V.V., Silyukov O.I.

SYNTHESIS AND STUDY OF MANGANESE-CONTAINING PHOTOCATALYSTS BASED ON $\text{Na}_2\text{La}_2\text{Ti}_3\text{O}_{10}$ LAYERED OXIDE

1-33. Kalmakhelidze M.V., Mukhanova E.A.

INDIUM METAL-ORGANIC FRAMEWORK AS A POTENTIAL DRUG DELIVERY SYSTEM

1-34. Doroshenko I.V., Dmitrieva M.A., Filippova I.S., Krivoschapkina E.F.

ZIF-8 MEMBRANE FOR THE EXTRACTION OF LITHIUM

1-35. Boyko S.A., Esefiyeva T.Yu., Kovshova T.S., Malinovskaya J.A., Abakumov M.A., Gelperina S.E.

PHARMACOKINETIC STUDY OF NANOPARTICLE-BASED PACLITAXEL FORMULATIONS AFTER PRE-TREATMENT WITH RITONAVIR

1-36. Usmanova G.S., Latypova L.R., Mustafin A.G.

STUDY OF ADSORPTION PROPERTIES OF POLY[2-METHYL-1H-INDOLE] DERIVATIVES

1-37. Kozlova L.A., Rytova M.A., Vartiainen V.V., Nazarov D.V.

ATOMIC LAYER DEPOSITION OF ZINC-TITANIUM AND ALUMINIUM-TITANIUM OXIDE NANOCOATINGS ON MAGNESIUM ALLOYS AND INVESTIGATION OF THEIR CORROSION PROTECTION AND BIOMEDICAL PROPERTIES

1-38. Olenich E.A., Gorodov V.V., Milenin S.A., Cherkaev G.V., Khanin D.A., Buzin M.I., Muzafarov A.M.

THERMAL AND FROST-RESISTANT POLYDIMETHYL(METHYLBENZYL) SILOXANES: SYNTHESIS AND PROPERTIES

1-39. Trefilov V.S., Lindin E.Y., Burenina O.Y., Kubareva E.A.

SMALL NON-CODING 6S RNAS IN REGULATION OF SURFACTIN BIOSYNTHESIS IN BACILLUS SUBTILIS

1-40. Svinko V.O., Solovyeva E.V.

HYBRID SYSTEMS BASED ON GOLD NANOPARTICLES, CHITOSAN AND PROTOPORPHYRIN AS AGENTS OF ANTIBACTERIAL PHOTODYNAMIC THERAPY

1-41. Nutan Shukla, Ratnesh Das, Mukhanova E.E., Soldatov A.

ENCAPSULATION OF HYDROPHOBIC ANTICANCER DRUGS USING PLASMONIC GOLD NANORODS (GNRS) FOR SIMULTANEOUS CHEMOTHERAPY AND PHOTOTHERMAL THERAPY (CHT-PTT)

1-42. Maslennikova M.S., Zarubin D.M., Kachalova E.A., Salomatina E.V., Smirnova L.A.

PROPERTIES OF NANOCOMPOSITE MATERIALS BASED ON POLYSACCHARIDES

1-43. Kritchenkov I.S., Kritchenkova A.Kh.

LUMINESCENT SENSORS OF HUMAN BODY TEMPERATURE BASED ON COPPER(I) CLUSTER WITH THIAMAZOLE AND NATURAL POLYSACCHARIDES

1-44. Shilovskikh E.E., Meleshko A.A.

SYNTHESIS OF PERFORATED ZINC OXIDE NANOSHEETS WITH THE ASSISTANCE OF REACTIONS AT THE AQUEOUS SOLUTION OF ZINC SALT - ETHYLENEDIAMINE (AIR) INTERFACE

1-45. Balabanov S.V., Syrov M.M., Perevislov S.N.

«IDEAL»: DIAMOND-CARBIDE-SILICON COMPOSITE FOR LIGHTWEIGHT CERAMIC ARMOR PROTECTION

1-46. Bondareva A.F., Grigorieva V.D.

Na₆Mo₁₁O₃₆ SCINTILLATING CRYSTALS: GROWTH, MORPHOLOGY AND OPTICAL PROPERTIES

1-47. Pankratova E.M., Kurlov A.S.

PRODUCTION OF WC-ZrO₂ CERAMICS FROM NANOCRYSTALLINE MIXTURES

1-48. Shiribazarova E.B., Korobatova N.M., Koroleva O.N.

EFFECT OF THE SiO₂/GeO₂ RATIO IN THE Na₂O-B₂O₃-SiO₂-GeO₂ SYSTEM ON THE CHARACTERISTICS OF POROUS GLASSES

1-49. Kharchenko I.A., Ryzhkov I.I., Simunin M.M., Lebedev D.V., Vaulin N.V.

STUDY OF IONIC CONDUCTIVITY OF NANOPOROUS MEMBRANES WITH ELECTRICALLY CONDUCTIVE CARBON COATING



1-50. Sychinskaia K.A., Ermakov S.S.

DEVELOPMENT OF A TECHNIQUE FOR DETERMINING THE ACTIVITY OF ARGININE DEIMINASE USING A VOLTAMMETRIC AMMONIA SENSOR BASED ON COPPER(II) SULFATE COATED WITH A POLYMER MEMBRANE

1-51. Pavlova A.D., Savina A.A., Abakumov A.M.

COMPOSITE SINGLE CRYSTAL LAYERED OXIDES AS POSITIVE ELECTRODES FOR ADVANCED LI-ION BATTERIES

1-52. Streminskaya R.A., Krivoschapkin P.V.

SYNTHESIS OF NANOSTRUCTURED COPPER COMPOUNDS FOR ELECTROCATALYTIC UTILIZATION

1-53. Sobol M.E., Sukhanov K.S., Gilev A.R., Kiselev E.A., Cherepanov V.A.

SYNTHESIS, CRYSTAL STRUCTURE AND FUNCTIONAL PROPERTIES OF $\text{La}_{2-x}\text{A}_x\text{Ni}_{1-y}\text{Cu}_y\text{O}_{4+\delta}$ (A=Pr, Nd; x=0.5, 1.0, 1.5, y=0.4, 0.6, 0.8) AS CATHODE MATERIAL FOR SOFC

1-54. Rodionova U.M., Levin O.V., Kustin R.P., Filippova S.S.

SYNTHESIS AND ELECTROCHEMICAL PROPERTIES OF POLYNIMESALTMEN

2. MODERN TRENDS IN POLYMER SCIENCE

CHAIRMAN: Dr. Sci. **Penkova Anastasia**, Institute of Chemistry, SPbU

SECRETARY: Dr. **Kuzminova Anna**, Institute of Chemistry, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1222

9:00 - 9:16

**KEYNOTE
SPEAKER**

Dr. Sci. Alexei Volkov

Polymers for Separation on Molecular Level

9:16 - 9:32

**INVITED
SPEAKER**

Dr. Tatiana Plisko, Burts K.S., Penkova A.V., Bilyukevich A.V.

Influence of Molecular Weight and Concentration of Poly(Diallyldimethylammonium Chloride) Added to Coagulant on the Structure and Performance of Thin Film Composite Membranes for Nanofiltration

9:32 - 9:44

Kuzminova A.I., Stepanova A.S., Dmitrenko M.E., Penkova A.V.

DEVELOPMENT OF NOVEL SODIUM ALGinate BASED MEMBRANES MODIFIED WITH Zr-MOFs FOR ISOPROPANOL DEHYDRATION

9:44 - 9:56

Mikulan A.I., Kuzminova A.I., Dmitrenko M.E., Dubovenko R.R., Penkova A.V.

DEVELOPMENT AND CHARACTERISATION OF NOVEL COMPOSITE MEMBRANES BASED ON CARBOXYMETHYL CELLULOSE/MOF FOR PERVAPORATION

9:56 - 10:08

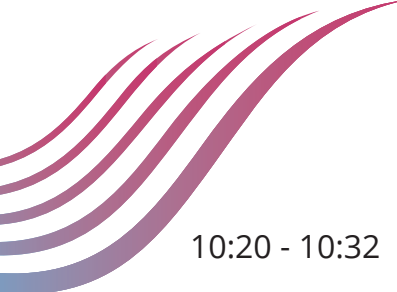
Dubovenko R.R., Dmitrenko M.E., Kuzminova A.I., Mikulan A.I., Puzikova M.E., Selyutin A.A., Penkova A.V.

DEVELOPMENT AND RESEARCH ON COMPOSITE MEMBRANES BASED ON CARBOXYMETHYLCELLULOSE FOR THE HYBRID PROCESS «ESTERIFICATION + PERVAPORATION»

10:08-10:20

Golubkov S.S., Statsenko T.G., Mamontov M.A., Don G.M., Lihomanov V.S., Sanginov E.A., Belmesov A.A., Kashin A.M., Levchenko A.V., Morozova S.M.

FUNCTIONAL MATERIALS BASED ON FLUORINATED POLYMERS FOR FUEL CELLS AND ELECTROACTIVE DEVICES



10:20 - 10:32

*Morozova S.M., Golubkov S.S., Statsenko T. G., Baturina E.P.,
Don G.M., Lihomanov V.S., Sanginov E.A., Belmesov A.A.,
Kashin A.M., Levchenko A.V.*

**NANOSTRUCTURED POLYMERIC MATERIALS BY
SELF-ASSEMBLY: FABRICATION TECHNIQUES AND
APPLICATION**

10:44 - 10:56

*Khankishiyeva R., Mammadova G., Axundzada H.V., Azizova A.,
Ahmad S., Khudaverdiev V.*

**ENHANCING MECHANICAL PROPERTIES OF NBR/EPDM
BLENDS THROUGH GAMMA RADIATION AND EPOXIDIZED
ACRYLONITRILE BUTADIENE RUBBER (ENBR) AS A
COMPATIBILIZER**

11:20 - 11:32

Dmitrenko M.E., Kuzminova A.I., Pasquini D., Penkova A.V.

**DEVELOPMENT AND STUDY OF CARRAGEENAN/STARCH/
NANOCELLULOSE FILMS FOR ADVANCED EDIBLE
PACKAGING MATERIAL**

11:32 - 11:44

Pozdniakova A.V., Sukhanova A.A.

**EFFECT OF ZINC OXIDE NANOPARTICLES ON THE
PROPERTIES OF PLA-FILMS**

11:44 - 11:56

Tryakhov D.E.

**ENZYMATIC HYDROLYSIS AS A NEW WAY
FOR STARCH NANOCRYSTALS PREPARATION**

11:56 - 12:08

Sokolov A.S., Sukhorukov G.B.

**PHOTO-SWITCHING OF IRON ALGINATE HYDROGEL VIA
DIFFERENT WAVELENGTH LIGHT**

12:08 - 12:20

*Mikhailovskaya O.A., Kuzminova A.I., Dubovenko R.R.,
Penkova A.V., Dmitrenko M.E.*

**DEVELOPMENT AND STUDY OF PERVAPORATION
MEMBRANES FROM POLYELECTROLYTE COMPLEX
MODIFIED WITH GRAPHENE OXIDE**

12:20 - 12:32

Gushchina K.S., Lobanova K.S., Vavilova A.S., Kuznetsova Yu.L.
SYNTHESIS OF TRIPLE COPOLYMERS OF COLLAGEN-POLYSACCHARIDE-METHYL METHACRYLATE AS A BASIS OF BIOMATERIAL FOR REGENERATIVE MEDICINE

12:32 - 12:44

Ryzhkova A.S., Makeeva A.A., Vernaya O.I., Semenov A.M., Shabatina T.I.
PREPARATION OF TARGETED DRUG DELIVERY SYSTEMS BASED ON COLLAGEN DERIVATIVES AND CHITOSAN USING VARIOUS CROSS-LINKING AGENTS

12:44 - 12:56

Chernikova E.E., Zagvozkin M.D., Brussevich A.
DEVELOPMENT AND STUDY OF PHYSICOCHEMICAL PROPERTIES OF PH-SENSITIVE DELIVERY SYSTEMS OF ENCAPSULATED BSA BASED ON CHITOSAN AND HYDROXYAPATITE

12:56 - 13:08
ONLINE

Zagvozkin M.D., Chernikova E.E., Brussevich A.
RESEARCH ON OBTAINING A SYSTEM FOR TARGETED DELIVERY OF PROTEIN OBJECTS BASED ON CHITOSAN NANOPARTICLES WITH CHEMISORBED OBJECT APPLICATION

13:08 - 13:20

Voroshnina A.A.
STRUCTURE AND PROPERTIES OF INCLUSION COMPLEXES OF AMYLOSE WITH FATTY ACIDS

THURSDAY, 05.09, Room 1222

9:30 - 9:42

Bagaeva I.O., Sinitsyna E.S., Tennikova T.B., Korzhikova-Vlakh E.G.
NANOPARTICLES BASED ON AMPHIPHILIC COPOLYMERS FOR COMBINATION DRUG DELIVERY

9:42 - 9:54

Bokatyi A.N., Dubashynskaya N.V., Skorik Y.A.
POLYSACCHARIDE-BASED POLYELECTROLYTE COMPLEXES AS OPHTHALMIC DEXAMETHASONE DELIVERY SYSTEMS

9:54 - 10:08

Istomina L.I., Zverev S.A.
CYPERMETHRIN AND PERMETHRIN-BASED POLYACRYLATE COMPOSITE FILMS FOR TICK BITE PREVENTION



10:08 - 10:20

Alikparova E.R., Guliaeva P.S., Sinitsyna E.S.,
Korzhikov-Vlakh V.A., Korzhikova-Vlakh E.G., Tennikova T.B.
**INTERPOLYMER COMPOSITES OF POLYESTERS WITH
POLYSACCHARIDES**

10:20 - 10:32

Makushchenko I.S., Kozlov I.A.
**ANTI-CORROSION SEALANT TO PREVENT CREVICE
CORROSION OF MATING MATERIALS**

10:32 - 10:44

Dzhuzha A.Yu., Levit M.L., Korzhikova-Vlakh E.G.
**DUAL-DRUG DELIVERY SYSTEMS BASED ON
POLYPEPTIDES OF DIFFERENT ARCHITECTURE**

10:44 - 10:56

Konstantinova A.O., Semenova A.Yu., Chistyakov E.M.
**POLYMER MATERIALS WITH INCREASED FIRE
RESISTANCE BASED ON EPOXY RESINS CONTAINING
ARILOXYPHOSPHAZENES**

10:56 - 11:08

Gryazev I.P., Peshkova M.A.
**DEVELOPMENT OF POLYMERIC CALIBRATION-FREE
DEVICE BASED ON OPTICAL SENSORS FOR IN SITU
ANALYSIS OF BIOLOGICAL FLUIDS**

11:08 - 11:20

Mitroshin A.M., Miltsov S.A., Litvinova L.S., Smyslov R.Yu.,
Yakimansky A.V.
**NEW COPOLYCARBAZOLES WITH DELAYED
FLUORESCENCE**

11:20 - 11:32

Lokiaeva Z.A., Soboleva J.A., Storozhuk I.P.
**SELF-HEALING POLYURETHANE BLOCK COPOLYMERS
WITH CONTROLLED PROPERTIES**

11:50 - 12:02

Rafikova A.R., Milyaeva O.Yu., Noskov B.A.
**DYNAMIC SURFACE PROPERTIES OF β -CASEIN FIBRILS
ADSORPTION LAYERS**

12:02 - 12:14

Isakov N.A., Belousov M.V., Nizhnikov A.A., Noskov B.A.
**SPREAD AND ADSORBED LAYERS OF PLANT PROTEIN
CUPIN-1.1 AND ITS AGGREGATES**

12:14 - 12:26

Vihireva A.D., Vdovina O.S., Shirshin K.V.
**ACRYLAMIDE AND DIALLYLAMINE HYDROCHLORIDE
COPOLYMERS FOR IMPROVING THE STRENGTH
CHARACTERISTICS OF RECOVERED PAPERBOARD**

12:26 - 12:38

Koltsova D.M., Zacharova V.A., Karshieva S.Sh.

**PRODUCTION OF HYDROGEL INKS FOR FRESH 3D
PRINTING BASED ON ESTERIFIED PECTIN**

12:38 - 12:50

Silaeva A.A., Soldatov M.A., Malyavina Y.M., Rodnikov D.T.

**TRENDS IN CHEMISTRY OF RESINS FOR CATHODIC
ELECTRODEPOSITION COATINGS**

12:50 - 13:02

Borodina A.M., Kostromin S.V., Bronnikov S.V.

**SYNTHESIS AND INVESTIGATION OF POLYMER
HYDROGELS FILLED WITH CARBON QUANTUM DOTS**

13:14 - 13:26

ONLINE

Stamer K.S., Baltaeva M.B., Orlov M.A., Wagle V.

**SMART POLYUREA-BASED SYSTEMS FOR UPSTREAM
APPLICATIONS**

14:50 - 15:02

Yakimanskiy A.A., Zhukova E.V., Kashina A.V., Chulkova T.G.,
Yakimansky A.V.

**ACYCLIC DIAMINOCARBENE PALLADIUM(II) COMPLEXES
AS SUZUKI POLYCONDENSATION CATALYSTS**

15:02 - 15:14

Fedoskin I.A., Markov E.S., Vasiliev A.S., Trishin Yu.G.

**SYNTHESIS AND EVALUATION OF THE EFFECTIVENESS OF
POLYCARBOXYLATE SUPERPLASTICIZER**

15:14 - 15:26

Khina A.G., Bulkatov D.P., Buryakov V.S., Kuleznev A.A.,
Storozhuk I.P.

**POLYETHERIMIDES OF COPOLYMER STRUCTURE AND
THEIR THERMAL PROPERTIES**

15:26 - 15:38

Koziavina D.A., Nechaeva A.M., Belousova V.A., Vnukova A.A.,
Bagrov D.V., Mezhev Y.O.

**SYNTHESIS AND CHARACTERIZATION OF NOVEL
AMPHIPHILIC COPOLYMERS OF N-VINYL-2-PYRROLIDONE
AND OLEIC ACID**

15:38 - 15:50

Kachmarzhik A.D., Nikolaev I.A., Galukhin A.V.

**MECHANISM AND KINETICS OF CYANATE ESTERS
CYCLOTRIMERIZATION IN DIFFERENT MEDIA**



15:50 - 16:02

Styazhkin D.V., Plotnikova N.V.

INFLUENCE OF THE METHOD FOR OBTAINING THE SOLVATE COMPLEX $\text{GdCl}_3 \cdot n(\text{i-PrOH})$ ON ITS PARTICLE SIZE AND ACTIVITY OF THE GADOLINIUM CATALYST $\text{GdCl}_3 \cdot n(\text{i-PrOH})\text{-Al}(\text{i-Bu})_3$ IN THE POLYMERIZATION OF ISOPRENE

16:02 - 16:14

Karpov G.O., Bermeshev M.V.

PALLADIUM COMPLEXES WITH PHOSPHINE-THIOETHER LIGANDS FOR VINYL-ADDITION POLYMERIZATION OF NORBORNENE AND ITS DERIVATIVES

16:14 - 16:26

Pyatakov D.A., Ivchenko P.V., Tavgorkin A.N., Nifant'ev I.E.

COMBINED RECYCLING AND UPCYCLING OF POLY(BISPHENOL A CARBONATE) THROUGH METAL ACETATE CATALYZED GLYCOLYSIS

16:26 - 16:38

Ponomareva P.F., Platonova E.O., Solodilov V.I.

NEW CHAIN EXTENDER FOR SELF-HEALING POLYURETHANE

16:38 - 16:50

Sorin E.S., Baimuratova R.K., Dzhardimalieva G.I.

HIGH-STRENGTH SELF-HEALING METALLOPOLYMERS OF ACRYLAMIDE AND ACRYLIC ACID

POSTER SESSION

TUESDAY, 03.09, 15:00 - 16:45

2-1. Bakirova E.R.

PROPERTIES OF POLYMER MATERIALS BASED ON COMPOSITIONS OF POLYCAPROLACTONE-CHITOSAN-MEDICINAL SUBSTANCE

2-2. Baturina E.P., Golubkov S.S., Statsenko T.G., Don G.M., Lihomanov V.S., Vinyukov A.V., Kashin A.M., Maryasevskaya A.V., Levchenko A.V., Ivanov D.A., Morozova S.M.

INFLUENCE OF THE NATURE OF THE LIQUID PHASE IN THE IONOMER'S DISPERSION ON ITS CONFORMATION AND FILMS MICROSTRUCTURE

2-3. Belyaeva A.A., Averchik A.S., Korzhikova-Vlakh E.G., Salmina A.B., Morozova S.M.

POLY(N-ISOPROPYLACRYLAMIDE) IS THE BASIS OF STIMULUS-RESPONSIBLE MATERIALS FOR THE CREATION OF ACTUATORS AND CELLULAR SCAFFOLDS

2-4. Blokhin A.N., Kozina N.D., Razina A.B., Tenkovtsev A.V.

NOVEL MIKTOARM STAR POLYMERS WITH A CALIZ[8]ARENE CORE AND PEG/ POLYOXAZOLINE ARMS

2-5. Bryantseva J.D., Uflyand I.E.

USE OF ZIRCONIUM-CONTAINING MIXED-LIGAND METAL-ORGANIC FRAMEWORKS IN SOLID-PHASE EXTRACTION OF ORGANIC DYES

2-6. Burachevskaya O.A., Butova V.V., Ozhogin I.V., Pugachev A.D., Starikov A.S., Tereshchenko A.A., Borodkin G.S.

MODIFICATION OF MOFS BY SPIROPYRAN MOLECULES

2-7. Burts K.S., Plisko T.V., Penkova A.V., Bildyukevich A.V.

NOVEL THIN FILM COMPOSITE NANOFILTRATION MEMBRANES WITH POLYANILINE INTERMEDIATE LAYER

2-8. Chernomorova M.A., Uflyand I.E., Zhinzilo V.A.

SOLID-PHASE EXTRACTION OF PERSONAL CARE PRODUCTS USING NICKEL TEREPHTHALATE COMPLEX WITH 2,2'-BIPYRIDINE

2-9. Chetverikova D.A., Pokhvishcheva N.V., Peshkova M.A.

DETERMINATION OF PARTITION COEFFICIENTS OF LIPOPHILIC ELECTROLYTES BETWEEN WATER AND PLASTICIZED POLYVINYLCHLORIDE MEMBRANE

2-10. Danilova E.E., Fetin P.A., Zorin I.M.

COMB-LIKE POLYELECTROLYTES BASED ON LOW MOLECULAR WEIGHT BLOCK COPOLYMER OF THE SURFACTANTS AND PEG-ACRYLATE FOR MICELLEAR CATALYSIS

2-11. Dogadina A.A., Maslennikov D.V.

SYNTHESIS AND CHARACTERISATION OF THE FUNCTIONAL PROPERTIES OF STARCH CITRATES BASED ON THERMALLY TREATED CORN STARCHES

2-12. Dudka D.V., Mityukov A.V., Malkin A.Ya.

HIGHLY FILLED ALUMINUM-BASED COMPOSITE MATERIALS IN POWDER INJECTION MOLDING AND IN FUSED FILAMENT FABRICATION

2-13. Fedotova E.V., Borisov E.V., Pankin D.V., Paston S.V.

APPLICATION OF RAMAN SPECTROSCOPY TO RESEARCH IN THE STRUCTURE OF BOVINE SERUM ALBUMIN IN FILMS

2-14. Filippova I.S., Dmitrieva M.A., Doroshenko I.V.

POLYMERIC MEMBRANE FUNCTIONALISED WITH 4'-AMINOBENZO-15-CROWN-5-ETHER (4AB15C5) FOR LITHIUM EXTRACTION



2-15. Gorlo V.D., Pidenko P.S., Burmistrova N.A.

THE SYNTHESIS OF MOLECULARLY IMPRINTED POLYANILINE SPECIFIC FOR ZEARELENONE BASED ON EXPERIMENTAL DESIGN

2-16. Gotfried S.D., Mikhalev D.B., Belyakov A.V.

THE EFFECT OF A POLYMER BINDER ON THE COLOR AND RHEOLOGICAL CHARACTERISTICS OF THE PYROTECHNIC COMPOSITION OF BLUE FLAME

2-17. Gudkin A.V., Grigoriev D.V., Sivtsov E.V., Uspenskaya M.V.

STUDYING OF THE INFLUENCE OF pH ON THE KINETICS OF RELEASE OF SULFANILAMIDE FROM POLYMER COMPOSITE MATERIAL BASED ON ACRYLIC HYDROGELS AND DETONATION NANODIAMONDS

2-18. Ivanova D.N., Borisov E.V., Pankin D.V., Paston S.V.

APPLICATION OF FTIR SPECTROSCOPY TO STUDY THE B-A TRANSITION IN THE SECONDARY STRUCTURE OF DNA

2-19. Kablov I.V., Kaskeh V., Kravchenko I.E., Zorina T.E., Zorin V.P.

CO-SOLVENTS EFFECTS IN THE DEVELOPMENT OF A DRUG DELIVERY SYSTEM FOR PHOTSENSITIZERS USING COPOLIMER DEXTRAN-POLY(N-ISOPROPYLACRYLAMIDE)

2-20. Khrebina A.D., Zorin I.M., Vlasov P.S., Noskov B.A.

DYNAMIC PROPERTIES OF ADSORPTION AND SPREAD LAYERS OF STYRENE AND HYDROPHOBISED VINYL BENZYL COPOLYELECTROLYTES

2-21. Konnova M.E., Anwar M., Dastgir S.

EFFECTIVE DEPOLYMERIZATION OF PET-WASTE VIA CHEMOLYSIS METHODS

2-22. Korovina A.M., Kuzminova A.I., Dmitrenko M.E., Dubovenko R.R., Penkova A.V.

DEVELOPMENT OF NOVEL MEMBRANES BASED ON SODIUM ALGINATE MODIFIED BY ZnBIM FOR PERVAPORATION

2-23. Kudrina S.A., Dmitrenko M.E., Kuzminova A.I., Polyakov V.A., Kalmahelidze M.V., Penkova A.V.

DEVELOPMENT AND STUDY OF PERVAPORATION MIXED MATRIX MEMBRANES CARBOXYMETHYL CELLULOSE/ZIF-67

2-24. Solomakha O.A., Stepanova M.A., Gofman I.V., Dobrodumov A.V., Nashchekina Y.A., Nashchekin A.V., Korzhikova-Vlakh E.G.

MODIFICATION OF NANOCRYSTALLINE CELLULOSE TO IMPROVE THE PROPERTIES OF BONE REPLACEMENT MATERIALS BASED ON POLY(E-CAPROLACTONE)

2-25. Loza J.S., Loza N.V., Falina I.V.

EFFECTS OF THE MODIFICATION WITH ZIRCONIUM HYDROGEN PHOSPHATE ON THE PROPERTIES OF PERFLUORINATED MEMBRANES

2-26. Malandina M.A., Mikhaylova P. A., Falchevskaya A.S.

TRIBOELECTRIC NANOGENERATORS DIFFERENT SHAPES BASED ON THE GALLIUM ALLOYS FOR ENERGY HARVESTING

2-33. Nazemutdinova V.R., Sadovnikov K.S., Wozniak A.I., Morontsev A.A., Zhigarev V.A., Bermeshev M.V.

SYNTHESIS OF DIMERS, TRIMERS, TETRAMERS AND PENTAMERS OF 5-N-BUTYLNORBONENE BY ROMP IN THE PRESENCE OF THE 1ST AND 2ND GENERATION GRUBBS CATALYST. HYDROGENATION OF METATHESIS POLYMERIZATION PRODUCTS

THURSDAY, 05.09, 17:00 - 18:30

2-27. Maliavina Y.M., Silaeva A.A., Romakhina T.R., Kukushkina E.A., Snimshchikova Y.O., Rodnikov D.T.

INVESTIGATION OF THE PERMEABILITY OF PAINT COATINGS FILLED WITH BASALT PRODUCTION WASTE

2-28. Manapova E.E.

EPOXY VITRIMERS WITH A RECONFIGURABLE POLYMER MATRIX

2-29. Meshcheryakova E.E., Falina I.V., Kononenko N.A., Timofeev S.V.

TRANSPORT AND MECHANICAL PROPERTIES OF THE MF-4SK PERFLUORINATED MEMBRANES WITH VARYING CONTENTS OF INERT FLUOROPOLYMER AND ZIRCONIUM HYDROGEN PHOSPHATE

2-30. Mikhailova P.A., Malandina M.A., Falchevskaya A.S.

APPLICATION OF LIQUID GaInSn ALLOY IN THE DEVELOPMENT OF FLEXIBLE SENSORS AND TRIBOELECTRIC NANOGENERATORS FOR HEALTH MONITORING

2-31. Muratova A.D., Komolkin A.V., Markelov D.A.

IMPACT OF MODELING CELL SIZES ON THE HYDRODYNAMIC RADIUS OF PAMAM DENDRIMERS G2 IN METHANOL

2-32. Naumkina V.N., Zhinzhilo V.A., Uflyand I.E.

SOLID PHASE EXTRACTION OF ORGANIC DYES: NEW HORIZONS WITH NICKEL TRIMESINATE

2-34. Nechaeva A.A., Saratovceva E.E., Pantileeva S.V., Mezhev Y.O.

SYNTHESIS AND PHASE BEHAVIOR OF NOVEL TEMPERATURE-RESPONSIVE COPOLYMERS OF N-VINYL-2-PYRROLIDONE



2-35. Orlov M.S., Baeva A.S., Sinitsyna E.S., Korzhikov-Vlakh V.A.

SOFT POLY(ϵ -CAPROLACTONE)-BASED CORE-SHELL NANOPARTICLES

2-36. Puzikova M.E., Kuzminova A.I., Dmitrenko M.E., Dubovenko R.R., Penkova A.V.

DEVELOPMENT AND INVESTIGATION OF NOVEL POROUS MEMBRANES BASED ON CELLULOSE ACETATE MODIFIED BY POLYMERS AND CARBON NANOPARTICLES

2-37. Rakovskaya N.S., Kuzminova A.I., Dmitrenko M.E., Dubovenko R.R., Penkova A.V.

DEVELOPMENT OF NOVEL MEMBRANES BASED ON POLYETHER BLOCK AMIDE MODIFIED BY METAL-ORGANIC FRAMEWORK MIL-125

2-38. Rodnikov D.T., Ahkar Kaung Myint, Malyavina Y.M., Ozdoev A.A., Silaeva A.A., Soldatov M.A.

THE PREPARATION OF A PAINT COATING BASED ON AN ACRYLIC COPOLYMER AND A BLOCKED ISOCYANATE UTILISING THE CATHODIC ELECTRODEPOSITION METHOD

2-39. Rotanova K.Yu., Milyaeva O.Yu.

IMPACT OF PH AND IONIC STRENGTH ON SILK FIBROIN SELF-ASSEMBLY AT AIR-WATER INTERFACE

2-40. Salomatin K.A., Kuzminova A.I., Dmitrenko M.E., Dubovenko R.R., Selyutin A.A., Penkova A.V.

CHARACTERIZATION OF NOVEL DENSE MEMBRANES BASED ON CHITOSAN MODIFIED BY MIL-125

2-41. Shonin G.A., Savkina S.R., Serafimov V.V., Tverdokhleba A.R., Kuzminova A.I., Dubovenko R.R., Dmitrenko M.E., Penkova A.V.

DEVELOPMENT OF NOVEL MEMBRANE MATERIALS FOR EFFECTIVE WATER TREATMENT

2-42. Siaglova E.D., Piryazev A.A., Ivanov D.A.

EXPLORING CRYSTALLIZATION AND MELTING OF POLY(ARYL-ETHER-ETHER-KETONE) WITH FAST SCANNING CALORIMETRY

2-43. Srivastava A.A., Bondarev V.P., Kostyleva E.I., Ordina E.V.

FILLERS AND MODIFIERS FOR POLYORGANOSILOXANES

2-44. Stepanova A.S., Kuzminova A.I., Dmitrenko M.E., Dubovenko R.R., Penkova A.V.

NOVEL NANOFILTRATION MEMBRANES BASED ON POLY(ESTER-BLOCK-AMIDE) MODIFIED BY METAL-ORGANIC FRAMEWORKS

2-46. Tishchenko N.A., Vyshivannaya O.V., Tikhonov V.E., Bezrodnykh E.A., Piskarev V.E., Aysin R.R., Antonov Y.A., Orlov V.N., Blagodatskikh I.V.

INTERACTION BETWEEN CHITOSAN AND ALBUMIN IN WEAKLY ALCALINE MEDIA

2-47. Ustyukhina I.S., Dubashynskaya N.V., Petrova V.A., Skorik Y.A.

FUCOIDAN/NANOCHITIN MICROGELS FOR VAGINAL DELIVERY OF METRONIDAZOLE

2-48. Uzhegov A.A., Gumerov R.A., Rudyak V. Yu., Potemkin I.I.

COMPUTER SIMULATIONS OF AMPHIPHILIC STIMULI-RESPONSIVE MICROGELS WITH HYDROPHOBIC MACRO-CROSSLINKERS

2-49. Vinogradov R.A., Zharikov A.A., Zezina E.A., Pozdnyakov A.S., Zezin A.A.

ONE- POT PREPARATION OF METAL – POLYMER NANOCOMPOSITE IN IRRADIATED SOLUTION HAuCl_4 AND 1-VINYL-1,3-IMIDAZOLE: FEATURES FORMATION OF GOLD NANOPARTICLES AND 1-VINYL-1,3-IMIDAZOLE POLYMERIZATION

2-51. Yarchenko P.S., Safonova E.A.

STRUCTURAL BEHAVIOR OF AQUEOUS AND AQUEOUS-SALT SOLUTIONS OF POLYMERIZED IMIDAZOLIUM IONIC LIQUID

2-52. Zakharova D.V., Morozova S.M.

ION-CONDUCTING POLYMERIC MATERIALS FOR ELECTROCHEMICAL STORAGE DEVICES

2-53. Zherdochkina Y.S., Ugolkova M.A., Belova O.A., Lazareva O.L., Popova E.I., Nevskiy R.E., Sokovishin A.V.

RESEARCH OF AGING OF PLASTIC DETAILS FOR TPTS EQUIPMENT

2-54. Dolmatova A.G., Levin O.V.

INVESTIGATION OF INFLUENCE OF THE ELECTROLYTE NATURE AND COMPOSITION ON THE ELECTROCATALYTIC ACTIVITY OF POLY(TEMPO-PYRROLE)



3. NEW TECHNOLOGIES AND MATERIALS FOR CHEMICAL ANALYSIS

CHAIRMAN: Dr. Sci. **Andrey Bulatov**, Institute of Chemistry, SPbU

SECRETARY: Dr. **Irina Timofeeva**, Institute of Chemistry, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1214

9:00 - 9:20
**KEYNOTE
SPEAKER**

*Dr. Sci. Vladimir Apyari, Furletov A.A., Matiash M.V.,
Tolmacheva V.V., Dmitrienko S.G., Zolotov Yu.A.*
**Gold and Silver Nanoparticles in Spectrophotometric/
Colorimetric Analysis: Behavior, Peculiarities,
Opportunities**

9:20 - 9:35

Melesova M.A., Kirsanov D.O., Shishov A.Y., Bulatov A.V.
**THE SIMULTANEOUS DETERMINATION OF METHANOL,
GLYCEROL, AND WATER IN BIODIESEL USING DEEP
EUTECTIC SOLVENTS**

9:50 - 10:05

Kasimovskaya V.S., Eliseev A.A., Karyakin A.A., Komkova M.A.
**PULSE POWER GENERATION CHRONOAMPEROMETRY
FOR HIGHLY SENSITIVE GLUCOSE MONITORING**

10:05 - 10:20

*Boichenko E.S., Khaydukova M.M., Andreev I.I., Sirro S.V.,
Kirsanov D.O.*
**PAINT IT BLUE: IDENTIFICATION OF SYNTHETIC AND
NATURAL ULTRAMARINE VIA NIR SPECTROSCOPY AND
CHEMOMETRICS**

10:20 - 10:35

*Antonova A.N., Kochetkova M.A., Timofeeva I.I., Bulatov A.V.,
Shishov A.Y.*
**A SMARTPHONE-BASED COLORIMETRIC DETERMINATION
OF POLYDADMAC IN TREATED WASTEWATER**

10:35 - 10:50

Tuyakova S.G., Mikhalchenkov M.V., Kurgachev D.A.

A NEW APPROACH TO MONITORING THE QUALITY OF EQUIPMENT CLEANING FROM "FEBUXOSTAT"

11:20 - 11:40
**INVITED
SPEAKER**

Dr. Andrey Shishov

Deep Eutectic Solvents in Microextraction Methods of Analysis

11:40 - 11:55

Pidenko P.S., Pidenko S.A., Burmistrova N.A.

DUMMY TEMPLATE IMPRINTED PROTEINS FOR ZEARALENONE DETERMINATION IN GRAINS

11:55 - 12:10

Karpitskiy D.A., Bessonova E.A., Shishov A.Yu., Kartsova L.A.

CHOLINE CHLORIDE-BASED DES, IMIDAZOLIUM IONIC LIQUIDS AND POLYDOPAMINE-COATED MAGNETIC NANOPARTICLES AS LIQUID AND SOLID SMART MATERIALS IN ANALYSIS OF NATURAL SAMPLES

12:10 - 12:25

Zhilkina A.V., Kolotov V.P., Tyurin D.A., Gromyak I.N., Sibrina M.A.

DEVELOPMENT OF SAMPLE PREPARATION METHODS AT ATMOSPHERIC PRESSURE FOR DETERMINATION OF RARE EARTH ELEMENTS IN ROCKS BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY

12:25 - 12:40

Bulatova E.A., Golovin M.S., Mironova A.T., Zakharchenkova V.P., Nekorysnova N.S.

ELECTROCHEMICAL DETECTION OF NITROFURAZONE USING A CARBON-PASTE ELECTRODE MODIFIED WITH LANTHANUM FERRITE

12:40 - 12:55

Prozherin I.S., Pokhvishcheva N.V., Menshova A.S., Peshkova M.A.

WATER-SOLUBLE ACIDOCHROMIC DYES LIPOPHILIZED WITH QUATERNARY AMMONIUM CATIONS AS TUNABLE HYDROGEN CHROMOIONOPHORES FOR POLYMERIC OPTICAL SENSORS

12:55 - 13:10

Bodulev O.L., Solovjev A.M., Sakharov I.Yu.

CHEMILUMINESCENT PLATE-BASED METHODS FOR microRNA DETECTION USING ISOTHERMAL AMPLIFICATION



THURSDAY, 05.09, Room 1214

9:30 - 10:00
**INVITED
SPEAKER**

Dr. Olga Osmolovskaya

**Inorganic Nanosorbents for Solid-Phase
Microextraction: Preparation, Most Important
Parameters and Examples of Application**

10:00 - 10:15

Drozhd D.D., Kornilov D.A., Strokin P.D., Goryacheva I.Yu.

**ALLOYED QUANTUM DOTS: FEW STEPS TOWARDS
THE PHOTOLUMINESCENT LABEL PRODUCTION WITH
FLEXIBLE PROPERTIES**

10:15 - 10:30

Kurashov Y.V., Pochivalov A.S., Bulatov A.V., Garmonov S.Y.

**SUPRAMOLECULAR SOLVENT-BASED MICROEXTRACTION
FOR CHROMATOGRAPHIC DETERMINATION OF
ENROFLOXACIN IN MILK**

10:30 - 10:45

Maliushevskaya A., Kartsova L.A.

**ANALYTICAL CAPABILITIES OF VARIOUS APPROACHES
TO ELECTROPHORETIC DETERMINATION OF MONO- AND
DISACCHARIDES**

10:45 - 11:00

Alexandrovich A.S., Komkova M.A., Karyakin A.A.

**POLY(METHYLENE GREEN) NANOPARTICLES AS ANCHORS
OF PQQ GLUCOSE DEHYDROGENASE FOR ITS MOST
EFFICIENT BIOELECTROCATALYSIS**

11:00 - 11:15

Abdullin Y.R., Nazzyrov M.I., Perfilova Y.A.

**DETERMINATION OF DRUG ENANTIOMERS USING A
VOLTAMMETRIC SENSOR MODIFIED WITH MOLECULARLY
IMPRINTED POLYPYRROLE**

11:15 - 11:30

Pavlova A.A., Shekhovtsova A.D., Maleeva K.A., Smirnov E.A.

**SELF-ASSEMBLY OF SILVER NANOPARTICLES AT THE
LIQUID-LIQUID INTERFACE AS SCAFFOLD FOR NEW
GENERATION OF RAMAN SENSORS**

12:00 - 12:20
**INVITED
SPEAKER**

Dr. Sci. Dmitry Kirsanov

**Machine Learning, Artificial Intelligence and
Chemometrics in Analytical Chemistry - What's the
Difference?**

12:20 - 12:35

Kochetkova M.A., Timofeeva I.I., Bulatov A.V.

**DIGITAL IMAGE-BASED TEST SYSTEM FOR ON SITE
DETERMINATION OF ASCORBIC ACID IN BABY FOOD**



12:35 - 12:50	<i>Araslanova A.T., Bessonova E.A., Platonova N.B., Kartsova L.A.</i> ANALYTICAL APPROACHES TO OBTAINING CHROMATOGRAPHIC PROFILES OF AMINO ACIDS AND GABA CONTENT IN GABA TEA BASED ON THE COLCHIS VARIETY BY HPLC-UV AND HPTLC METHODS
12:50 - 13:05	<i>Yuskina E.A., Shishov A.Y., Panchuk V.V., Kirsanov D.O.</i> EXPLORING THE PROPERTIES OF DEEP EUTECTIC SOLVENTS USING INDUCTANCE COIL HIGH-FREQUENCY CONTACTLESS SENSOR
13:05 - 13:20	<i>Nazyrov M.I., Abdullin Y.R., Perfilova Y.A.</i> DETERMINATION OF BIOLOGICALLY ACTIVE COMPOUNDS USING A VOLTAMMETRIC SENSOR BASED ON MOLECULARLY IMPRINTED POLY(3,4-ETHYLENEDIOXYTHIOPHENE)
13:20 - 13:35	<i>Shigapov I.V., Khromova I.A., Lubimov S.E., Dubenskiy A.S., Maksimova Y.A., Statkus M.A.</i> THE STUDY OF THE SORPTION OF RHENIUM FROM HYDROCHLORIC AND NITRIC ACID SOLUTIONS BY IMIDAZOLIUM POLYMER SORBENT FOR SUBSEQUENT MS-ICP DETERMINATION
13:35 - 13:50 SPONSOR	<i>Demidenko E.S., Botin A.A., Khasyikova V.V., Podlesnova E.V.</i> QUANTIFICATION OF FATTY ACIDS OLIGOMERS USING GC AND GC-MS METHODS
15:00 - 15:15	<i>Saveliev M.Yu., Kirsanov D.O., Jahatspanian I.E.</i> DETERMINATION OF HALITOSIS BY EXHALED BREATH ANALYSIS USING SEMICONDUCTOR METAL OXIDE SENSORS AND CHEMOMETRIC METHODS
15:15 - 15:30	<i>Nizov E.R., Shishov A.Y.</i> HPLC-FLD DETERMINATION OF PAHS IN NATURAL WATER SAMPLES USING HYDROPHOBIC DEEP EUTECTIC SOLVENTS
15:30 - 15:45	<i>Sagitova A.S., Rumyantseva M.N., Krivetskiy V.V.</i> SUB-PPM SHORT-CHAIN FATTY ACIDS DETECTION WITH LANTHANUM(III) MODIFIED TIN DIOXIDE GAS SENSORS
15:45 - 16:00	<i>Lazov M.A., Karygin E.D., Ischenko A.A.</i> ANALYSIS OF NANOPARTICLES AND NANOMATERIALS BY X-RAY PHOTOELECTRON SPECTROSCOPY (XPS)



16:00 - 16:15

Gaponova A.G., Adels K., Lang F., Monakhova J., Kirsanov D.O.
QUANTIFICATION OF GLUCOSAMINE AND HYALURONIC ACID IN FOOD SUPPLEMENTS BY POTENTIOMETRIC MULTISENSOR SYSTEM

16:30 - 16:45

Barbayanov K.A., Veselova D.S., Timofeeva I.I., Bulatov A.V.
LIQUID MICROEXTRACTION BASED ON "CLASSICAL" AND "GREEN" SOLVENTS FOR CHROMATOGRAPHIC DETERMINATION OF BIOTIN

POSTER SESSION

TUESDAY, 03.09, 15:00 - 16:45

3-1. *Adamova A.A., Kartsova L.A., Fetin P.A.*

NEW MICELLAR POLYELECTROLYTES – MODIFIERS OF ELECTROPHORETIC SYSTEMS

3-2. *Afanasyev A.O., Podolina E.A., Livanov D.R.*

SORPTIONED SPECTROMETRIC DETERMINATION OF PHENOL AND ALKADERIVATIONS IN WATER

3-3. *Borodina A.F., Chikurova N.Yu., Patrushev D.P., Gorbovskaia A.V., Chernobrovkina A.V., Shpigun O.A.*

SIMULTANEOUS DETERMINATION OF SWEETENERS AND CARBOHYDRATES USING LABORATORY-DESIGNED ADSORBENTS BASED ON SILICA AND POLYSTYRENE-DIVINYLBENZENE IN HILIC MODE

3-4. *Butorlin O.S., Bessonova E.A., Karstova L.A.*

SIMULTANEOUSLY DETERMINATION OF SHORT- AND LONG-CHAIN FATTY ACIDS BY HPLC IN THE FORM OF DERIVATIVES WITH 3-NITROPHENYLHYDRAZINE IN BIOLOGICAL OBJECTS

3-5. *Cheremensky S.O., Egorov A.V.*

WATER AND IONS MOBILITY IN LiCl-CSCL-H₂O TERNARY SOLUTION. A MOLECULAR DYNAMICS SIMULATION STUDY

3-6. *Chichkanova E.S.*

QUALITATIVE ANALYSIS OF VOLATILE COMPOUNDS OF LAVENDER FLOWERS BY TD-GX-MS METHOD DURING THEIR PASSIVE SORPTION ON MONOLITHIC SORPTION MATERIALS BNR-SIC

3-7. Chikin D.V., Loktionov P.A., Speshilov I.O., Pichugov R.D.

MONITORING THE STATE OF CHARGE OF ANTHRAQUINONE-VANADIUM REDOX FLOW BATTERY ELECTROLYTES

3-8. Danilova D.A., Ignatovich Z.V., Rogachev A.A.

DEVELOPMENT OF A GC-MS/MS METHOD FOR ANALYSIS OF ENERGYSATURATED COMPOUNDS

3-9. Davlethbaeva K.N., Rodinkov O.V.

EVALUATION OF THE ANALYTICAL CAPABILITIES OF HEADSPACE SINGLE-DROP MICROEXTRACTION FOR GAS CHROMATOGRAPHIC DETERMINATION OF ETHANOL IN SOFT DRINKS

3-10. Dolzhanskaya T.R., Banerjee T., Shishov A.Y.

FLOW EXTRACTION DEVICE BASED ON A ROTATING DISK FOR AUTOMATED SAMPLE PREPARATION OF AQUEOUS MEDIUM. DETERMINATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN NATURAL WATERS

3-11. Dvoinykh D.D., Kochetkova M.A., Zubakina E.A., Timofeeva I.I., Bulatov A.V.

MICELLAR MICROEXTRACTION BASED ON ALKYL POLYGLUCOSIDE FOR THE DETERMINATION OF PHOSPHATES

3-12. Fedosov P. A., Shishov A.Y., Bochko T.N.

SPECTROPHOTOMETRIC DETERMINATION OF ALUMINIUM IN FOOD SAMPLES USING MADDER'S EXTRACT AND DEEP EUTECTIC SOLVENTS

3-13. Furletov A.A., Yakimenko A.V., Apyari V.V., Dmitrienko S.G., Zolotov Yu.A.

ASSEMBLABLE MICROFLUIDIC PAPER-BASED DEVICES MODIFIED WITH SILVER NANOPARTICLES FOR COLORIMETRIC DETERMINATION OF BIOFLAVONOIDS

3-14. Gaga A.S., Serebryakov K.V., Ilyina A.M., Volgina T.N., Gavrilenko M.A.

SIMPLE SMARTPHONE BASED DETERMINATION OF CHLORIDES IN OIL USING A TRANSPARENT OPTODE

3-15. Ganieva A.Sh., Androsova A.V., Kartsova L.A.

DETERMINATION OF PHENYL- AND INDOLE CARBOXYLIC ACIDS BY CAPILLARY ELECTROPHORESIS USING IMIDAZOLE-BASED COVALENT COATINGS

3-16. Gorbunov P.E., Ponomareva A.N.

INDICATOR METHOD FOR QUANTATIVE DETERMINATION OF ACID-BASE SITES ON THE SURFACE OF OXIDE MATERIALS

3-17. Igosheva V.S., Kiseleva D.V., Kudyakova V.S., Kel P.V., Fokina A.K.

MULTI-METHOD SPECTROSCOPIC TRACE ELEMENTAL ANALYSIS OF QUARTZ AND SYNTHESIZED SILICON



3-19. *Ivakina K.V., Shemiakina A.O., Chernobrovkina A.V., Spigun O.A.*

RELATIONSHIP BETWEEN THERMODYNAMIC PARAMETERS AND RETENTION MECHANISM FOR POLAR COMPOUNDS IN HYDROPHILIC INTERACTION LIQUID CHROMATOGRAPHY

3-20. *Ivanova S.V., Nikitina T.G.*

DETERMINATION OF 4-ACETAMIDOPHENYL ACETATE AS PARACETAMOL IMPURITY BY HPLC AND MEKC

3-21. *Kaleeva M.A., Danilov D.A., Kurlov A.S.*

DETERMINATION OF OXYGEN IN CERAMICS BASED ON WC, ZrC, Y₂O₃

3-22. *Kalmykova A.D., Ziyatdinova G.K.*

POLYMER-MODIFIED ELECTRODES FOR THE DETERMINATION OF EUGENOL AND TRANS ANETHOLE IN ESSENTIAL OILS

3-23. *Kazanina D.A., Babain V.A., Kirsanov D.O.*

HYDROPHOBIC ANIONS. EFFECT ON THE EXTRACTION AND SENSITIVITY OF MEMBRANE SENSORS

3-24. *Kazin V.I., Zakharchenko E.A., Khludneva A.O., Dogadkin D.N., Gromyak I.N., Tyurin D.A., Kolotov V.P.*

INFLUENCE OF THE SPECTRAL INTERFERENCE ON THE DETERMINATION OF PRECIOUS METALS IN BLACK SHALE SAMPLES BY THE ICP-MS METHOD

3-25. *Khludneva A.O., Kazin V.I., Zakharchenko E.A., Zhilkina A.V., Dogadkin D.N., Tyurin D.A., Kolotov V.P.*

MODIFIED CARBON NANOMATERIALS FOR CONCENTRATING ULTRA-LOW RARE EARTH ELEMENTS CONCENTRATIONS IN GEOLOGICAL SAMPLES

3-26. *Khrolenko R.A., Kupriyanova G.S.*

DETERMINATION OF ADULTERATION MARKERS USING 1H NMR SPECTROSCOPY

3-27. *Korina E.A., Karaberova A.S., Bulatova E.A., Golovin M.S., Stankovich D.M., Gusev S.A., Fadeev V.V., Bol'shakov O.I.*

SAMARIUM CUPRATE WITH MICRON-SIZE PORES FOR DRUG SENSING

3-28. Kulinich Y.A., Tolmacheva V.V., Apyari V.V.

MAGNETIC SOLID-PHASE EXTRACTION BASED ON MAGNETIC HYPERCROSSLINKED POLYSTYRENE FOR DETERMINATION OF FLUOROQUINOLONES IN MILK WITH HPLC

3-29. Lazaretova A.I., Bessonova E.A., Kartsova L.A.

DEVELOPMENT OF ANALYTICAL APPROACHES FOR THE DETERMINATION OF LOW MOLECULAR WEIGHT ORGANIC ACIDS IN BIOLOGICAL FLUIDS

3-30. Lodianov I.O., Pochivalov A.S., Bulatov A.V.

MICROEXTRACTION OF FLUOROQUINOLONES FROM BIOLOGICAL FLUIDS USING SUPRAMOLECULAR SOLVENTS BASED ON DI-(2-ETHYLHEXYL)-PHOSPHORIC ACID SALT

3-31. Pavlova K.V., Pochivalov A.S., Bulatov A.V.

MICELLE-MEDIATED EXTRACTION OF GLYPHOSATE FROM FOOD SAMPLES FOLLOWED BY ITS DERIVATIZATION, ENRICHMENT AND LIQUID CHROMATOGRAPHIC DETERMINATION

THURSDAY, 05.09, 17:00 - 18:30

3-32. Lusnikova K.M., Krekhova F.M., Shishov A.Yu.

MICROEXTRACTION SEPARATION OF FLUOROQUINOLONE ANTIBIOTICS USING THREE-COMPONENT DEEP EUTECTIC SOLVENTS FOR THEIR DETERMINATION IN SEDIMENT

3-33. Makhrov D.E., Ionova I.V., Ionov D.S.

METAL-FREE PHOSPHORESCENT MATERIALS FOR OXYGEN SENSING WITH NAPHTHALENE- β -CYCLODEXTRIN-HYDROCARBON COMPLEXES

3-34. Markova U.O., Shishov A.Y., Bulatov A.V.

AN AUTOMATED MICROEXTRACTION PROCEDURE FOR DETERMINATION OF HEAVY METALS IN FOOD PRODUCTS WITH THE USE OF A NOVEL SULFUR-RICH DEEP EUTECTIC SOLVENT

3-35. Morocho D.S., Minich I.A.

ORGANIC-INORGANIC HYBRIDS OF LAYERED PEROVSKITES: ENHANCING PHOTOCATALYTIC ACTIVITY THROUGH INTERCALATION AND GRAFTING

3-36. Muradymov R.R., Banerjee T., Shishov A.Y.

QUASIHIDROPHOBIC DEEP EUTECTIC SOLVENTS: A VERSATILE APPROACH FOR DYES DETERMINATION IN FOOD PRODUCTS



3-37. *Mursalov R.K., Martynova N.A., Prischepa O.A., Rusanova T.Yu.*

SPECTROPHOTOMETRIC DETERMINATION OF CEFTRIAXONE AND CEFOTAXIME IN MILK

3-38. *Mursalov R.K., Kulapina E.G.*

MODIFIED SCREEN-PRINTED SENSORS FOR THE DETECTION OF CERTAIN CEPHALOSPORIN ANTIBIOTICS

3-39. *Pantin A.V., Navolotskaya D.V.*

ELECTROCHEMICAL SENSOR BASED ON GOLD IDE FOR QUANTITATIVE DETERMINATION OF MIR-371A-3P - BIOMARKER OF TESTICULAR GERM CELL TUMORS

3-40. *Pleshakov V.M., Nikitina V.N., Karyakin A.A.*

ELECTROCHEMICAL LACTATE BIOSENSORS BASED ON CHITOSAN MEMBRANE FOR CONTINUOUS ANALYSIS

3-41. *Purytskin I.P., Biryuzov A.A., Tolmacheva V.V., Apyari V.V.*

APPLICATION OF IRON OXIDE NANOPARTICLES AS A MAGNETIC SORBENT IN MATRIX SOLID-PHASE DISPERSION FOR EXTRACTION OF TETRACYCLINES FROM MILK AND THEIR CHROMATOGRAPHIC DETERMINATION

3-42. *Serebryakov K.V., Khachkovskii A.V., Gaga A.S., Volgina T.N., Gavrilenko M.A.*

REVERSIBLE POLYMER COLORIMETRIC pH SENSOR

3-44. *Sidelnikov V.O., Ganeev A.A., Chuchina V.A., Kravtsov D.V., Gubal A.R., Krylov O.A.*

PULSED GLOW DISCHARGE MASS SPECTROMETRY FOR VOC DETERMINATION IN AIR SAMPLES BEFORE AND DURING SURGERY TO REMOVE A BLADDER TUMOR

3-45. *Smagina M.A., Shemiakina A.O., Ivanova E.D., Chernobrovkina A.V., Shpigun O.A.*

STUDY OF THE RETENTION MECHANISM FOR ORGANIC AND INORGANIC IONS IN HILIC WITH SILICA- AND POLY(STYRENE-DIVINYLBENZENE)-BASED STATIONARY PHASES

3-46. *Smolyanov N.A., Kirsanov D.O.*

3D PRINTING WITH A POLYMER MODIFIED USING MOLECULAR EMITTERS BASED ON CYCLOMETALLIC EUROPIUM COMPOUNDS FOR THE DEVELOPMENT OF A «SPECTROPHOTOMETER IN A CUVETTE»

3-47. *Syutkin V.S., Peshkova M.A.*

TAILORING DIGITAL MACROPHOTOGRAPHY FOR IMAGING OF OPTICAL SENSORS

3-48. *Talipova I.I., Gorbovskaia A.V., Uzhel A.S.*

MIXED-MODE POLYMER-BASED STATIONARY PHASES WITH GRAFTED ZWITTERIONIC CHAINS

3-49. *Tanykova N.G., Chudova E.S., Petrova Yu.Yu.*

STUDY OF ORGANIC MATTER DISTRIBUTION IN OIL SHALE BY MICRO-FTIR AND SEM-EDS

3-50. *Timichev A.A., Pogonia E.V., Gorbovskaia A.V., Uzhel A.S.*

ANALYSIS OF BEVERAGES AND ORAL HYGIENE PRODUCTS USING NOVEL STATIONARY PHASES FOR ION CHROMATOGRAPHY

3-51. *Timoshenko V.V., Harb A.H., Ermolenko Yu.E., Smirnov I.V.*

CHEMICAL SENSORS FOR POTENTIOMETRIC MONITORING IN THE PRODUCTION OF RADIOPHARMACEUTICAL YTTRIUM-90

3-52. *Urusova S.V., Shishov A.Yu., Melesova M.A.*

DETERMINATION OF BIOACTIVE COMPOUND IN PRÍMULA VÉRIS USING DEEP EUTECTIC SOLUTIONS

3-53. *Usanova E.D., Melekhin A.O.*

BETA-LACTAM ANTIBIOTIC STABILITY IN CHICKEN MEAT

3-54. *Varabyova V.V., Zuraev A.V.*

THE EFFECT OF THE MOBILE PHASE ADDITIVES ON FRAGMENTATION PATHWAYS IN THE ANALYSIS OF OCTOGEN (HMX) AND HEXOGEN (RDX) BY HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY WITH MASS-SPECTROMETRY

3-55. *Vasileva E.N., Ikhalaynen Y.A., Rodin I.A.*

CHARACTERISATION OF THE COMPONENT COMPOSITION OF BREWING HOP VARIETIES USING HPLC-HRMS AND MOLECULAR NETWORKS

3-56. *Vasilyeva A.A., Fokina A.S., Gorbunova M.V., Apyari V.V.*

SILICA NANODOTS AS LUMINESCENT REAGENTS FOR THE DETERMINATION OF CATECHOLAMINES

3-57. *Veselova D.S., Barbayanov K.A., Timofeeva I.I., Bulatov A.V.*

THE NEW GENERATION OF GREEN SOLVENTS FOR THE EXTRACTION OF B GROUP VITAMINS FROM FOODS

3-58. *Yatsyshina V.S., Shishov A.Y., Nizov E.R.*

THE INTERFERING EFFECT OF DEEP EUTECTIC SOLVENTS ON THE DETERMINATION OF FLAVONOIDS IN PLANTS MATERIALS



3-59. *Zhalnina T.V., Khudozhitkov A.E., Kolokolov D.I.*

HYDROGEN BOND STRENGTH AND PHASE TRANSITION IN PYRIDINIUM-BASED IONIC LIQUIDS AS VIEWED BY SOLID-STATE ^2H NMR

3-60. *Zhidomorova K.A., Enikeeva M.O.*

THE SYNTHESIS OF NANOPARTICLES AND THE PHASE FORMATION IN THE $\text{LAPO}_4\text{-GDPO}_4\text{-YPO}_4\text{-(nH}_2\text{O)}$ SYSTEM UNDER SOFT CHEMISTRY METHODS

3-61. *Ziangirova E.R., Kolobova E.A., Solovyeva E.V., Kartsova L.A.*

COMPARATIVE STUDY OF POLY(DIALLYLDIMETHYLAMMONIUM CHLORIDE) AND CHITOSAN AS PHYSICALLY ADSORBED COATINGS FOR ELECTROPHORETIC SEPARATION OF BIOLOGICALLY ACTIVE COMPOUNDS

4. ORGANIC, ORGANOMETALLIC AND MEDICINAL CHEMISTRY

CHAIRMAN: Dr. **Olga Bakulina**, Institute of Chemistry, SPbU

SECRETARY: Ms. **Polina Paramonova**, Institute of Chemistry, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1301

9:00 - 9:35 KEYNOTE SPEAKER	<i>Dr. Sci. <u>Leonid Fershtat</u></i> Nitrogen-Oxygen Heterocyclic Systems: Novel Synthetic Approaches and Emerging Trends
9:36 - 9:51 SPONSOR	<i><u>Kolychev E.L.</u></i> INDUSTRIALLY APPLICABLE PHOSGENE-FREE SYNTHESIS OF ARYL ISOCYANATES
9:52 - 10:02	<i><u>Bolotova I.A.</u>, <u>Ustyuzhanin, A. O.</u>, <u>Sergeeva E. S.</u>, <u>Faizdrakhmanova A. A.</u>, <u>Hai Y.</u>, <u>Stepanov A. V.</u>, <u>Ushakov I. A.</u>, <u>Lyssenko K. A.</u>, <u>You L.</u>, <u>Lvov A. G.</u></i> 2,3-DIARYLMALEATE SALTS AS A VERSATILE CLASS OF DIARYLETHENES WITH A FULL SPECTRUM OF PHOTOACTIVITY IN WATER
10:03 - 10:13	<i><u>Kuleshov A.V.</u>, <u>Andreev I.A.</u>, <u>Ratmanova N.K.</u>, <u>Trushkov I.V.</u></i> DONOR-ACCEPTOR CYCLOPROPANES WITH A PHOSPHONATE GROUP AS AN ACCEPTOR: SYNTHESIS, PROPERTIES
10:14 - 10:24	<i><u>Semenov A.V.</u>, <u>Baykov S.V.</u>, <u>Soldatova N.S.</u>, <u>Postnikov P.S.</u>, <u>Boyarskiy V.P.</u></i> C-N COUPLING WITH DIARYLIODONIUM(III) SALTS: NEW APPROACH FOR SELECTIVE N-ARYLATION OF FIVE MEMBERED HETEROCYCLES
10:25 - 10:35	<i><u>Giricheva M.A.</u>, <u>Vorobiev I.G.</u>, <u>Budruev A.V.</u></i> SYNTHESIS OF 1,3-DICARBONYL AZEPINES VIA PHOTOINITIATED REACTIONS OF ARYL AZIDES WITH CARBON-BASED NUCLEOPHILES



11:20 - 11:30

Ledovskaya M.S., Voronin V.V.

CALCIUM CARBIDE AS A SOLID ACETYLENE ANALOGUE IN ORGANIC SYNTHESIS

11:31 - 11:41

Kozlenko A.S., Pugachev A.D., Makarova N.I., Rostovtseva I.A., Metelitsa A.V., Ozhogin I.V.

HALOGENATED SPIROPYRANS' DERIVATIVES AS PROMISING BUILDING BLOCKS FOR SMART MATERIALS

11:42 - 11:52

Simbirtseva A.E., Obydenov D.L., Kornev M.Y., Sosnovskikh V.Y.

A NEW APPROACH FOR THE SYNTHESIS OF MEROCYANINE DYES VIA ENAMINATION OF 4H-PYRANES AND THEIR DERIVATIVES

11:53 - 12:03

Boichenko M.A., Trushkov I.V., Ivanova O.A.

NUCLEOPHILIC RING-OPENING REACTIONS IN THE SYNTHESIS OF HETEROCYCLES FROM DONOR-ACCEPTOR CYCLOPROPANES

12:04 - 12:14

Ikonnikova V.A., Mikhaylov A.A.

SYNTHETIC STUDIES TOWARDS HASUBANAN ALKALOIDS. ESTABLISHMENT OF TANDEM SIGMATROPIC REARRANGEMENT, RING-CONTRACTION AND DEAROMATISATION METHODOLOGIES

12:15 - 12:25

Stepanov A.V., Ushakov I.A., Lysenko K.A., Lvov A.G.

CHEMICAL MODIFICATIONS OF DIHYDROQUERCETIN TOWARDS PHOTOACTIVE DERIVATIVES

12:26 - 12:36

Iuring E.S., Raesi G.R., Kulikova L.N.

SYNTHESIS OF BIOLOGICALLY ACTIVE DERIVATIVES OF N-ALKYL-10-CHLORO-1,2,3,4-TETRAHYDROBENZO[b][1,6]NAPHTHYRIDINES

12:37 - 12:47

Puchkov V., Koval V., Revtovich S., Lyfenko A., Morozova E., Solyev P.

SYNTHESIS OF THIOSULFINATES WITH ANTIMICROBIAL ACTIVITY

12:48 - 12:58

Kuznetsov N.A., Samet A.V.

REDIRECTING THE [3 + 2] CYCLOADDITION REACTION BETWEEN PYRIDINIUM YLIDES AND 1-ARYLNITROALKENES TOWARD [4 + 1] ANNULATION

WEDNESDAY, 04.09, Room 1213

9:55 - 10:05

Pugachev A.D., Kozlenko A.S., Ozhogin I.V., Makarova N.I., Rostovtseva I.A., Sazykina M.A., Sazykin I.S., Matukhno A.E., Ponyatovskaya A.M., Borodkin G.S.

MOLECULAR DESIGN AND SYNTHESIS OF SPIROPYRAN FLUORESCENT PROBES

10:06 - 10:16

Karapetyan A.V., Gharibyan Y.A., Gharibyan T.K., Yengoyan A.P., Ghazaryan E.A.

GREEN, ONE-POT SYNTHESIS OF PYRAZOLE DERIVATIVES BASED ON CHALCONES

10:17 - 10:27

Bykov V.N., Ukhanev S.A., Ushakov I.A., Vologzhanina A.V., Antsiferov E.A., Klimenko L.S., Lvov A.G.

ACTIVATION OF ANTHRAQUINONE'S ELECTROPHILICITY BY LIGHT FOR A DYNAMIC C-O BOND

10:39 - 10:49

Vidyakina A.A., Silonov S.A., Danilkina N.A.

DEVELOPMENT OF CYCLOALKYNE DYE REAGENTS: ROLE OF THE NATURE OF ALKYNE AND LINKER PART

10:50 - 11:00

Antropov S.M., Tokmacheva S.A., Trushkov I.V.

SYNTHESIS OF NEW CYCLIC SYSTEMS PERI-ANNULATED TO THE INDOLE RING

11:20 - 11:30

Strekalova S.O., Kononov A.I., Khvorova M.A., Zlygostev A., Saveliev G.N., Budnikova Y.H.

ELECTROOXIDATIVE AMIDATION OF ARENES WITH NITRILES



11:31 - 11:41

Kuleshov D.O., Gromov I.A., Pikovskoi I.I., Onuchina A.A., Voronov I.S.

APPLICATION OF MULTIPLEXED ELECTROSPRAY FOR MICRODROPLET CHEMICAL SYNTHESIS PROBLEMS

11:42 - 11:52

Filippov I.P., Rostovskii N.V., Zakharov T.N., Grishin A.V., Novikov M.S., Khlebnikov A.F.

FORMATION OF PYRROLE AND 1H-CYCLOPENT[C] PYRID-1-ONE DERIVATIVES BY DBU-MEDIATED TRANSFORMATIONS OF 4-ALKYL-2-AZABUTA-1,3-DIENES

11:53 - 12:03

Aleshin R.P., Galukhin A.V.

AZIDE-ALKYNE CYCLOADDITION OF ARYL PROPARGYL ETHERS: KINETICS AND SYNTHETIC FEATURES OF THE PROCESS IN NON-ISOTHERMAL CONDITIONS

12:04 - 12:14

Obydennik A.Y., Titov A.A., Varlamov A.V.

DIVERGENT REARRANGEMENT IN THE CONSTRUCTION OF PYRROLO[2,1-b][3]BENZAZEPINE AND PYRIDO[2,1-a] ISOQUINOLINE SCAFFOLDS UNDER DIFFERENT CONDITIONS

12:15 - 12:25

Shuingalieva D. V., Vil' V. A., Gorlov E. S., Akulov A. A., Varaksin M. V., Terent'ev A. O.

RADICAL ALKYLATION USING ACYCLIC DIACYL PEROXIDES CONDITIONS

12:26 - 12:36

Pasyukov D.V., Shevchenko M.A., Chernyshev V.M.

SYNTHESIS AND FUNCTIONALIZATION OF HALOGEN METHYL IMIDAZOLIUM SALTS

12:37 - 12:47

Tikhonov T. P., Shorohov V. V., Trushkov I. V., Ivanova O. A.

DIVERGENT SYNTHESIS OF 2-AMINOQUINOLINES, 2-AMINOARYL-SUBSTITUTED CYCLOPROPANES AND CYCLOPROPA[C]QUINOLONES FROM ORTHO-AMINO-SUBSTITUTED BENZALDEHYDES

12:48 - 12:58

Mingazhetdinova D.O., Agarkov A.S., Nefedova A.A.,
Ovsyannikov A.S., Litvinov I.A., Solovieva S.E., Antipin I.S.
**SYNTHESIS, STRUCTURE IN THE CRYSTALLINE PHASE
AND NEW REARRANGEMENTS IN THE SERIES OF
2-ARYLHYDRAZONE THIAZOLO[3,2-a]PYRIMIDINE
DERIVATIVES**

12:59- 13:09

Merkulov V.G., Ivanova E.A., Rusakov S.P., Zharkov M.N.
**SUPERCRITICAL CARBON DIOXIDE AS PROSPECTIVE
MEDIUM FOR PHOTOOXIDATION PROCESSES IN
ORGANIC SYNTHESIS**

13:10- 13:20

Meshalkin S.A., Tsybulin S.V., Tonkoglazova D.I. , Antonov A.S.
**QUADRUPLE REACTIVITY OF STERICALLY HINDERED
ORTHO-DIMETHYLAMINO ARYLOXIMES IN ACIDIC MEDIA**

THURSDAY, 05.09, Room 1301

9:30 - 9:55
**INVITED
SPEAKER**

Dr. Sci. Dmitry Perekalin, Ankudinov N.M., Komarova A.A.
**Synthesis of Chiral Boranes by Asymmetric Insertion of
Diazoacetates into B-H Bonds**

9:56 - 10:21
**INVITED
SPEAKER**

Dmitry Dar'in, Kantin G.P., Bunev A.S., Kalinin S.A., Bakulina O.Yu.
**New Ligands of the Ubiquitin Ligase Cereblon for
Targeted Proteasomal Protein Degradation**

10:33 - 10:43

Polivanovskaia D.A., Birin K.P., Senchikhin I.N.,
Demina L.I., Tsivadze A.Yu.
**PYRAZINOPORPHYRINS – PROSPECTIVE BASIS FOR
HETEROGENEOUS OXIDATION PHOTOCATALYSTS**

10:44 - 10:54

Belousov M.S., Dubinina T.V.
**NOVEL PYRIDO[1,2-A]BENZIMIDAZOLE-FUSED
PORPHYRAZINE COMPLEXES: SYNTHESIS,
PHOTOCHEMICAL PROPERTIES AND PHOTODYNAMIC
ACTIVITY**

10:55 - 11:05

Sysoeva A.A.
**HALOGEN BOND DONORS AS EFFICIENT CATALYSTS FOR
FUNCTIONALIZATION OF CARBONYL COMPOUNDS**



11:06 - 11:16

Korobkov S.M., Birin K.P., Tsivadze A.Yu.

SINGLET OXYGEN-MEDIATED OXIDATION OF SULFIDES: A KINETIC AND DFT STUDY

11:50 - 12:00

Zimnitskiy N.S., Kaigorodova V.V., Korotaev V.Y., Obydenov D.L., Sosnovskikh V.Y.

ENAMINODIKETONES FROM 5-ARYLPENT-4-ENE-1,3-DIONES IN THE SYNTHESIS OF NITROGEN-CONTAINING HETEROCYCLES

12:01 - 12:11

Durakov S.A., Magasumov A.A., Flid V.R.

PALLADIUM-CATALYZED ALLYLIC SUBSTITUTION OF PRIMARY AND SECONDARY AMINES WITH ALLYL FORMATE

12:23 - 12:33

Orlov T.S., Pakhomova M.V., Bykov M.V., Suslov D.S.

NOVEL CATALYST SYSTEMS FOR THE ADDITION POLYMERIZATION NORBORNENE AND IT'S DERIVATIVES BASED CATIONIC CYCLOPENTADIENYL COMPLEXES OF PALLADIUM

12:34 - 12:44

Gaiazov E.R., Anisovich K.V., Ivanova O.A.

SYNTHESIS OF NOVEL MESOIONIC PYRIDAZIN-1-IUM-3-OLATES

12:45 - 12:55

Putnin I.O., Sysoeva A.A.

HALONIUM AND CHALCONIUM SALTS AS NONCOVALENT ORGANOCATALYSTS FOR ELECTROPHILIC ACTIVATION OF CARBONYL COMPOUNDS



13:07 - 13:17	<u>Gavrilov G.A., Nguyen T.K., Katkova S.A., Rostovskii N.V., Kinzhalov M.A.</u> SYNTHESIS OF BIOLOGICALLY ACTIVE NITROGENOUS HETEROCYCLES BASED ON A METALL-CATALYZED COUPLING OF ISOCYANIDES AND GUANIDINES
13:18 - 13:28	<u>Kolos A.V., Nelybina Y.V., Perekalin D.S.</u> RHODIUM COMPLEXES WITH PLANAR-CHIRAL CYCLOPENTADIENYL LIGANDS ASSEMBLED FROM ALKYNES
13:29 - 13:39	<u>Ivanova E.A., Merkulov V.G., Zharkov M.N.</u> APPLICATION OF C₃N₄@AEROGEL COMPOSITES FOR PHOTOCATALYTIC OXIDATION IN SC-CO₂ MEDIUM
13:40 - 13:50	<u>Karcheuski A.A., Katkova S.A.</u> OXIDATIVE ADDITION OF ALKYL HALIDES AND HALOGENS TO PLATINUM(II) ACYCLIC DIAMINOCARBENE COMPLEXES
14:50 - 15:00	<u>Shatsauskas A.L., Kirnosov S. A., Petrova A.V., Zheleznova T. Yu., Fisyuk A.S</u> A SYNTHESIS AND PHTOTOPHYSICAL PROPERTIES OF 6-ETHYL-6,12-DIHYDRODIBENZO[b,h] [1,5] NAPHTHYRIDIN-7(5H)-ONES
15:01 - 15:11	<u>Viktorova V.V., Obydenov D.L., Sosnovskikh V.Y.</u> SYNTHESIS OF PYRAZOLO[4,3-C]PYRIDINES BASED ON THE AMINATION OF 4-PYRIDONES
15:12 - 15:22	<u>Zinoveva A.D., Borisova T.N.</u> THE TRANSFORMATIONS OF HETEROCYCLIC COMPOUNDS IN REACTIONS WITH INTERNAL ALKYNES
15:23 - 15:33	<u>Ilyushchenko M.K., Salikov R.F., Tomilov Yu. V.</u> ORGANOCATALYTIC ACTIVATION AND SUBSTITUTION IN ELECTRON-DEFICIENT VINYL HALIDES



15:34 - 15:44

Snetkov D.A., Grachova E.V.

**A NEW CLASS OF CATIONIC PHOSPHINE LIGANDS
CONTAINING A PHOSPHONIUM MOIETY: SYNTHESIS AND
PHOTOPHYSICAL PROPERTIES**

15:45 - 15:55

Starodubtseva K.V., Smirnov A.A., Kartsev D.D.

**MICROREACTORS ARRAY BASED ON WETTABILITY
PATTERNS FOR HIGH-THROUGHPUT ORGANIC SYNTHESIS**

15:56 - 16:06

Degtyareva V.S., Shamanaev I.V., Gerasimov E.Yu.,
Pakharukova V.P., Bukhtiyarova G.A.

**INFLUENCE OF TEMPERATURE TREATMENT ON THE
CATALYTIC PROPERTIES OF COBALT CATALYSTS FOR THE
SELECTIVE HYDROGENATION OF P-IODONITROBENZENE**

16:29 - 16:39

Puskov G.I., Dubovtsev A.Yu.

**INTERMOLECULAR GOLD-CATALYZED N-TRANSFER
INVOLVING ARYLAZIDES: A ROUTE TO FUNCTIONALIZED
2-AMINOINDOLES**

16:40 - 16:50

Sumina A.A., Selishcheva S.A., Sosnina V.M., Bulavchenko O.A.,
Yakovlev V.A.

**COPPER-CHROMIUM CATALYSTS FOR THE
HYDROGENATION OF FURFURAL TO FURFURYL ALCOHOL
IN VARIOUS MODES**

THURSDAY, 05.09, Room 1213

10:35 - 10:45

Pokidova O.V., Emel'yanova N.S., Novikova V.O., Kulikov A.V.,
Sanina N.A.

**PARTICIPATION OF ALBUMIN AND GLUTATHIONE IN THE
BIOTRANSFORMATION OF NITROSYL IRON COMPLEXES**



10:46 - 10:56	<i>Patra C., Eldeeb A.A., Kolpashchikov D.M.</i> MULTICOMPONENT ASO AGENT FOR INTRACELLULAR OVEREXPRESSION AND MUTATION RECOGNITION
10:57 - 11:07	<i>Tafran L., Drozd V.S., Moustapha Y.N., Kolpashchikov D.M., Eldeeb A.A.</i> DEVELOPMENT OF THE BIASO THRESHOLDER GATES MODULATED BY DIFFERENT CONCENTRATIONS OF THE CANCER MARKER
11:19 - 11:29	<i>Diachkova A.Y., Ostroverchov P.V.</i> PRODUCTION OF PYRIDINE-CONTAINING NATURAL CHLORINES FOR COMBINED ANTITUMOR THERAPY
11:50 - 12:00	<i>Makarova T.M.</i> ALLOSTERIC DESTABILIZATION OF THE RIBOSOMAL PEPTIDYL TRANSFERASE CENTER: A MOLECULAR DYNAMICS STUDY
12:01 - 12:11	<i>Demchuk D.V., Adaeva O.I., Semenova M.N., Semenov V.V.</i> DISCOVERY OF 4,5-DIARYLPYRIDAZINES AS A NEW CLASS OF ANTI-TUBULIN AGENTS
12:23 - 12:33	<i>Golubeva E.A., Lavrov M.I., Zamoyski V.L., Grigoriev V.V., Palyulin V.A.</i> NEW ALLOSTERIC AMPA RECEPTOR MODULATORS BASED ON TRICYCLIC BISPIDINE DERIVATIVES WITH INDANE MOIETY
12:34 - 12:44	<i>Novikova V.O., Pokidova O.V., Kulikov A.V., Emel'yanova N.S., Konyukhova A.S., Sanina N.A.</i> INTERACTION OF NITROSYL IRON COMPLEXES WITH SUBSTRATES IN MODEL BIOLOGICAL SYSTEMS AND BIODISTRIBUTION OF THEIR DECOMPOSITION PRODUCTS



12:56 - 13:06

Nbeaa A., Moustapha A. Y., Nour and El-Deeb A.A.

**OPTIMIZATION OF SELECTIVITY AND STABILITY OF
ALREADY SELECTED APTAMER FOR BSA**

13:07 - 13:17

Mansurova E.E., Chudinov N.Yu., Shulaeva M.M., Fazleeva R.R., Voloshina A.D., Lyubina A.P., Nizameev I.R., Kadirov M.K., Ziganshina A.Yu., Semenov V.E., Antipin I.S.

**CREATION AND CHARACTERISTICS OF NANOCARRIERS
FOR THE DELIVERY OF DRUGS AND ANTIDOTES**

13:18 - 13:28

Novokshonova A.D.

**APPLICATION OF POLYCARBONYL COMPOUNDS AND
THEIR HETEROCYCLIC DERIVATIVES IN BIOMEDICINE AND
BIOTECHNOLOGY**

13:29 - 13:39

Kuznetsov A.N., Krylov V.B., Nifantiev N.E.

**LINEAR OLIGOSACCHARIDE FRAGMENTS OF BRUCELLA
CYCLIC β -(1-2)-GLUCAN: SYNTHESIS, NMR AND
IMMUNOCHEMICAL INVESTIGATION**

13:40 - 13:50

Khaskanova I.M., Shelenkova I.E., Nesterova A.I.,
Osroverkhov P.V., Vadekhina V.V., Abakumov M.A.

**PROMISING ATP INHIBITOR MOLECULES FOR THE
TREATMENT OF NONALCOHOLIC FATTY LIVER DISEASE**

14:50 - 15:00

Fatykhova A.A., Madzhidov T.I.

**DE NOVO DESIGN BASED ON MONTE-CARLO TREE
SEARCH**

15:01 - 15:11

Mazina L.M., Novikova V.O., Pokidova O.V., Konyukhova A.S.,
Sanina N.A.

**INFLUENCE OF NITROSYL IRON COMPLEXES WITH
AROMATIC LIGANDS ON THERAPEUTIC ENZYMATIC
TARGETS**

15:12 - 15:22

Makarov D.A., Jasko M.V., Karpenko I.L., Efremenkova O.V.,
Vasilyeva B.F., Avdanina D.A., Zhgun A.A., Kochetkov S.N.,
Alexandrova L.A.

**5-SUBSTITUTED N4-ALKYLCYTIDINES AS PROMISING
INHIBITORS WITH A WIDE SPECTRUM OF BIOLOGICAL
ACTIVITY**



15:34 - 15:44	<i>Simonova V.M., Khripun V.D., Pestova O.N.</i> THE CATALYTIC REDUCTION OF TRIMETHYLAMINE N-OXIDE IN REACTION WITH THE TUNGSTEN-CONTAINING ENZYME MODEL COMPLEX
15:45 - 15:55	<i>Nnanyereugo V.O., Dubovichenko M.V., El-Deeb A.A.</i> MULTIVALENT ANTISENSE OLIGONUCLEOTIDES FOR EFFICIENT RNA CLEAVAGE
15:56 - 16:06	<i>Gubanov A.N., Verkhov V.A., Antonov A.S.</i> EXPERIMENTAL STUDY OF «FLIPPING» METALATION OF 4-DIMETHYLAMINOPYRIDINE
16:07 - 16:17	<i>Kutuzov I.A., Danilkina N.A.</i> NICHOLAS REACTION IN CYCLOALKYNE-SULFAMATES SYNTHESIS
16:18 - 16:28	<i>Arkaniya L.Z., Khoroshilova O.V., Vasilyev A.V.</i> TRANSFORMATIONS OF TMS ESTERS OF β-ARYL-α-THIOPHENYL-TRIFLUOROPROPANOLS UNDER THE ACTION OF ACIDS
16:29 - 16:39	<i>Patra C., Eldeeb A.A., Kolpashchikov D.M.</i> MULTICOMPONENT ASO AGENT FOR INTRACELLULAR OVEREXPRESSION AND MUTATION RECOGNITION

POSTER SESSION

TUESDAY, 03.09, 15:00 - 16:45

4-1. *Abramov V.M., Tokhtueva M.D., Melekhin V.V., El'tsov O.S.*
SYNTHESIS OF Pt(IV) COMPLEXES OF ARYLBIPIRIDINES AS POTENTIAL ANTICANCER PRODRUGS

4-2. *Adamchik M.A., Levashova E.Y., Dar'in D.V.*
3-DIAZOPIPERIDINE-2,4-DIONES IN THE SYNTHESIS OF SPIROCYCLIC BIS-LACTAMS VIA THE THERMALLY PROMOTED WOLFF REARRANGEMENT-STAUDINGER CYCLOADDITION



4-3. Agarkov A.S., Mingazhetdinova D.O., Nefedova A.A., Gabitova E.R., Kozhikhov A.A., Ovsyannikov A.S., Litvinov I.A., Voloshina A.D., Solovieva S.E., Antipin I.S.

THIAZOLO[3,2-a]PYRIMIDINE DERIVATIVES: NEW REARRANGEMENTS, CHIRAL SUPRAMOLECULAR ARCHITECTURES IN THE CRYSTALLINE PHASE AND ANTITUMOR ACTIVITY

4-4. Alekseeva A.N., Fedorov A.N.

NEW CHROMONE-BASED DERIVATIVES OF 10-MEMBERED LACTONES OBTAINED BY TANDEM NUCLEOPHILIC ADDITION-INTRAMOLECULAR CONDENSATION REACTION

4-5. Aslanov S.F., Svinko V.O., Solovyeva E.V.

CHITOSAN COATED GOLD NANORODS AS PRECURSORS OF AGENTS FOR HYPERTHERMAL AND PHOTODYNAMIC THERAPY

4-8. Chekunkov E.V., Minzanova S.T., Mironova L.G., Voloshina A.D., Milyukov V.A.

NEW SUGAR BEET PECTIN COMPLEXES WITH TETRACYCLINE: SYNTHESIS, PROPERTIES AND ANTIMICROBIAL ACTIVITY

4-9. Cherepanova V.A., Galushko A.S., Ananikov V.P.

STUDY OF THE DYNAMICS OF NANOSCALE SYSTEMS ON THE SURFACE OF CARBON MATERIALS UNDER CONDITIONS OF CATALYTIC CROSS-COUPLING PROCESSES

4-10. Churbanova E.S., Gabdrakhmanova F.B., Parfenov A.A., Kleshnina S.R., Solovieva S.E., Antipin I.S.

SUPRAMOLECULAR COMPLEXES OF AZO-DERIVATIVES OF THIAICALIX[4] ARENES WITH RHODAMINE DYES FOR VISUALIZATION OF HYPOXIA ON CELLS

4-11. Demidov N.A., Nikolaev D.M.

DEVELOPMENT OF NOVEL FLUORESCENT ARCHAERHODOPSIN-3 MUTANTS WITH IN SILICO DIRECTED EVOLUTION

4-12. Denisov A. A., Kazantsev D.A., Pestov A.V.

DEVELOPMENT OF A METHOD FOR THE PREPARATION OF 5-(ALKYLTHIO)-1H TETRAZOLES

4-13. Dolya D.A., Dubashynskaya N.V., Skorik Y.A.

SYNTHESIS OF CHITOSAN-HYDROXYCINNAMIC ACID CONJUGATES

4-14. Erdelyi K.E., Timofeev S.V., Anufriev S.A., Nasyrova D.I., Sivaev I.B.

SYNTHESIS OF NOVEL CARBORANYL-CARBENE COMPLEXES OF RHODIUM

4-15. *Erina A.A., Borodulin V.B., Zybin D.I., Ishchenko A.A.*

STUDY OF THE REACTION OF CYANOCOBALAMIN IN THE PRESENCE OF FENTON'S REACTIVE

4-16. *Faizdrakhmanova A.A., Bykov V.N., Mikhailov I.E., Lvov A.G.*

FLUORESCENT SWITCHES BASED ON PERI-ARYLOXYQUINONES

4-17. *Fomin T.O., Krasilnikov V.A., Belskaya N.P.*

FLUORESCENT PHOTOPROTECTIVE GROUPS BASED ON 1,2,3-TRIAZOLYLTHIAZOLE: SYNTHESIS AND PHOTOPHYSICAL PROPERTIES

4-18. *Gabov I.S., Pestov A.V.*

THE REACTIVITY OF EPICHLOROHYDRIN TOWARD CARBON DIOXIDE IN PRESENCE OF ANION EXCHANGE RESINS

4-19. *Galiakhmetov S.A., Tonkoglazova D.I., Mulloyarova V.V., Antonov A.S.*

ALKYLATION OF PHOSPHINE SELENIDES

4-20. *Galkin E.S., Vidyakina A.A., Danilkina N.A.*

NEW FLUORESCENT CYCLOALKYNE WITH C₂ SYMMETRY: SYNTHESIS AND APPLICATION IN BIOORTHOGONAL CHEMISTRY

4-21. *Golubev A.S., Golubev I.M., Ostapchuk P.N., Strelkova T.V., Suponitsky K.Yu., Chkanikov N.D.*

SYNTHESIS OF 4-(TRIFLUOROMETHYL)THIOCOUMARINS

4-22. *Grigorkevich O.S., Zhurikov R.V., Kovalenko L.P., Durnev A.D., Gudasheva T.A., Dorofeev V.L.*

DESIGN, SYNTHESIS AND ANTI-TUMOR ACTIVITY OF AN ORIGINAL MATRIX METALLOPROTEINASES-2 AND -9 INHIBITOR

4-23. *Grishin A.V., Filippov I.P., Zakharov T.N., Khlebnikov A.F., Novikov M.S., Rostovskii N.V.*

DBU-PROMOTED CYCLIZATIONS OF CYCLOPENTYL-SUBSTITUED OXAZAPOLYENES TO CYCLOPENTAPYRIDONES AND HYDROXYPYRROLES: EXPERIMENTAL AND DFT STUDY

4-24. *Tsagaraev T.V., Andreeva A.S., Gromov N.V.*

ANTAGONISTIC ACTIVITY OF GALLIUM AND ITS COMPOUNDS

4-26. *Ivanova M.M., Belousov M.S.*

NOVEL CARBAZOLE-FUSED BORON SUBPORPHYRAZINES: SYNTHESIS AND STUDY OF OPTICAL AND PHOTOCHEMICAL PROPERTIES



4-27. *Karagodin B.D., Dubovtsev A.Yu.*

GOLD-CATALYZED CYCLOADDITION OF ENYNES AND CYANAMIDES

4-28. *Karamanova D.A., Fatykhova A.A., Gimadiev T.R.*

USING AN ORGANIC REACTION NETWORK TO PREDICTING SYNTHESIS PATHWAYS

4-30. *Khashimova D.D., Efremova M.M., Govdi A.I.*

MICROWAVE ASSISTED CYCLOADDITION OF BENZONITRILE OXIDES TO 1-IODOBUTA-1,3-DIYNES

4-31. *Khmelevskaya E.A., Danilkina N.A., Aleksanyan N.N., Silonov S.A., Balova I.A.*
MODIFICATION OF ACYCLIC ENEDIYNES AND STUDY OF THEIR BIOLOGICAL ACTIVITY

4-32. *Kim M.D., Kaminskiy N.A., Govdi A.I., Danilkina N.A.*

A REMARKABLE ARRAY OF COBALT- PROTECTED CYCLOALKYNE REAGENT PRECURSORS OBTAINED VIA NICHOLAS CYCLIZATION

4-33. *Kononov A.I., Strekalova S.O., Zlygostev A.D., Khvorova M.A., Saveliev G.N., Budnikova Y.H.*

C-N AND C-C BOND FORMATION IN ELECTROOXIDATION REACTIONS OF AROMATIC COMPOUNDS

4-34. *Kotikova P.F., Dubovtsev A.Yu.*

COINAGE (Au, Ag, Cu) METAL-CATALYZED (3+2) ANNULATION OF α -AMINOKETONES AND ELECTRON-DEFICIENT ALKYNES AS A ROUTE TO 3-EWG-SUBSTITUTED PYRROLES

4-35. *Koval V.S., Morozova E.A., Kulikova V.V., Revtovich S.V., Chobanyan A.A., Sidrorova A.I., Solyev P.N.*

POLYIONIC VESICLES FOR TARGETED DELIVERY OF THE THERAPEUTIC ENZYME METHIONINE- γ -LYASE

4-36. *Krasilnikov V.A., Fomin T.O., Vargina M.V., Belskaya N.P.*

NEW FLUOROPHORES BY THE INTEGRATION OF THE 2-ARYL-1,2,3-TRIAZOLE AND THIAZOLE RINGS

4-37. *Kryazh V.V., Fershtat L.L.*

SYNTHESIS OF NEW TETRAZINE-BASED POLYNITROGEN STRUCTURES

4-38. Ledneva A.I., Soldatova N.S.

SYNTHESIS OF NEW DONORS OF NON-COVALENT INTERACTION FROM DIARYLIODONIUM SALTS

4-39. Levashova E.Yu., Adamchik M.A., Dar'in D.V.

CHEMO- AND DIASTEREOSELECTIVE ENTRY INTO ALL-CARBON α QUATERNARY ALDEHYDES VIA C-C INSERTION OF 4 DIAZOISOQUINOLIN-3-ONES INTO C-CHO BONDS

4-40. Logvinenko N.A., Volchkov N.S., Antonova A.S., Vasilyev K.A., Zubkov F.I.

ARCHITECTURE MODIFICATION OF HOVEYDA- GRUBBS TYPE RUTHENIUM CATALYSTS: A COMBINATION OF EFFICIENCY AND STABILITY IN THE OLEFINS METATESIS REACTION

4-41. Lystsova E.A., Maslivets A.N., Khramtsova E.E.

IN SITU GENERATION OF ACYL(1,3-BENZOTHAZOL-2-YL)KETENES: THERMOLYSIS OF PYRROLO[2,1-c][1,4]BENZOTHAZINE-1,2,4-TRIONES

4-42. Bodrov A.S., Makeev M.A., Ushakov A.V., Burashnikova M.M.

CATALYST FOR SELECTIVE OXIDATION OF PROPYLENE AND AMMONIA

4-43. Malakhova M.A., Gorbunov A.N.

TRIAZOLATED CALIX[4]SEMITUBES FEATURING STERICALLY HINDERED GROUPS AND ADDITIONAL FUNCTIONAL UNITS

4-44. Martyanov G.S., Barabanov M.A., Pestov A.V.

STEPWISE HYDROLISIS OF N-ALKYLATED 3,4-DIHYDROPYRIMIDO[2,1-a]ISOINDOL-6(2H)-ONES

4-45. Menchicov V.V., Govdi A.I.

SYNTHESIS NEW FLUORESCENT DYES BASED ON 4,5-DIETHYNYL-1,2,3-TRIAZOLES

4-46. Metelkina E.M., Nikolaev D.M.

DEVELOPMENT OF FAR-RED ARCHAEORHODOPSIN-3-BASED FLUORESCENT GENETICALLY-ENCODED VOLTAGE INDICATORS

4-47. Molchanov M.I., Zavyalova V.V., Slovesnova N.V., Petrov A.Yu., Nikonov I.L., Galishev B.A., Kopchuk D.S., Grzhegorzhevskii K.V.

OPTIMIZATION OF THE ANTHOCYANINS EXTRACTION FROM THE RICE «SOUTHERN NIGHT»



4-48. Morozova P.Yu., Valueva S.V., Danilova A.B.

MODIFICATION OF RADACHLORIN WITH SELENIUM NANOPARTICLES AND AN AMPHIPHILIC MOLECULAR BRUSH FOR USE IN PDT

THURSDAY, 05.09, 17:00 - 18:30

4-49. Nepochatyi G.D., Popova E.A.

SYNTHESIS OF NEW METHYL 5(2METHOXY2OXOETHYL)1ARYL1,2,3TRIAZOLE4 CARBOXYLATES

4-50. Ponomarev A.S., Norkin R.R., Yanigina L.M., Khusainova L.A., Vovchenko A.A., Rizvanov A.A.

THE EFFECT OF GENETIC MODIFICATION ON THE LEVEL OF TRANSGLUTAMINASE 1 IN SKIN CELLS: EVALUATION OF EFFECTIVENESS AND SAFETY

4-51. Novikova V.P., Dubashynskaya N.V., Skorik Y.A.

POLYSACCHARIDE-BASED PREDNISOLONE DELIVERY SYSTEMS

4-52. Novoselskaya Y.S., Podrezova A.G., Nikitina E.V.

HYPERBARIC IMDAF REACTION BETWEEN BIS-FURYL DIENES AND FUMARIC ACID ESTERS

4-53. Ogurtsova A.D., Mikhaylov V.N.

THE RICHTER REACTION IN THE SYNTHESIS OF PYRAZOLO[4,3-b]PYRIDINE COMBRETASTATIN ANALOGS

4-54. Osipov A.A., Rajakumar K., Nayfert S.A., Zherebtsov D.A., Efremov A.N.

TERPHENYLDICARBOXYLIC ACID AS PROMISING LINKER FOR METAL-ORGANIC FRAMEWORKS

4-55. Oskolsky I.A., Alexandrova L.A., Makarov D.A., Jasko M. V., Karpenko I.L., Efremenkova O.V., Vasilyeva B.F., Avdanina D.A., Ermolyuk A.A., Benko E.E., Kalinin S.G., Kolganova T.V., Kochetkov S.N., Zhgun A.A.

N⁴-ALKYLMODIFIED CYTIDINE DERIVATIONS AS MICROBIAL GROWTH INHIBITORS

4-56. Pankov D.I., Terekhov R.P., Selivanova I.A.

CHROMATOGRAPHIC CONTROL OF DIHYDROQUERCETIN DIASTEREOMERIZATION

4-57. Serdyuchenko P.Yu., Bityukov O.V., Vil' V.A., Terent'ev A.O.

COBALT-CATALYZED PEROXIDATION OF CYCLIC CH-ACIDS

4-58. Perepechay A.A., Sukach S.M., Dyachenko V.D.

NEW MULTICOMPONENT METHODS FOR THE SYNTHESIS OF SUBSTITUTED 1,4-DIHYDRO-1,6-NAPHTHYRIDINES



4-59. Petropavlovskaya M.V., Palkeeva M.E., Molokoedov A.S., Ovchinnikov M.V., Sidorova M.V.

MINIMIZATION OF SIDE PROCESSES IN SOLID-PHASE PEPTIDE SYNTHESIS USING FMOC-DEPROTECTION REAGENTS ALTERNATIVE TO PIPERIDINE

4-60. Poltavtsev I.D., Kouame E.K., Ushakov I.A., Lysenko K.A., Lvov A.G.

FUNCTIONALIZED OXAZOLE DERIVATIVES: UNEXPECTED REACTIONS AND EFFECTS

4-61. Posypayko E.E., Buikin P.A., Korlyukov A.A.

MULTICOMPONENT CRYSTALS BASED ON FAVIPIRAVIR

4-62. Pronina Yu.A., Boitsov V.M., Stepanov A.V.

THE CONSTRUCTION OF SPIRO[1-AZABICYCLO[3.2.0]HEPTANE] FRAMEWORKS VIA 1,3-DIPOLAR CYCLOADDITION

4-63. Puzanov A.I., Vasilyev A.V.

REACTIONS OF LEVULINIC ACID WITH ARENES UNDER SUPERELECTROPHILIC ACTIVATION

4-64. Radiupov V.E., Nenova A.V., Kantin G.P., Dar'in D.V.

N-H INSERTION REACTION OF DIAZO COMPOUNDS IN TETRAZOLES

4-65. Rajakumar K., Osipov A.A., Efremov A.N., Zherebtsov D.A., Nayfert S.A.

THE CONCEPT OF «ANTI-MOF». STRUCTURAL FEATURES OF HEXAMETHYL-[1,1'-BIPHENYL]- 4,4'-DIAMMONIUM SALTS

4-66. Reznichenko A.A., Reznichenko E.A., Ledovskaya M.S., Voronin V.V.

S-VINYL DERIVATIVES AS ACETYLENE SURROGATES IN THE SYNTHESIS OF PYRIDAZINES UNDER MICROWAVE ACTIVATION

4-67. Reznichenko E.A., Reznichenko A.A., Ledovskaya M.S., Voronin V.V.

CALCIUM CARBIDE IN TOTAL SYNTHESIS OF (HETERO)ARYL ACETYLENES

4-68. Romanenko I.A., Novikov M.S.

PHOSPHORUS(III) COMPOUNDS AS REAGENTS FOR THE TRANSFORMATION OF 2-HALOAZIRINES

4-70. Ryabchikova M.N., Nelyubin A.V., Zhdanov A.P., Zhizin K.Yu.

RECEIVING AND APPLYING CLOSO-BORANE ANIONS AND NATURAL AMINO ACIDS IN BNCT



4-71. Safinskaya Y.V., Il'in M.V., Bolotin D.S.

ORGANOCATALYSIS BASED ON CHALCOGEN- AND HALOGEN-BOND-DONATING CYANOBORORHYDRIDES

4-72. Sergeeva E.S., Svistova A.A., Vologzhanina A.V., Lyssenko K.A., Ushakov I.A., Lvov A.G.

UNEXPECTED PHOTOREACTIONS OF SEMI-STIFF-DIARYLETHENES

4-74. Shnigirev R.B., Lvov A.G.

PHOTOCHROMIC DIARYLETHENE CONTAINING N-HETEROCYCLIC CARBENES

4-75. Shremzer E.S., Polivanovskaia D.A., Birin K.P., Tsivadze A.Yu.

ENHANCING THE PHOTOCATALYTIC EFFICIENCY OF PYRAZINOPORPHYRINS: INNOVATIVE STRATEGIES AND PERSPECTIVES

4-76. Sidorova A.I., Koval V.S., Morozova E.A., Revtovich S.V., Kulikova V.V., Anufrieva N.V., Solyev P.N.

SYNTHESIS OF DAIDZEIN DERIVATIVES FOR TARGETED DELIVERY

4-77. Sitdikova A.R., Shchegravina E.S., Svirshchevskaya E.V., Fedorov A.Yu.

DESIGN, SYNTHESIS AND BIOLOGICAL EVALUATION OF HYDROPHILIC PRODRUGS OF HETEROCYCLIC ALLOCOLCHICINOIDS

4-81. Sokolova A.N., Bezhenar G.V., Zdereva P.S., Paponov B.V.

INTERACTION OF PURINE NUCLEIC BASE PERCHLORATES WITH ACETYLACETONE

4-82. Solodyankina O.V., Baykova S.O., Baykov S.V.

REACTION OF AMIDOXIMES WITH PYRIDINE-N-OXIDES

4-83. Syrovsky D.V., Fedin V.V., Usachev S.A., Sosnovskikh V.Ya.

SYNTHESIS AND SOME PROPERTIES OF 3-ALKYNYL-4-PYRONES

4-84. Titova P.K., Alikin N.A., Obydenov D.L., Steparuk E.V., Sosnovskikh V.Ya.

REACTIONS OF EPOXIDES OF ETHYL 5-ACYL-4-PYRONE-2-CARBOXYLATES WITH AMINES



4-86. *Valutsa N., Gladkova E., Chepanova A., Zakharenko A., Luzina O., Salakhutdinov N., Lavrik O.*

**NOVEL 9-O BERBERINE DERIVATIVES AS TYROSYL-DNA PHOSPHODIESTERASE
1 INHIBITORS**

4-87. *Vasilchenko D.S., Rostovsky N.V., Trishin Yu.G.*

**HYDROGENATION OF O-H INSERTION PRODUCTS OF TERPENE ALCOHOLS
WITH 5-ARYL-1-ARYLSULFONYL-1,2,3-TRIAZOLES**

4-88. *Vasileva M.S., Semenov A.V., Baykov S.V.*

[3+2]-DIPOLAR CYCLOADDITION OF 1,2,3-TRIAZOLE N-OXIDES TO ARYNES

4-89. *Vavilov M.V., Petushkov V.N., Rodionova N.S., Khokhlova A.N., Zagitova R.I., Dubinnyi M.A., Yampolsky I.V.*

BRET IN BIOLUMINESCENT SYSTEM OF EARTHWORMS HENLEA SP

4-90. *Volchkov N.S., Logvinenko N.A., Antonova A.S., Vasilyev K.A., Zubkov F.I.*

**HOVEYDA-GRUBBS RUTHENIUM CATALYST CONTAINING TRIDENTATE
BENZYLIDENE LIGAND**

4-91. *Weber D.I., Sapegin A.V.*

**SYNTHESIS OF 3-ARYLSUBSTITUTED 4,5,6,7-TETRAHYDRO-[1,2,3]
TRIAZOLO[1,5-a]PYRASINES WITH CATALYST-FREE AZIDE-ALKYNE
CYCLOADDITION**

4-92. *Zagitova R.I., Purtov K.V., Shcheglov A.S., Belozerova O.A., Yampolsky I.V.*

**PEROXIDES OF POLYUNSATURATED FATTY ACIDS AS SUBSTRATES IN
BIOLUMINESCENCE SYSTEM OF MARINE POLYCHAETE CHAETOPTERUS
VARIOPEDATUS**

4-94. *Zanakhov T.O., Galenko E.E., Novikov M.S., Khlebnikov A.F.*

**HETEROANNULATION OF 2-(A-DIAZOACYL)-2H-AZIRINES WITH AMIDINES IN
DIAZO SYNTHESIS OF FUNCTIONALIZED NAPHTO[1,2-D]IMIDAZOLES**



4-95. *Zapevalova M.V., Fonareva I.P., Shchegravina E.S., Scherbakov A.M., Svirshchevskaya E.V., Fedorov A.Yu.*

NOVEL 2,4-DIMORPHOLINOQUINAZOLINE-BASED INHIBITORS OF PI3K-AKT-MTOR SIGNALING PATHWAY

4-96. *Zavyalova V.V., Slovesnova N.V., Petrov A.Yu., Vatolina S.E., Krinochkin A.P., Kopchuk D.S., Zyryanov G.V.*

PROSPECTS FOR THE USE OF UNUSABLE DRUGS AS SYNTHONS IN ORGANIC SYNTHESIS

4-97. *Melnikov V.E., Khmelevskaya E.A., Danilkina N.A.*

SYNTHESIS OF ETHYNYL SUBSTITUTED INDOLE-PYRROLINE DYADS UNDER NICHOLAS REACTION CONDITIONS

5. ADVANCES IN COORDINATION AND INORGANIC CHEMISTRY

CHAIRMAN: Dr. **Nikita Bogachev**, Institute of Chemistry, SPbU

SECRETARY: Dr. **Yulia Toikka**, Institute of Chemistry, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1206

9:00 - 9:25
**KEYNOTE
SPEAKER**

Dr. Sci. Irina Goryacheva

Semiconductor Quantum Dots for Bioanalysis

9:25 - 9:45
**INVITED
SPEAKER**

*Dr. Sci. Andrey Mereshchenko, Butorlin O.S., Petrova A.S.,
Toikka Yu.N., Badikov A.R., Bogachev N.A., Skripkin M.Yu.*

**Luminescent Heterometallic Rare Earth Based
Terephthalate MOFs**

9:45 - 9:55

Antonova Elina, Kinzhalov M.A.

**SOLID STATE CONTROL OF THE PHOSPHORESCENCE
OF PLATINUM(II) COMPLEXES BY INTERMOLECULAR
INTERACTIONS**

9:55 - 10:05

*Boltkov Evgenii, Belousov Yu.A., Lermontova E.Kh.,
Goncharenko V.E., Glazunova T.Yu.*

**RARE EARTH FLUOROTRIFLUOROACETATES: SYNTHESIS,
STRUCTURE AND LUMINESCENCE PROPERTIES**

10:05 - 10:15

Erzunov Dmitrii, Vashurin A.S.

**FLUORESCENT ACTIVITY AND BEHAVIOUR ESPECIALITIES
OF SUBSTITUTED PHTHALOCYANINE COMPLEXES**

10:15 - 10:25

Valeriya Meshcheryakova, Glebov E.M.

**PHOTOPHYSICAL AND PHOTOCHEMICAL PROPERTIES
OF THE DIRHODIUM COMPLEX IN THE CONTEXT OF ITS
POTENTIAL APPLICATION IN PHOTODYNAMIC THERAPY**

10:25 - 10:35

Luginin Maksim, Grachova E.V.

**SYNTHESIS AND PHOTOPHYSICAL PROPERTIES
OF ANTHRACYL AND ETHYNYLANTHRACENE BIS
CYCLOMETALLATED GOLD(III) COMPLEXES BEARING A
ETHYNYLDIPHENYLPHOSPHORYL GROUP**



10:35 - 10:45

Roman Shilov, Shakirova J.R., Baigildin V.A.

LUMINESCENT WATER-SOLUBLE BLOCK COPOLYMERS OF CYCLOMETALATED PLATINUM(II) COMPLEXES AND POLYVINYLPYRROLIDONE: SYNTHESIS, STRUCTURE AND AGGREGATION INDUCED EMISSION EFFECT

11:20 - 11:30

Abramova Evgeniya, Grachova E.V.

BIPYRIDINE-BASED PHOSPHINE OXIDES AS ANCILLARY LIGANDS FOR BIS-CYCLOMETALLATED IRIIDIUM(III) COMPLEXES

11:30 - 11:40

Burlakova Marina, Tsymbarenko D.M., Grebenyuk D.I.

SYNTHESIS AND STUDY OF POLYNUCLEAR REE HYDROXOTRIFLUOROACETATES

11:40 - 11:50

Eliseeva Anastasiya, Busygina A.A., Rozhkov A.V., Ivanov D.M., Bokach N.A.

METAL-INVOLVING NONCOVALENT INTERACTIONS IN PLATINUM(II) DITHIOCARBAMATE COMPLEXES

11:50 - 12:00

Kashina Maria, Kinzhalov M.A.

GREEN- AND BLUE-LIGHT HYDROSILYLATION PHOTOCATALYSIS WITH PLATINUM(II) METALLA NHETEROCYCLIC CARBENE COMPLEXES

12:00 - 12:10

Maria Lavrova, Mishurinskii S.A., Verzun S.A., Sirotin M.A., Korshunov V.M., Dolzhenko V.D.

CYCLOMETALATED RUTHENIUM(II) COMPLEXES WITH VARIOUS ARYLAZOLES: FINE TUNING OF ELECTRONIC STRUCTURE

12:10 - 12:20

Novikov Dmitriy, Koshenskova K.A., Nebykov D.N., Eremenko I.L., Lutsenko I.A.

COPPER(II) COMPLEXES AS PRECURSORS OF EFFECTIVE HYDROGENATION CATALYSTS

12:20 - 12:30

Paderina Aleksandra, Sizova A.A., Grachova E.V.

CATIONIC OR NEUTRAL: DEPENDANCE OF PHOTOPHYSICAL PROPERTIES OF BIS ALKYNYLPHOSPHONIUM Pt(II) COMPLEXES ON ANCILLARY LIGAND

12:30 - 12:40

Panova Elizaveta, Safin D.A.

SYNTHESIS AND MOLECULAR DOCKING STUDIES OF THE NICKEL(II) CHELATES WITH CYCLOHEXYL CONTAINING SCHIFF BASES

12:40 - 12:50

Daria Semeshkina, Dolzhenko V.D.

POLYNUCLEAR HETEROMETALLIC COMPLEXES OF LANTANIDES AND NICKEL WITH L-ALANINE

12:50 - 13:00

Tyupina Margarita, Miroslovov A.E., Sidorenko G.V., Sakhonenkova A.P.

NEW ^{99m}Tc RADIOPHARMACEUTICALS FOR MYOCARDIAL METABOLIC PROCESSES

THURSDAY, 05.09, Room 1206

9:30 - 9:50

**INVITED
SPEAKER**

Dr. Jefferson L. Ferrari

The Conversion of Energy into Inorganic Materials Containing Rare Earths for Possible Use in Photodynamic Therapy

9:50 - 10:00

Ivanov Daniil

INTERMOLECULAR PNICTOGEN BONDING WITH METALS

10:00 - 10:10

Luhang Xu, Kostin M.A., Alkhuder O., Krutin D.V., Asfin R.E., Tolstoy P.M.

SPECTROSCOPIC STUDY OF HYDROGEN BONDING IN COMPLEXES OF PHOSPHINE OXIDES WITH PHENOLS AND ALCOHOLS

10:10 - 10:20

Kendin Mikhail, Shaulskaya M.D., Tsymbarenko D.M.

INTRIGUING LATTICE DYNAMICS IN ALIPHATIC METAL CARBOXYLATES: PHASE TRANSITIONS AND ANOMALOUS THERMAL EXPANSION

10:20 - 10:30

Kuchkaev Airat, Kuchkaev A.M., Sukhov A.V., Zueva E.M., Yakhvarov D.G.

WHITE IS THE NEW BLACK. COORDINATION COMPOUNDS DERIVED FROM WHITE PHOSPHORUS ACTIVATION AS ELECTROCATALYSTS FOR HYDROGEN PRODUCTION

10:30 - 10:40

Milenkaya Elena, Skripov N.I., Kornaukhova T.A., Belykh L.B., Schmidt F.K.

INFLUENCE OF P-ELEMENTS (P, S) ON THE PROPERTIES OF PALLADIUM CATALYSTS IN THE DIRECT SYNTHESIS OF HYDROGEN PEROXIDE



10:40 - 10:50

Nikandrov Nikita, Spasskaya S.A., Tsymbarenko D.M.

NANOSIZED CeO₂: SYNTHESIS FROM POLYNUCLEAR COORDINATION COMPOUNDS AND STUDY OF ITS CATALYTIC PROPERTIES

10:50 - 11:00

Soldatova Natalia, Ivanov D.M., Abramov P.A., Postnikov P.S.

IODONIUM OCTAMOLYBDATE: NEW EDGE IN CHEMISTRY OF IODONIUM METALLATE

11:00 - 11:10

Suchkova Anastasia, Bykov M.V., Pakhomova M.V., Suslov D.S.

SYNTHESIS AND CATALYTIC PROPERTIES OF CATIONIC PALLADIUM AND NICKEL-ACETYLACETONATE COMPLEXES BEARING PYRIDINYLMINE LIGANDS

11:10 - 11:20

Sukhorukov Dmitry, Dmitruk K.A., Mukha S.A., Komova O.V., Simagina V.I., Netskina O.V.

A SOLVENT-FREE SYNTHESIS OF COBALT-CONTAINING CATALYSTS FOR THE HYDROLYSIS OF SODIUM BOROHYDRIDE

11:20 - 11:30

Ubovich Milosh, Mukhin K.A., Mazur Ya.E

PECULIARITIES OF COORDINATION OF WATER MOLECULES IN MIXTURES OF IONIC LIQUIDS AND WATER, CONTAINING Al³⁺ CATION

11:50 - 12:00

Azimova Gunel, Babayev E.M.

CATALYTIC CONVERSION OF CARBON MONOXIDE INTO CARBON DIOXIDE IN THE PRESENCE OF COBALT FERRITE SPINELS

12:00 - 12:10

Bykov Andrey, Shestimerova T.A., Gontcharenko V.E., Shevelkov A.V.

TUNING OF CRYSTAL STRUCTURES OF ORGANIC-INORGANIC METAL HALIDES FOR REDUCING THE BANDGAP FOR LEAD-FREE PEROVSKITE PHOTOVOLTAICS

12:10 - 12:20

Di Zhou, Semenok D.V.

NUCLEAR MAGNETIC RESONANCE IN LANTHANUM SUPERHYDRIDES



12:20 - 12:30	<u>Gaifullina Erika</u> , Zarafutdinova Z.R., Gataullina R.M., Shmelev A.G., Kornev T.A, Nizameeva G.R., Ziyatdinova A.B., Amirov R.R. SULFUR QUANTUM DOTS STABILIZED BY CATIONIC SUPRAMOLECULAR STRUCTURES
12:30 - 12:40	<u>Jyakhwo Susan</u> DISCOVERING SELECTIVELY ANTIMICROBIAL INORGANIC NANOPARTICLES FOR TARGETED ERADICATION OF PATHOGENIC BACTERIA
12:40 - 12:50	<u>Kalle Paulina</u> , Churakov A.V., Kuzmina L.G., Bezzubov S.I. CRYSTAL STRUCTURES AND THERMAL PROPERTIES OF POTASSIUM ACETATE AND SORBATE
12:50 - 13:00	<u>Kalyaskin Pyotr</u> , Petropavlovskii K.S., Novicenkova T.B., Sulman M.G. SELF-REINFORCEMENT EFFECT IN THE PROCESS OF SYNTHESIS OF GYPSUM COMPOSITES BASED ON FLY ASH WITH A HIGH CONTENT OF FREE CALCIUM OXIDE
13:00 - 13:10	<u>Lagunova Varvara</u> , Filatov E.Yu., Korenev S.V. FORMATION OF METASTABLE SOLID SOLUTIONS Rh_xCu_{1-x} AND Ir_xCu_{1-x} DURING THERMAL DECOMPOSITION OF COMPLEX PRECURSORS
13:10 - 13:20	<u>Popova Elena</u> , Egorysheva A.V., Ellert O.G., Kirdyankin D.I., Imshennik V.K., Kulikova E.S., Khramov E.V. STRUCTURAL TRANSFORMATIONS IN PYROCHLORE-LIKE SOLID SOLUTIONS BASED ON Y_2FeTaO_7
13:20 - 13:30	<u>Semenok Dmitrii</u> , Zhou D. HYDRIDE CHEMISTRY AT ULTRA-HIGH PRESSURE
13:30 - 13:40 ONLINE	<u>Abdulaziz Khokimov</u> , Eminov A.M., Kadirova Z.R., Eminov Sh.O. PHYSICO-CHEMICAL STUDY OF THE COMPOSITION AND PROPERTIES OF DUNE SANDS OF YAZYAVAN
13:40 - 13:50 ONLINE	<u>Punda Aleksandr</u> , Zhivulin V.E., Pavlova K., Gudkova S., Vinnik D.A. SYNTHESIS AND INVESTIGATION OF HEXAFERRITE $BaFe_{12-x}In_xO_{19}$ ($X = 0.25-1$)



14:50 - 14:55

Toikka Yulia, Bokach N.A.

**COCRYSTALS OF Cu₄I₄-CLUSTERS CONTAINING
PERFLUOROARENE MOLECULES: STRUCTURAL AND
LUMINESCENT STUDIES**

14:55 - 15:00

Alatortsev Oleg, Volchkov V.V., Khimich M.N., Melnikov M.Ya.,
Fomina M.V., Gromov S.P.

**SPECIFICITY OF COMPLEXATION AND PHOTOINDUCED
RECOORDINATION OF BIS-AZA-18-CROWN-6-
CONTAINING DIBENZYLIDENECYCLOPENTANONE WITH
ALKALI AND ALKALINE-EARTH METAL**

15:00 - 15:05

Babitova Ekaterina, Sakhonenkova A.P., Miroslavov A. Ye.,
Brechalov A.A.

**NEW SYNTHESIS METHODS OF DECACARBONYL
DITECHNETIUM-99**

15:05 - 15:10

Badanina Ksenia, Korolev R.I., Makeev B.A., Zhuk N.A.

**SYNTHESIS OF NANOCRYSTALLINE Bi₂Cr_{0.5}Co_{0.5}Nb₂O₉+Δ
CERAMICS**

15:10 - 15:15

Bolotko Alyona, Shmelev M.A., Chistyakov A.S., Taydakov I.V.,
Varaksina E.A., Sidorov A.A., Eremenko I.L.

**DIRECTED DESIGN OF BRIGHTLY LUMINESCENT MIXED-
CARBOXYLATE BENZOATE-PENTAFLUOROBENZOATE
LANTHANIDE COMPLEXES**

15:15 - 15:20

Brechalov Alexandr, Babitova E.S., Aleksandrof T.S., Smirnov I.V.

**EXTRACTION SEPARATION OF YTTRIUM FROM
STRONTIUM IN CARBONATE MEDIA**

15:20 - 15:25

Dracheva Ekaterina, Paderina A.V., Luginin M.E., Snetkov D.A.

**ALKYNYL GOLD(I) COMPLEXES WITH D-Π-A LIGANDS:
SYNTHESIS AND PHOTOPHYSICAL PROPERTIES**

15:25 - 15:30

Krot Anna, Matveev P.I.

**SPECTROSCOPIC INVESTIGATION OF NP(V) COMPLEXES
WITH N,O-DONOR LIGAND IN ORGANIC PHASE**

15:30 - 15:35

Kudina Polina, Kazakov I.V.

**BIDENTATE LEWIS ACIDS FOR SMALL MOLECULE
ACTIVATION**



15:35 - 15:40	<u>Meshcheriakova Elizaveta, Tatarin S.V., Bezzubov S.I.</u> DESIGN OF CYCLOMETALATED Ir(III) COMPLEXES WITH BENZOPHENAZINE AND BENZOQUINOXALINE MOIETIES FOR NIR EMISSION – EXPERIMENTAL AND THEORETICAL STUDY
15:40 - 15:45	<u>Novikova Veronika, Zorina-Tikhonova E.N., Efimov N.N., Vologzhanina A.V., Eremenko I.L.</u> STRUCTURE AND MAGNETIC PROPERTIES OF CoII AND MnII POLYMERS WITH ANIONS OF UNSATURATED MALONIC ACIDS AND BRIDGING N-DONOR LIGANDS
15:45 - 15:50	<u>Pashkov Gregory, Berdonosov P.S., Lyssenko K.A., Markina M.M., Vasiliev A.N.</u> NEW COPPER(II) SELENATES: SYNTHESIS, CRYSTAL STRUCTURE, PHYSICAL AND MAGNETIC PROPERTIES
15:50 - 15:55	<u>Safronova Stefania, Luginin M.E., Grachova E.V.</u> CYANIDO-BRIDGED HETEROMETALLIC Pt(II)-Au(III) COMPLEXES:SYNTHESIS AND PHOTOPHYSICAL PROPERTIES
15:55 - 16:00	<u>Savinykh Polina, Golubeva Yu.A., Ermakova E.A.</u> SYNTHESIS AND CYTOTOXICITY STUDY OF FERROCENYLMETHYL-L-METHIONINE AND ITS 2,2'-BIPYRIDINE / 1,10-PHENANTHROLINE BASED COPPER(II) COMPLEXES
16:00 - 16:05	<u>Sharifullin Timur, Kazin P.E., Vasiliev A.V.</u> ALL-INORGANIC SINGLE-ION MAGNET BASED ON HIGH-SPIN IRON(III) IN MAYENITE STRUCTURE
16:05 - 16:10	<u>Shaulskaya Maria, Grebenyuk D.I., Voropaeva A.S., Tymbarenko D.M.</u> STRUCTURAL PECULIARITIES AND TRANSFORMATIONS OF THE METAL-ORGANIC FRAMEWORKS FAMILY BASED ON LANTHANIDE TEREPHTHALATES
16:10 - 16:15	<u>Shevchenko Anna, Doinikov D.A., Davydova E.I.</u> TENSIMETRIC STUDY OF I2-L SYSTEMS (L = PYRIDINE, PYRAZINE, 4,4'-BIPYRIDINE, 2-AMINOPYRIDINE)
16:15 - 16:20	<u>Sibiryakov Michael, Kashnik I.V., Brylev K.A.</u> OCTAHEDRAL HEXARHENIUM METHOXIDE CLUSTER COMPLEXES — NEW PRECURSORS FOR LIGAND EXCHANGE REACTIONS



16:20 - 16:25

Skripnyak Polina, Kinzhalov M.A.

EMITTERS BASED ON IRIIDIUM(III) COMPLEXES WITH C,N-CHELATE ACYCLIC DIAMINOCARBENE LIGANDS

16:25 - 16:30

Strunin Daniil, Nikovsky I.A., Nelyubina Yu.V.

POLYNUCLEAR TRANSITION METAL COMPLEXES BASED ON SUBSTITUTED HYDROBENZAMIDES

16:30 - 16:35

Tatarin Sergei, Meshcheriakova E.A., Zhuravlev I.S., Minin M.M., Bezzubov S.I.

DEVELOPMENT OF APPROACHES TOWARDS ENHANCEMENT OF VISIBLE LIGHT-ABSORPTION IN CYCLOMETALATED IRIIDIUM(III) COMPLEXES

16:35 - 16:40

Tomas Matvei

METAL-ORGANIC FRAMEWORKS BASED ON {Zn₁₂} AND {Zn₁₀} CARBOXYLATE WHEELS AS POTENTIAL ADSORBENTS AND SENSORS

POSTER SESSION

TUESDAY, 03.09, 15:00 - 16:45

5-1. Strokin Pavel, Goryacheva E.A., Goryacheva O.A., Popova N.R., Goryacheva I.Yu.

HIGH-TEMPERATURE ORGANOMETALLIC SYNTHESIS OF LUMINESCENT CERIUM (IV) OXIDE NANOPARTICLES

5-2. Nykhrikova Ekaterina, Bezzubov S.I.

DESIGN AND SYNTHESIS OF HIGHLY EMISSIVE, WATER-SOLUBLE CYCLOMETALATED IRIIDIUM(III) COMPLEX

5-3. Busygina Anastasiya, Eliseeva A.A., Rozhkov A.V.

CHALCOGEN BONDING INVOLVING SQUARE PLANAR PLATINUM(II) COMPLEXES BEARING CHELATING LIGANDS

5-4. Komova Polina, Kinzhalov M.A.

NON-COVALENT INTERACTIONS IN ADDUCTS OF PLATINUM(II) AND PALLADIUM(II) ISOCYANIDE COMPLEXES WITH MOLECULAR IODINE

5-5. Pushikhina Olga, Kozlyakova E.S., Karpova E.V.

SYNTHESIS OF POLYNUCLEAR MAGNETIC COPPER COMPLEXES BY CONTROLLED HYDROLYSIS

5-6. Vlassova Vassilissa, Bokach N.A.

SYNTHESIS AND STRUCTURE OF MONONUCLEAR COPPER(II) COMPLEXES WITH ISOCYANIDES LIGANDS

5-7. Sherstyuk Daria, Vinnik D.A., Zhivulin V.E., Shipkova E.D., Perov N.S.

CURIE TEMPERATURE OF $\text{Ni}_x\text{Zn}_y\text{Co}_{1-x-y}\text{O}_4$ (x=0-1) FERRITE

5-8. Sherstyuk Darya, Zykova A.R., Kovalev A.I., Zhivulin V.E., Vinnik D.A.

SYNTHESIS OF BARIUM HEXAFERRITE WITH HIGH CHROMIUM SUBSTITUTION LEVEL AT DIFFERENT TEMPERATURES

5-9. Kiseleva Marina, Bezzubov S.I.

EFFECT OF CRYSTAL PACKING ON THE OPTICAL PROPERTIES OF CYCLOMETALATED RHODIUM(III) AND IRIIDIUM(III) COMPLEXES WITH 1,3-DIKETONES

5-10. Markopolskii Roman, Timusheva N.B., Golubnichiy A.A., Morozov A.V., Savina A.A., Abakumov A.M.

IMPLEMENTATION OF BALL-MILL AND SINTERING ADDITIVES FOR GRAIN BOUNDARIES ENGINEERING IN GARNET-TYPE LLZO SOLID ELECTROLYTE

5-11. Chernyshev Savely, Vlasov M.I.

EVALUATION OF THE FLINAK MELT STRUCTURE BASED ON ELECTRONIC ABSORPTION SPECTRA

5-12. Alkhuder Omar, Kostin M.A., Tolstoy P.M.

PHOSPHINE OXIDES AS PROBES FOR STUDYING HYDROGEN BONDING

5-13. Zykova Alena, Kovalev A.I., Sherstyuk D.P., Zhivulin V.E., Vinnik D.A.

SYNTHESIS AND CRYSTAL STRUCTURE OF $\text{SrFe}_{12-x}\text{Cr}_x\text{O}_{19}$ WITH HIGH CHROMIUM SUBSTITUTION LEVEL (x = 0-6)

5-14. Efromeev Leonid, Shmelev M.A., Shapovalov S.S., Varaksina E.A., Taidakov I.V., Sidorov A.A., Eremenko I.L.

HETEROANIONIC COMPLEXES OF REE'S WITH PENTAFLUOROBENZOIC AND 2,4,6-TRIMETHYLBENZOIC ACIDS AND AROMATIC N-DONOR LIGANDS

5-15. Zykov Sergey, Kuramshin B.K., Mironov V.A., Shtyrilin V.G.

SYNTHESIS AND STRUCTURE OF NOVEL MANGANESE CARBOXYLATE POLYMERS

5-16. Yagovitin Roman, Tsvetkov D.S., Malyshkin D.A., Sereda V.V., Zuev A.Yu.

SYNTHESIS AND PROPERTIES OF PRASEODYMIUM-BARIUM COBALTITES

5-17. Shmelev Aleksandr, Shaikhutdinov I.K., Sokolov A.V., Alexandrov E.V.

DESIGN OF FERROELECTRIC METAL-ORGANIC FRAMEWORKS BY REPLACING SYMMETRIC LIGANDS WITH POLAR ONES

5-18. Tutmina Natalia, Komarovskikh M.R., Tereshina T.A., Dobrokhotova E.V., Rudnitskaya O.V., Kultyshkina E.K., Khrustalev V.N.

A NEW DIMERIC THIOCARBAMIDE COMPLEX OF RUTHENIUM

5-19. Kalinkina Valeria, Antina L.A., Kalygin A.A.

WATER-SOLUBLE FORMS OF THERANOSTICS BASED ON BIS(BODIPY) AND PLURONIC® F127

5-20. Verzun Stepan, Lavrova M.A., Mishurinskii S.A., Feoktistova A.V., Bytskevich Yu.M., Sirotin M.A., Korshunov V.M., Dolzhenko V.D.

SYNTHESIS, OPTICAL AND ELECTROCHEMICAL PROPERTIES AND ELECTRONIC STRUCTURE OF CYCLOMETALATED Ru(II) COMPLEXES WITH 1-BENZYL-2-ARYLBENZIMIDAZOLES WITH DONOR SUBSTITUENTS IN THE BENZIMIDAZOLE FRAGMENT

5-21. Mishurinskii Sergej, Elin A.D., Sirotin M.A., Korshunov V.M., Dolzhenko V.D., Lavrova M.A.

ANTENNA LIGAND NATURE EFFECTS ON ELECTRONIC STRUCTURE AND OPTICAL PROPERTIES OF DYES BASED ON CYCLOMETALLATED Ru(II) COMPLEXES WITH CONJUGATED 2-ARYLIMIDAZOLES

5-22. Astakhov Nikita, Berdonosov P.S.

SYNTHESIS AND INVESTIGATION OF THE PROPERTIES OF NEW PHASES $A_2B(SeO_3)_2Cl_2$ and $A_5B(SeO_3)_4Cl_4$

THURSDAY, 05.09, 17:00 - 18:30

5-23. Ivanov Aleksandr, Petrov D.S., Volkovich V.A., Smirnova V.V.

SEPARATION OF ZIRCONIUM AND URANIUM USING GALLIUM-BASED ALLOYS

5-24. Listova Anastasiia, Plakhova T.V., Kuzenkova A.S., Shaulskaya M.D., Tsymbarenko D.M., Gerasimov M.A., Novichkov D.A., Romanchuk A.Yu. Kalmykov S.N.

TRANSFORMATIONS OF CeO_2 NANOPARTICLES IN SODIUM-PHOSPHATE BUFFER SOLUTIONS: STRUCTURE AND PROPERTIES OF PRODUCTS

5-25. Gavrikov Andrey

RATIONAL DESIGN OF NEW HETEROMETALLIC YTTRIUM-BASED COMPLEXES AS PROSPECTIVE ANTIPROIFERATIVE AGENTS

5-26. Aleksandrov Timofey, Smirnov I.V., Brechalov A.A., Babitova E.S., Gorbunov P.E.
STUDY OF THE KINETICS OF EXTRACTION OF EUROPIUM AND YTTRIUM IN CARBONATE AND NITRATE MEDIA BY THE IR ATR METHOD

5-27. Stozharova Marina, Eliseeva A.A., Ivanov D.M., Soldatova N.S.
HALOGEN BONDING IN DIPHENYLIODONIUM DICHROMATE

5-28. Grigorieva Oksana
NEW IODATE FLUORIDES WITH GENERAL COMPOSITION $MICe(IO_3)_{6-x}F_x$ (MI = ALKALI METAL, X = 0 – 3)

5-29. Belareva Miryam, Murtazoev A.F., Moskin A.V., Berdonosov P.S., Vasiliev A.N.
 $FeLn_2(SeO_3)_4X$ (Ln=La, Ce, Pr, Nd; X=Cl, Br) PHASES: SYNTHESIS, CRYSTAL STRUCTURE, MAGNETIC PROPERTIES

5-30. Parshukova Kristina, Makeev B.A., Sekushin N.A., Krzhizhanovskaya M.G., Koroleva A.V., Zhuk N.A.
FEATURES OF PHASE FORMATION, DIELECTRIC PROPERTIES, XPS SPECTROSCOPY STUDY OF PYROCHLORE-TYPE $Bi_2Cr_1/6Mn_1/6Fe_1/6Co_1/6Ni_1/6Cu_1/6Ta_2O_9+\Delta$

5-31. Taigina Marina, Sukhikh T.S., Berezin A.S., Nafikov M.D., Vinogradova K.A.
MANGANESE(II) COMPLEXES BASED ON PHOSPHINATAMIDES: SYNTHESIS, STRUCTURE, PHOTOLUMINESCENT PROPERTIES

5-32. Buzoverov Mikhail, Gavrikov A.V., Ilyukhin A.B., Efimov N.N.
NOVEL STABLE YTTERBIUM ACETYLACETONATE-QUINALDINATE COMPLEXES AS SINGLE-MOLECULE MAGNETS AND SURPRISINGLY EFFICIENT LUMINOPHORES

5-33. Kovalev Andrey, Zykova A.R., Sherstyuk D.P., Zhivulin V.E., Vinnik D.A.
MAGNETIC PROPERTIES CHARACTERIZATION OF CHROMIUM SUBSTITUTED STRONTIUM M-TYPE HEXAGONAL FERRITES

5-34. Kolbunova Anastasia, Klyukin I.N., Zhizhin K.Yu.
SYNTHESIS AND PHYSICOCHEMICAL PROPERTIES OF O-BORYLATED CARBOXONIUM IONS

5-35. Glukhovich Ekaterina, Kazakov I.V.
INTERACTION OF $E(C_6F_5)_3 \cdot Et_2O$ (E=Al-In) with ICl: COMPETITION OF COMPLEXATION AND DECOMPOSITION



5-36. Kosykh Anastasiia, Rychkov V.N.

SYNTHESIS OF LAYERED Gd-Eu AND Y-Eu HYDROXIDES AND STUDY OF FLUORESCENT PROPERTIES OF ORGAN-INORGANIC COMPOSITES BASED ON THEM

5-37. Madieva Svetlana, Shakirova J.R., Tunik S.P.

SYNTHESIS OF NEW ORGANOMETALLIC COMPLEXES Re(I) WITH DIIMINE LIGANDS APPLICATION IN PHOTOACOUSTIC IMAGING

5-38. Kostareva Margarita, Ivanov D.M.

ELECTROPHILIC-NUCLEOPHILIC DUALISM OF IODIDES IN Pt(IV) DIALKYL CYANAMIDE COMPLEXES

5-39. Mikhaltsov Aleksei, Vesnovskii D.V.

SOLUTION-SOLID EQUILIBRIUM IN $\text{Co}(\text{NO}_3)_2$ - 4,4'-BIPYRIDINE - $\text{EtOH-H}_2\text{O}$ SYSTEM

5-40. Medvedeva Margarita, Pestova O.N.

THERMAL EFFECTS OF DOUBLE SALTS DISSOLUTION IN THE SYSTEM $\text{LiCl-RbCl-H}_2\text{O}$

5-41. Gashigullin Ruslan, Kendin M.P., Tsymbarenko D.M.

LACTATES AND PROPIONATES OF RARE EARTH ELEMENTS - SYNTHESIS, STRUCTURE AND APPLICATION FOR RARE EARTH NICKELATES FILMS DEPOSITION

5-42. Gusak Mikhail, Kinzhalov M.A.

TETREL INTERACTIONS IN Iridium(III) Xylylisocyanide COMPLEXES

6. THEORETICAL CHEMISTRY

CHAIRMAN: Dr., **Tupikina Elena**, Institute of Chemistry, SPbU

SECRETARY: **Verkhov Valerii**, Institute of Chemistry, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1217

9:00 - 9:20	<i>Dr. Elena Tupikina</i> Quantum Chemistry in the Investigation of Non-Covalent Interactions
9:20 - 9:30	<i>Chudakova M.V., Andreev D.S., Popov M.V., Korovchenko P.A.</i> CATALYTIC PYROLYSIS OF METHANE - PROMISING METHOD FOR PRODUCING HYDROGEN AND STRUCTURED CARBON MATERIAL
9:30 - 9:40	<i>Zaikin M.A.</i> PRODUCED JET-FUEL FROM RENEWABLE HYDROCARBON FEEDSTOCK
9:40 - 9:50	<i>Borodina O.S., Krasnostanov Y.S., Kuzovlev M.D., Ovchinnikova, I.G., Fedorova, O.V., Bartashevich E.V.</i> ENERGY BARRIERS OF THE BIGINELLI REACTION WITH THE CHIRAL INDUCTORS BASED ON 4-HYDROXYPROLINE
9:50 - 10:00 ONLINE	<i>Gordeeva J.F., Filatov E.S.</i> INFLUENCE OF THE DEGREE OF PREPARATION OF COMPONENTS FOR WORKING WITH HASTELLOY G35
10:00 - 10:10	<i>Turchenko P.D., Skripnikov L.V.</i> MOLECULAR PARAMETER CHARACTERIZING NSD-PV IN THE $^{29}\text{Si}^{16}\text{O}^+$ CATION
10:10 - 10:20	<i>Moshchenkov A.D., Otlyotov A.A., Minenkov Y.V.</i> ACCURATE AB INITIO ENTHALPIES OF FORMATION OF GROUPS 10–12 METAL COMPLEXES WITH TETRAPHENYLPORPHYRIN
10:20 - 10:30	<i>Timoshchuk K.V., Andoskin P.A., Semenov K.N.</i> STUDYING NITROGEN-CONTAINING HETEROCYCLES WITH STYRYLE SUBSTITUTES BY QUANTUM-CHEMICAL AND SPECTROPHOTOMETRIC METHOD
10:30 - 10:40	<i>Kulikova Y.I., Timoshkin A.Y.</i> REACTIVITY OF I₂ TOWARDS PERFLUORINATED LEWIS ACIDS OF GROUP 13 ELEMENTS: A COMPUTATIONAL STUDY



10:40 - 10:50

Cherezova P.Y., Porsev V.V.

QUANTUM CHEMICAL MODELING OF MECHANICAL PROPERTIES OF CARBON AND NITRIDE BORON NANOTUBES

10:50 - 11:00

Zubricheva D.V., Tikhova V.D., Tkachev A.V.

USE OF QUANTUM CHEMICAL CALCULATIONS IN THE EXTRACTION OF NOBLE METALS

11:20 - 12:00
**INVITED
SPEAKER**

Dr. Denis Sabirov

Information Entropy in Theoretical Chemistry

12:10 - 12:20

Chakalov E.R., Tolstoy P.M., Resnati G.

INTERROGATING BRIDGING HYDRON TUNNELING IN THE COUPLED HOMOCONJUGATED ANIONS OF SELENIC ACID

12:20 - 12:30

Verkhov V.A., Gubanov A.N., Antonov A.S.

THEORETICAL STUDY OF «FLIPPING» METALATION OF 4-DIMETHYLAMINOPYRIDINE

12:30 - 12:40

Rusanov D.A., Dzhiblavi K., Kuznetsov N.A., Malyshev V.I., Popović-Bijelić A., Samet A.V., Semenov V.V., Babak M.V., Medvedev M.G.

ELECTRON BUFFER EFFECT: GUIDING PYRIDINIUM YLIDES AND NITROALKENES TOWARD [3 + 2] OR [4 + 1] PRODUCTS

12:40 - 12:50

Titova A.A., Skakun M.A., Tupikina E.Yu.

INVESTIGATION OF MUTUAL INFLUENCE OF NH...N HYDROGEN BONDS IN AMIDINE SELF-ASSOCIATES BY MEANS OF QUANTUM CHEMISTRY

12:50 - 13:00

Odintsov K.V., Domratcheva T.M.

ESTIMATING ELECTRON TRANSFER RATES OF DNA REPAIR BY MEANS OF MULTICONFIGURATION QUANTUM CHEMISTRY CALCULATIONS

13:00 - 13:10

Shitov D.A., Kaplanskiy M.V., Tupikina E.Yu.

INFLUENCE OF IRON SPIN STATE AND LIGAND NUMBER ON ELECTRONIC STRUCTURE OF MODEL HEMOPROTEINS

13:10 - 13:20

Kaplanskiy M.V., Tolstoy P.M., Tupikina E.Yu.

**THERMAL, SOLVATION AND QUANTUM EFFECTS
IN MODELING OF HYDROGEN BONDS SPECTRAL
PROPERTIES**

THURSDAY, 05.09, Room 1217

9:30 - 10:10

**KEYNOTE
SPEAKER**

Dr. Sci. Konstantin Lyssenko

**Experimental Charge Density Studies of Crystalline
Solids as the Inexhaustible Source of Data on
Interatomic Interactions**

10:10 - 10:20

Baigunov I.A., Kholmurodov Kh.T., Gladyshev P.P., Ibrahim M. A.

**THE MOLECULAR DYNAMICS OF THE STRUCTURAL
BEHAVIOUR OF THE ALCOHOL DEHYDROGENASE ENZYME
ON THE ADSORBENT SURFACE**

10:20 - 10:30

Ilicheva P.M., Pidenko P.S., Burmistrova N.A.

**MOLECULAR MODELING OF BOVINE SERUM
ALBUMIN IMPRINTED IN THE PRESENCE OF MULTIPLE
MYCOTOXINS MOLECULES: INTERACTIONS AND BINDING
MODE INSIGHTS**

10:30 - 10:40

Makarov G.I., Korenkov V.A., Makarova T.M.

**INTERACTION OF ED-20 EPOXY RESIN WITH THE SURFACE
OF MODIFIED GRAPHENE: MOLECULAR DYNAMICS STUDY**

10:40 - 10:50

Bashirov I.I., Chaliy V.A., Krivoshchapov N.V., Medvedev M.G.

**DIFFRACTION PATTERNS DIFFERENCE AS A DRIVING
FORCE IN MOLECULAR DYNAMICS**

10:50 - 11:00

Sopova N.S., Bochenkov V.E.

**PREDICTION OF INTERFACIAL PROPERTIES AND
MICROEMULSION TYPE IN OCTANE-C10E4-WATER
SYSTEMS THROUGH DISSIPATIVE PARTICLE DYNAMICS
AND THE METHOD OF MOMENTS**

11:00 - 11:10

Misikov G.Kh., Samarov A.A., Toikka A.M., Trofimova M.A.

**THERMODYNAMIC VIEW ON THE ESTERIFICATION
REACTION KINETICS**



11:20 - 11:30

Leonova M.S., Krivitskaya A.V., Mulashkina T.I.

MOLECULAR MODELING OF THE PHOSPHORYLATION REACTION IN THE ACTIVE SITE OF PROTEIN KINASE A

11:50 - 12:20

**INVITED
SPEAKER**

Dr. Andrey Kulsha, Ivashkevich O.A.

Strong Bases Design: Key Techniques and Stability Issues

12:20 - 12:30

Svinkin N.A., Kondratev V.M., Bolshakov A.D., Petrushenko I.K.

INTERACTION OF SUPERALKALIS NK3M (M = Li, Na, K) WITH CO₂: A THEORETICAL STUDY

12:30 - 12:40

Eremeeva M.A., Krasovskaya Z.S., Serov N.S., Patra C.K.

DESIGN OF APTAMER SEQUENCES WITH PREDETERMINED AFFINITY TO SMALL MOLECULES USING ARTIFICIAL INTELLIGENCE

12:40 - 12:50

Rybin N., Chalykh O., Noviko I., Shapeev A.

THERMOPHYSICAL PROPERTIES OF LIQUID ELECTROLYTES AND CRYSTAL STRUCTURE PREDICTION USING MOMENT TENSOR POTENTIAL

12:50 - 13:00

Vakhrushev A.A., Matveev A.V., Nartova A.V.

CONVOLUTIONAL NEURAL NETWORK FOR THE AUTOMATED ANALYSIS OF X-RAY PHOTOELECTRON SPECTRA

13:00 - 13:10

Ereshchenko A.V., Evteev S.A., Ivanenkov Y.A.

KINASE SELECTIVITY PROFILING USING 3D PHARMACOPHORES AND GRAPH NEURAL NETWORKS

13:10 - 13:20

Varlamova L.A., Erohin S.V., Larionov K.V., Sorokin P.B.

DIAMANE OXIDE. INVESTIGATION OF STRUCTURE, STABILITY AND ELECTRONIC PROPERTIES

13:20 - 13:30

Turyansky Y.M., Kudan P.V.

THE 3D MODEL OF THE MENDELEEV'S TABLE

13:30 - 13:40

Larionov K.V., Mochalova E.A., Pais Pereda J.J., Sorokin P.B.

THEORETICAL STUDY OF NEW MAGNETIC JUNCTIONS FOR SPINTRONICS APPLICATIONS

13:40 - 13:50

Kolchenko M.M., Makushin K.M., Fedorov A.K.

QUANTUM COMPUTING LIBRARY FOR QUANTUM CHEMISTRY APPLICATIONS

14:50 - 15:00

Fedorov K.A., Galibin S.D.

VISCOSITY OF DEEP EUTECTIC SOLVENTS: LINEAR AND NONLINEAR MODELS

15:00 - 15:10

Starostin R.O., Freidzon A.Ya., Gromov S.P., Melnikov M.Ya.

MODELING OF COORDINATION OF METAL AND AMMONIUM CATIONS IN COMPLEXES OF BIS-AZA-18-CROWN-6-CONTAINING DIENONES

15:10 - 15:20

Blinova A.R., Mulashkina T.I., Grigorenko B.L.

PHOTOINDUCED DEGRADATION OF FLAVIN MONONUCLEOTIDE (FMN) IN MINISOG PROTEIN

15:20 - 15:30

Kuzmin A.V., Shainyan B.A.

SILICON DOPED NITROGEN ANCHORED CARBON NANOTUBES FOR OXYGEN ELECTROREDUCTION REACTION. THEORETICAL STUDY

15:30 - 15:40

Krivoshchapov N.V., Medvedev M.G.

ACCURATE AND EFFICIENT CONFORMER GENERATION OF DRUG MACROCYCLES WITH RING KINEMATICS INFORMED SAMPLING

15:40 - 15:50

Davydov N.A., Victorov A.I.

MODELING ADSORPTION OF CONTAMINANTS FROM SOLUTION BY PARTICLES OF MICROPLASTICS

15:50 - 16:00
ONLINE

Pomogailo D.A., Selivantiev Yu.M., Spitsyn N.Yu., Raitman O.A.

QUANTUM-CHEMICAL MODELING OF MAGNETIC RESONANCE PARAMETERS AND OPTICAL PROPERTIES OF COPPER COMPLEXES WITH SPIRONAPHTHOXAZINES

16:00 - 16:10

Dutta K., Kravtsov V., Oleynikova K., Ruzov A., Skorb E.V., Shityakov S.

EFFECT OF SINGLE NUCLEOTIDE POLYMORPHISMS ON STABILITY AND FUNCTION OF HNRNPA2/B1

16:10 - 16:20

Ilin E.A., Filatov V.A.

PREDICTION OF PHOTOPHYSICAL PROPERTIES OF ORGANOMETALLIC COMPOUNDS USING MACHINE LEARNING ALGORITHMS



16:20 - 16:30

Smirnov M.V., Karpov K.V., Mitrofanov A.A.

**COMPUTATIONAL REDOX POTENTIAL PREDICTIONS:
APPLICATION TO ORGANIC MOLECULES USED IN
NUCLEAR REPROCESSING**

16:30 - 16:40

Domnin A.V., Solovev Y.V. Evarestov R.A.

AB INITIO MODELING OF HELICAL PEPTIDES

16:40 - 16:50

Nosov V.G., Peshkova M.A.

**PREDICTIVE THEORETICAL APPROACH TO THE
DEVELOPMENT OF THE OPTICAL SENSORS FOR
INDIVIDUAL IONIC ACTIVITIES**

POSTER SESSION

TUESDAY, 03.09, 15:00 - 16:45

6-1. Sharapova D.A., Zavgorodniy A.S.

**INTERACTIONS OF IODINE WITH ACIDS OF THE ALRF3 TYPE (RF - BULKY
PERFLUORINATED SUBSTITUENTS) IN VARIOUS SOLVENTS**

6-3. Stanislavchuk-Abovskiy D.B., Domnin A.V., Bandura A.V.

DEVELOPMENT OF FORCE FIELDS OF METAL DICHALCOGENIDE NANOTUBES

6-4. Mikhailov I.E., Domnin A.V., Evarestov R.A.

**QUANTUM CHEMICAL STUDY OF THE INFLUENCE OF TORSIONAL
DEFORMATIONS ON THE PROPERTIES OF CHIRAL WXY (X, Y = S, SE) JANUS-
NANOTUBES**

6-6. Kruglov M.L., Kaplanskiy M.V., Tupikina E.Yu.

**DYNAMIC OF NON-COVALENT INTERACTIONS DURING THE P-O BOND
CLEAVAGE BY RIBONUCLEASE A**

6-7. Kirillov M.V., Sizov V.V.

**IN SILICO SCREENING OF AGGREGATIVE BEHAVIOR MODIFIERS FOR
HYDROCARBON/WATER SYSTEMS IN HYDROPHOBIC CONFINEMENT**



6-8. Evsyukov I.V., Sizova A.A.

MOLECULAR DYNAMICS STUDY OF CO₂ AND CH₄ GAS HYDRATE

6-9. Shulepov R.R., Sizov V.V., Sizova A.A.

SIMULATION OF ZEOLITE MEMBRANE GAS SEPARATION BY NONEQUILIBRIUM MOLECULAR DYNAMICS

6-10. Tatarinov I.A., Kalinin S.A., Dar'in D.V.

METHOD DEVELOPMENT IN TAAR1 AGONIST STRUCTURE-BASED DRUG DESIGN

6-11. Bunyaev V.A., Sinolits A.V., Badun G.A.

CARBON NANOTUBES ADSORPTION MODIFICATION WITH CHITOSAN ACCORDING TO SUPERCOMPUTER SIMULATION

6-12. Kissler T.Yu., Vanin A.A.

MOLECULAR DYNAMICS SIMULATION OF SURFACTANT ASSYMETRICAL ADSORPTION AND INTERFACIAL TENSION

6-13. Bondarev V.P., Demidov M.P., Arngold V.A., Selina V.A., Novikov A.N.

HEAT CAPACITY OF ALKALY METALS AND AMMONIUM IONS SOLUTIONS IN MIXED SOLVENTS N-METHYLPYRROLIDONE–WATER AT 298.15 K

THURSDAY, 05.09, 17:00 - 18:30

6-16. Glushak A.A., Smirnov G.S.

CLASSICAL FORCEFIELD FOR SELENIUM OXYANIONS

6-18. Blinova A.R., Kulakova A.M., Zakharova T.M., Grigorenko B.L.

BIOLUMINESCENCE OF THE FIREFLY: MODELING THE PREOXIDATION STAGE OF MECHANISM



6-19. Bespalov I.A., Krivoschchapov N. V., Chaliy V.A., Medvedev M.G.

A NOVEL APPROACH FOR CONFORMATION SPACE SAMPLING VIA BAYESIAN OPTIMIZATION

6-20. Stentsova V.V., Kuzmin A.V.

THE ACTIVITY AND STABILITY OF FEN4-DOPED CARBONS IN OXYGEN ELECTROREDUCTION. STRUCTURE – REACTIVITY RELATIONSHIP

6-22. Ostras A.S., Timoshenko V.V.

THEORETICAL STUDY OF DIBENZOCROWN ETHERS COMPLEXATION WITH ALKALINE AND ALKALINE-EARTH METALS IN FLUORINATED SOLVENTS

6-23. Anichkin A.A., Ivchenko A.V., Kalinin A.A., Barskaya E.S., Ananyev I.V.

MACHINE SEARCH AND ANALYSIS OF ZOLEDRONIC ACID ANALOGUES WITH HIGH CYTOTOXICITY

6-24. Sibgatullina T.I., Afonina V.A., Gimadiev T.R.

MODELLING THE SOLUBILITY OF COMPOUNDS IN WATER USING OPEN DATA

6-25. Alyeva A.B., Ananicheva S.A., Krapivnitckaia T.O., Gerasimova E.V., Peskov N.Yu., Zelentsov S.V., Glyavin M.Yu.

THERMODYNAMIC CHARACTERISTICS OF HUMIC ACIDS

6-26. Donina M.V., Esefieva T.Yu., Magzhanov R.K., Yarovaya O.V.

KINETICS OF THE HYDROLYSIS REACTION OF SODIUM BOROHYDRIDE ON A HIGHLY DISPERSED NICKEL CATALYST

7. ECONOMICS OF THE CHEMICAL INDUSTRY IN THE CONTEXT OF MODERN CHALLENGES

CHAIRMANS: Dr. **Vetrova Maria**, Dr. **Evgeniya Zhalskaya**, Faculty of Economics, SPbU

SECRETARY: **Egor Manzhosov**, Faculty of Economics, SPbU

ORAL REPORTS

WEDNESDAY, 04.09, Room 1207

9:00 - 9:15

**KEYNOTE
SPEAKER**

Dr. Evgeniya Zhalskaya

Organization of the Process of Import Substitution in the Pharmaceutical Market of Russia

9:15 - 9:30

Blagikh Ivan, Shcheglov Maksim

STRATEGIC ANALYSIS OF THE PHARMACEUTICAL MARKET IN THE CONTEXT OF IMPORT SUBSTITUTION AND SANCTIONS

9:30 - 9:45

Koshkin Andrey, Gorbunov Pavel, Pashkus Vadim

THE RUSSIAN PHARMACEUTICAL MARKET: IMPORT SUBSTITUTION AND BREAKTHROUGH POSITIONING STRATEGY

9:45 - 10:00

Lyulyukin Arseniy

SYNTHESIS AND INVESTIGATION OF CU-CONTAINING DEEP OXIDATION CATALYSTS FOR A FLUIDIZED BED BASED ON SPHERICAL $\gamma\text{-Al}_2\text{O}_3$ STRENGTHENED WITH MAGNESIUM

10:00 - 10:15

Trukhin Ivan

APPLICATION OF THE CLUSTER ANALYSIS TO DETERMINE THE RATIO OF COMPONENTS IN COMPLEX MIXTURES FOR REVERSE ENGINEERING PROBLEMS

10:15 - 10:30

Manzhosau Yavor

APPLICATION OF LEAN PRODUCTION IN THE CHEMICAL INDUSTRY AS A TOOL TO COMBAT TECHNOGENIC DISASTERS

THURSDAY, 05.09, Room 1207

10:00 - 10:15

Voronin Vsevolod

RUSSIA'S CHEMICAL INDUSTRY DURING THE PERIOD OF SANCTIONS PRESSURE: A COMPREHENSIVE REVIEW



10:15 - 10:30

Temnikov Alexander

ECONOMIC ASPECTS OF RUSSIAN PATENT ACTIVITY IN THE ELECTRIC ACCUMULATOR INDUSTRY

10:30 - 10:45

Dmitrieva Maria

TECHNOLOGY FOR EXTRACTING LITHIUM IONS FROM BRINES USING POLYMER MEMBRANES

10:45 - 11:00

Maksimova Bogdana

CHOLESTEROL OXIDASE FROM STREPTOMYCES LAVENDULAE AS A PROSPECTIVE BIOCATALYST FOR BUTTER ANALYSIS

12:00 - 12:15

Amdur A.M., Fedorov S.A., Kurmacheva V.S.

PHYSICO-CHEMICAL FEATURES OF PULVERIZED COAL FUEL FOR BLAST FURNACES

12:15 - 12:30

Dolgopolova Alesia

STRATEGIES OF PERSONNEL MANAGEMENT IN THE CHEMICAL INDUSTRY IN THE CONTEXT OF MODERN CHALLENGES

12:30 - 12:45

Koriakova Polina

TALENT MANAGEMENT IN THE CHEMICAL INDUSTRY

12:45 - 13:00

Laptenko Vladimir, Pashkus Natalia

LONG-TERM STRATEGIES FOR THE FORMATION OF REGIONAL PHARMACEUTICAL CLUSTERS AND THE IMPLEMENTATION OF THE PHARMACEUTICAL INDUSTRY'S PRODUCT POLICY IN THE FACE OF SANCTIONS USING A BREAKTHROUGH POSITIONING TOOL



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ЭЛЕМЕНТНЫЙ И ИЗОТОПНЫЙ АНАЛИЗ

(ИСП-АЭС, ИСП-МС, РФА, ТИМС,
Пламенные фотометры)

ГАЗОАДСОРБЦИОННОЕ ОБОРУДОВАНИЕ

(Анализаторы удельной поверхности и размеров пор,
Анализаторы хемосорбции, Гелиевые пикнометры)

МОЛЕКУЛЯРНЫЙ АНАЛИЗ

(ИК-Фурье, Раман, УФ-вид, КД)

ПРОБОПОДГОТОВКА

(Системы очистки воды и кислот, Измельчение, Прессование,
Микроволновое разложение, Кислотное разложение и др.)

ХИМИЧЕСКАЯ
ПРОМЫШЛЕННОСТЬ



АТОМНАЯ
ПРОМЫШЛЕННОСТЬ



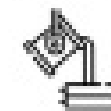
НЕФТЕХИМИЯ И
НЕФТЕПЕРЕРАБОТКА



ГЕОЛОГИЯ И
ГЕОХИМИЯ



МЕТАЛЛУРГИЯ



КРИМИНАЛИСТИКА



АНАЛИЗ ВАШИХ ОБРАЗЦОВ В СОБСТВЕННОЙ ДЕМОНСТРАЦИОННОЙ ЛАБОРАТОРИИ ЛАБТЕСТ

ПОСТАВКА
ОБОРУДОВАНИЯ

ПОДБОР
КОМПЛЕКТУЮЩИХ

МЕТОДИЧЕСКАЯ
ПОДДЕРЖКА

ТЕХНИЧЕСКОЕ
ОБСЛУЖИВАНИЕ

