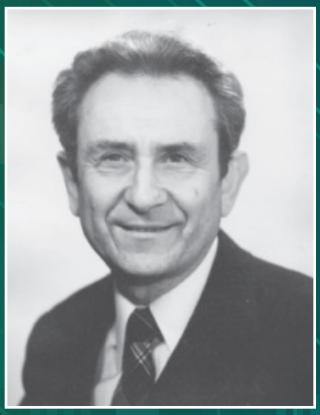
4th International symposium dedicated to the 100th anniversary of academician Mark Vol'pin

Modern Trends in Organometallic Chemistry & Catalysis

23-27 May 2023

PROGRAM



Professor
Mark E. Vol'pin
23.05.1923 - 28.09.1996

The day of May 23 2023 is the 100th anniversary of the birth of Mark Efimovich Vol'pin, chemist of genius and one of Russia's leading scientists.

Mark Efimovitch Vol'pin started his career as an organic chemist, then moved into organometallic chemistry, and ended it in bioinorganic chemistry. From 1988 he was the director of the A.N. Nesmeyanov Institute of Organoelement Compounds (INEOS) of the Russian Academy of Sciences.

Vol'pin came from a medical background but, after service during the Second World War, he graduated in Chemistry from Moscow State University in 1949. He first became well-known in the mid-1950s for his studies on the chemistry of tropylium, a remarkable organic compound with seven carbons in a ring, bearing a positive charge, which was isolable due to its 6-electron «aromatic» character. He later expanded the chemistry of such organic positively charged ions to the 3-membered ring, 2-electron analogues. For that work he was awarded the Lenin Prize in 1963. Deriving from this he became interested in the highly reactive unsaturated single carbon species called carbenes, which in turn led him to investigate related systems, including some highly reactive and unsaturated metal complexes. The successful synthesis of diphenylcyclopropenone via the reaction of dihalocarbenes with tolane led Vol'pin to very important theoretical generalizations for the concept of "carbenoids", heteroanalogs of carbenes (R_2Ge, R_2Sn, RB).

An interesting sidelight on the path of pure scientific research in the hands of a master like Vol'pin is seen in his progression from organic chemistry to a most remarkable discovery in inorganic chemistry: a metal complex with the ability to «fix» atmospheric nitrogen under very mild conditions. The catalytic system that Vol'pin and V.B. Shur developed offered a signpost to many other workers. For this research Vol'pin was awarded the USSR State Prize in 1982, as well as numerous other honours, and was elected to full membership of the USSR Academy of Science in 1987.

In his later work he studied biological metal complexes that could generate very active species, in this case free radicals. The object of these researches was to find compounds that were absorbed by tumours and would destroy them without harming healthy tissue. He felt that this work represented his most satisfying achievement.

In his later career he was the intellectual powerhouse that drove the research staff of INEOS by example and inspiration. Characteristically he ran a relatively small group himself and did not have his name on all the Institute publications, as was the custom elsewhere. He was a very approachable, gentle and nice man; and he was appointed Director on three separate occasions. Vol'pin was a tall youthful-looking man with a ready smile. He was a most convivial companion, and much enjoyed entertaining friends and visitors.

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Perekalin, Dmitry S.

WORKSHOP
“Organometallic Chemistry Frontiers”
Tuesday, May 23

10:00	**Mark Vol’pin memorial**
11:00-11:40	**RL1 Armando Pombeiro** Coordination Polymers and Metal-Organic Frameworks (MOFs) in Selected Catalytic Reactions
11:40-12:20	**RL2 Rinaldo Poli** A new pathway for borrowing hydrogen transformations under Cp^*Co^{III} catalysis
12:20-12:30	**Y1 Farida Akhmatkhanova** Chiral ferrocenylphosphinates: structural features and physico-chemical properties
12:30-12:40	**Y2 Irina Goncharova** [M]-/Organo-Catalyzed Aerobic Oxidation as the Green Way for the Preparation of Functionalized Organosilicon Compounds
12:40-12:50	**Y3 Vadim Ermolaev** Ferrocene Containing Sterically Hindered Phosphonium Salts
12:50-13:00	**Y4 Alena Lakomkina** Synthesis and coordination properties of 2,3,4,5-tetraaryl-1-mono- phosphaferrocenes
13:00-13:10	**Y5 Vladislav Potseleev** Synthesis of complex compounds of gold for cancer diagnosis and nanocomposite materials based on them
13:10-13:20	**Y6 Viktoriia Simonova** NMR and UV-Vis studies of the oxotransfer reaction’s mechanism involving a tungsten enzymes’ model

Evening session

15:00-15:40	**RL3 Pierre Dixneuf** Catalysis: a key to Polypyridines, Fused Heterocycles, Functional Phosphines and to catalyst improvement
15:40-16:20	**RL4 Maurizio Peruzzini** Synthesis, reactivity and catalytic applications of 2D-materials based on exfoliated black phosphorus
16:20-16:30	**Y7 Mikhail Frolov** A new method for the synthesis of five-membered metallacyclocumulenes. Protolysis of the zirconacyclocumulene complex and its reaction with ketones
16:30-16:40	**Y8 Vladimir Kharitonov** Triphenylcyclopentadienyl rhodium complexes: synthesis and application for catalytic C-H annulations
16:40-16:50	**Y9 Dmitry Tsymbarenko** Polynuclear and polymeric lanthanide carboxylates - self-assembly, structure and application for catalysis
16:50-17:00	**Y10 Elina Antonova** Polymorph-Dependent Phosphorescence of Platinum(II) Complexes
17:00-17:10	**Y11 Mariya Golosnaya** Structure and catalytic properties of Au_4 cluster protected by bis(dimethylphosphinomethyl) and phenylacetylide ligands
17:10-17:20	**Y12 Andrey Rumyantsev** Catalytic imidation of lactones via oxo/imido heterometathesis

4th International symposium
Modern trends in organometallic chemistry and catalysis

	PL – 40 min
	IL – 20 min
	OC – 15 min

Wednesday, May 24		
10:00	Main hall	
	OPENING CEREMONY	
10:30-11:10	**PL1** Irina Beletskaya	
11:10-11:50	**PL2** Igor Fedushkin	
11:50-12:20	COFFEE BREAK	
	Parallel sessions	
	Main hall	Library
12:20-12:40	**IL1** Elena Milaeva	**IL2** Elena Grachova
12:40-13:00	**IL3** Olga Fedorova	**IL4** Alexandr Piskunov
13:00-13:15	**OC1** Kristina Kisel	**OC2** Mikhail Arsenov
13:15-13:30	**OC3** Irina Utepova	**OC4** Mikhail Kinzhalov
13:30-13:45	**OC5** Dmitriy Kholodkov	**OC6** Galina Loukova
13:45-15:00	LUNCH	
	Parallel sessions	
	Main hall	Library
15:00-15:20	**IL5** Irina Balova	**IL6** Sergey Ketkov
15:20-15:35	**OC7** Tatiana Chulkova	**OC8** Sergey Bukalov
15:35-15:50	**OC9** Ivan Grishin	**OC10** Nina Volkova
15:50-16:05	**OC11** Tatyana Koptseva	**OC12** Darya Pichugina
16:05-16:20	**OC13** Dmitry Suslov	**OC14** Mariya Timofeeva
16:20-16:50	COFFEE BREAK	
	Parallel sessions	
	Main hall	Library
16:50-17:05	**OC15** Olesya Trofimova	**OC16** Pavel Bandurist
17:05-17:20	**OC17** Mikhail Khrizanforov	**OC18** Alexander Goloveshkin
17:20-17:35	**OC19** Dmitry Zimonin	**OC20** Svetlana Kuznetsova
17:40-17:50	**OC21** Petr Prikhodchenko	**OC22** Alsu Nugmanova
18:00-	**Welcome reception**	

Thursday, May 25		
	Main hall	
10:00-10:40	**PL3** Valentine Ananikov	
10:40-11:20	**PL4** Stepan Kalmykov	
11:20-12:00	**PL5** Yulia Gorbunova	
12:00-12:30	COFFEE BREAK	
	Parallel sessions	
	Main hall	Library
12:30-12:50	**IL7** Jianfeng Li	**IL8** Vladimir Burlakov
12:50-13:10	**IL9** Ashot Arzumanyan	**IL10** Igor Sivaev
13:10-13:25	**OC23** Mikhail Minyaev	**OC24** Rinat Aysin
13:25-13:40	**OC25** Stanislav Nikolaevskii	**OC26** Dmitrii Roitershtein
13:40-15:00	LUNCH	
	Main hall	
15:00-15:40	**PL6** Sergey Konchenko	
	Parallel sessions	
	Main hall	Library
15:40-16:00	**IL11** Sergey Karlov	**IL12** Konstanitn Brylev
16:00-16:20	**IL13** Denis Chusov	**IL14** Alexander Artem'ev
16:20-16:40	**IL15** Dmitry Perekalin	**IL16** Juliya Shakirova
16:40-16:55	**OC27** Oleg Afanasyev	**OC28** Lyudmila Telegina
16:55-	COFFEE BREAK & POSTER SESSION	

Friday, May 26		
	Main hall	
10:00-10:40	**PL7** Andrey Karasik	
10:40-11:20	**PL8** Elena Shubina	
11:20-12:00	**PL9** Vladimir Fedin	
12:00-12:30	COFFEE BREAK	
	Parallel sessions	
	Main hall	Library
12:30-12:50	**IL17** Zheyu Shen	**IL18** Vladimir Larionov
12:50-13:10	**IL19** Alexandra Yurkovskaya	**IL20** Dmitry Loginov
13:10-13:30	**OC29** Alexey Kiryutin	**OC30** Dmitrii Bolotin
13:30-13:45	**OC31** Almaz Zagidullin	**OC32** Nikolai Bushkov
13:45-15:00	LUNCH	
	Parallel sessions	
	Main hall	Library
15:00-15:20	**IL21** Andrey Asachenko	**IL22** Dmitry Yakhvarov
15:20-15:40	**IL23** Sergey Osipov	**IL24** Alexey Timoshkin
15:40-16:00	**IL25** Valentine Nenajdenko	**IL26** Maksim Sokolov
16:00-16:30	COFFEE BREAK	
	Main hall	
16:30-17:10	**PL10** Igor Alabugin	
17:10-	**Closing ceremony**	

4th International symposium Modern trends in organometallic chemistry and catalysis

Wednesday, May 24

Main hall

10:00	**OPENING CEREMONY**
10:30-11:10	**PL1 Irina Beletskaya** Metal catalysis in the substitution and addition reactions
11:10-11:50	**PL2 Igor Fedushkin** Compounds with Low-Valent p-Block Elements
11:50-12:20	COFFEE BREAK

PARALLEL SESSIONS

Main hall

12:20-12:40	**IL1 Elena Milaeva** The field of metal-based drugs in medicinal chemistry
12:40-13:00	**IL3 Olga Fedorova** Azacrown compounds and their conjugates with nanoparticles, antibodies and peptides as a platform for radiopharmaceuticals
13:00-13:15	**OC1 Kristina Kisel** An approach to biocompatible sensors based on the Re(I) luminophores
13:15-13:30	**OC3 Irina Utepova** Oxidative C-H functionalizations for synthesis of metallocene ligand systems and pharmacologically active compounds
13:30-13:45	**OC5 Dmitriy Kholodkov** Silica-Based Aerogels with Tunable Properties: The Highly Efficient Amphoteric F-containing Catalysts for Aerogels Preparation and Look inside Their Structure

Library

12:20-12:40	**IL2 Elena Grachova** Organometallic compounds of transition metals: bright stars of Universe of molecular emitters
12:40-13:00	**IL4 Alexandr Piskunov** Design and tuning of electronic properties for LL'CT metal complexes
13:00-13:15	**OC2 Mikhail Arsenov** Synthesis of Isocoumarin-substituted Isoquinolinium Cations by Tandem Rhodium-catalyzed CH Activation/ Annulation
13:15-13:30	**OC4 Mikhail Kinzhalov** Photo- and Electroluminescence of Platinum Group Metal Complexes with Acyclic Diaminocarbene Ligands
13:30-13:45	**OC6 Galina Loukova** Ligand-to-metal charge transfer excited states in organometallics
13:45-15:00	LUNCH

PARALLEL SESSIONS

Main hall

15:00-15:20	**IL5 Irina Balova** Intramolecular Nicholas reaction in the synthesis of cyclic alkynes and diynes
15:20-15:35	**OC7 Tatiana Chulkova** Synthesis of C,N-chelated Diaminocarbene Complexes of Palladium and Platinum and Their Application in Catalysis
15:35-15:50	**OC9 Ivan Grishin** Ruthenacarboranes with chelate ligands: synthesis, isomerism and catalytic application

15:50-16:05	**OC11 Tatyana Koptseva** Transformation of Heteroallenes with Acenaphthene-1,2-diimine Aluminum Compounds
16:05-16:20	**OC13 Dmitry Suslov** Cationic Palladium Cyclopentadienyl and Acetylacetonate Complexes Containing Tertiary Phosphines: Synthesis, Structure and Catalytic Properties

Library

15:00-15:20	**IL6 Sergey Ketkov** Specific Features of Metallocene Molecular and Electronic Structures Unveiled by Threshold Ionization Spectroscopy and DFT Calculations
15:20-15:35	**OC8 Sergey Bukalov** Molecular reorientation motion in plastic crystalline C_{60} under low power laser exposition
15:35-15:50	**OC10 Nina Volkova** Catalytic and Photocatalytic Activity of TiO_2 Nanoparticles in Polycarbonate Nanocomposites Degradation Reactions
15:50-16:05	**OC12 Darya Pichugina** Gold Nanoclusters Protected by Thiolate: Special Structure and Catalytic Properties
16:05-16:20	**OC14 Mariya Timofeeva** Insights into the structure-property-activity relationship of zeolitic imidazolate frameworks for cycloaddition of CO_2 to epoxides
16:20-16:50	COFFEE BREAK

PARALLEL SESSIONS

Main hall

16:50-17:05	**OC15 Olesya Trofimova** Mixed-ligand metal-organic coordination polymers based on redox-active linkers of the anilate type

17:05-17:20	**OC17 Mikhail Khrizanforov** Unusual ways of using electrochemical data in assessing the properties of organometallic systems
17:20-17:35	**OC19 Dmitry Zimonin** Electrochemical study of new platinum and nickel bis((diphenyl)phosphinoxy)phen pincer complexes
17:40-17:50	**OC21 Petr Prikhodchenko** Peroxocomplexes of p-block elements
	Library
16:50-17:05	**OC16 Pavel Bandurist** Structure and catalytic properties of $NiCu_{11}X_6$ clusters (X = S, O) in dry reforming of methane: active site model
17:05-17:20	**OC18 Alexander Goloveshkin** Structural significance of weak intermolecular and host-guest interactions for assembly of MoS_2-organic layered compounds
17:20-17:35	**OC20 Svetlana Kuznetsova** Palladium Nanoparticles Entrapped In Hydrogen Bonded Crystalline Organic Salt Matrixes as Selective Heterogeneous Reduction Catalysts
17:40-17:50	**OC22 Alsu Nugmanova** Highly Efficient Ambivalent Hybrid Photocatalysts Based on Porphyrin SURMOFs and Graphene Oxide
18:00-	Welcome reception

Thursday, May 25

Main hall

10:00-10:40	**PL3 Valentine Ananikov** Artificial intelligence in chemical research: what to expect in the 21st century?
10:40-11:20	**PL4 Stepan Kalmykov** Approaches to radiopharmaceuticals with targeted delivery
11:20-12:00	**PL5 Yulia Gorbunova** Tetrapyrrolic Photosensitizers: Design, Synthesis and Application in Medicine
12:00-12:30	COFFEE BREAK

PARALLEL SESSIONS

Main hall

12:30-12:50	**IL7 Jianfeng Li** Rare-Earth-Catalyzed Selective Hydrosilylation
12:50-13:10	**IL9 Ashot Arzumanyan** Hydrosilylation – Key Catalytic Approach to Si–C-Bonds Formation
13:10-13:25	**OC23 Mikhail Minyaev** Rare-earth anthracenide complexes in ethylene polymerization
13:25-13:40	**OC25 Stanislav Nikolaevskii** Complexes of 3d and 3d-4f metal carboxylates with N-heterocyclic carbenes as ancillary ligands

Library

12:30-12:50	**IL8 Vladimir Burlakov** From acetylene complexes of titanocene to five-membered metalla-cyclocumulenes and metallacyclopentynes, compounds that should not have existed

12:50-13:10	**IL10 Igor Sivaev** Substituted nido-Carboranes and Metallacarboranes Thereoff. Various Aspects
13:10-13:25	**OC24 Rinat Aysin** The delocalization of multicentered metal-carbon bonds
13:25-13:40	**OC26 Dmitrii Roitershtein** Structural diversity of the rare-earth polyarylcyclopentadienyl complexes
13:40-15:00	LUNCH

Main hall

15:00-15:40	**PL6 Sergey Konchenko** Coordination Chemistry of Functionalized Group 14 and 15 Amides

PARALLEL SESSIONS

Main hall

15:40-16:00	**IL11 Sergey Karlov** Metal Complexes in the Synthesis of Biodegradable Polymers: New Challenges
16:00-16:20	**IL13 Denis Chusov** Amines are our everything and more
16:20-16:40	**IL15 Dmitry Perekalin** Noble metals vs Earth-abundant metals in C-H activation catalysis: unexpected results of cost analysis
16:40-16:55	**OC27 Oleg Afanasyev** Towards the ideal catalyst for the borrowing hydrogen amination

	Library
15:40-16:00	**IL12 Konstanitn Brylev** Luminescent octahedral cluster complexes of molybdenum and rhenium: from synthesis to applications
16:00-16:20	**IL14 Alexander Artem'ev** Renaissance of phosphorescent Mn(II) complexes: the selected stories
16:20-16:40	**IL16 Juliya Shakirova** Aggregation induced emission in Pt(II) complexes: from molecular systems to nanoaggregates and metallopolymers.
16:40-16:55	**OC28 Lyudmila Telegina** Cymantrenylalkylptalimides as photo- and electroactive compounds
16:55-	COFFEE BREAK & POSTER SESSION

Friday, May 26

Main hall

10:00-10:40	**PL7 Andrey Karasik** Phosphine ligands with dynamic 3D architecture - a new tool of coordination chemistry
10:40-11:20	**PL8 Elena Shubina** Non-covalent interactions in hydride chemistry: from stoichiometric reactions to catalytic processes
11:20-12:00	**PL9 Vladimir Fedin** Luminescent Metal-organic Frameworks for Detection of Biologically Active Substances and Environmental Pollutants
12:00-12:30	COFFEE BREAK

PARALLEL SESSIONS

Main hall

12:30-12:50	**IL17 Zheyu Shen** Magnetic Resonance Imaging Contrast Agents and their Applications for Tumor Theranostics
12:50-13:10	**IL19 Alexandra Yurkovskaya** Recent advances in parahydrogen induced hyperpolarization
13:10-13:30	**OC29 Alexey Kiryutin** Parahydrogen combined with photoisomerization allows persistently hyperpolarize long-lived ^{15}N nuclear spin state of azobenzene
13:30-13:45	**OC31 Almaz Zagidullin** Recent advances in the chemistry of phosphacyclopentadienide derivatives

Library

12:30-12:50	**IL18 Vladimir Larionov** Chiral NNO Type Cu(II) and Ni(II) Complexes in Asymmetric Reactions
12:50-13:10	**IL20 Dmitry Loginov** Indenyl rhodium complexes: from synthesis to asymmetric catalysis
13:10-13:30	**OC30 Dmitrii Bolotin** Onium Salts as Noncovalent Organoelement Catalysts
13:30-13:45	**OC32 Nikolai Bushkov** W-based Silica-Supported Oxo/Imido Heterometathesis Catalysts
13:45-15:00	LUNCH

PARALLEL SESSIONS

Main hall

15:00-15:20	**IL21 Andrey Asachenko** Catalytic addition reactions of alkynes
15:20-15:40	**IL23 Sergey Osipov** C-H Activation/annulation (hetero)arenes with functionalized alkynes
15:40-16:00	**IL25 Valentine Nenajdenko** Dichlorodiazadienes - new versatile building blocks

Library

15:00-15:20	**IL22 Dmitry Yakhvarov** Organonickel sigma-complexes: synthesis, structure and catalytic activity in ethylene oligomerization process
15:20-15:40	**IL24 Alexey Timoshkin** Structures and stability of group 13-14-15 hydrides stabilized by Lewis bases and Lewis acids

15:40-16:00	**IL26 Maksim Sokolov** Coordination of organometallic units to polyoxometals – a rational way to organometallic oxides
16:00-16:30	COFFEE BREAK
	Main hall
16:30-17:10	**PL10 Igor Alabugin** Carboxylates as non-innocent L-ligand – metal-bound carboxylate radicals in Ni-catalyzed C-H activation
17:10-	Closing ceremony

PLENARY LECTURES	
Igor Alabugin	Carboxylates as non-innocent L-ligand – metal-bound carboxylate radicals in Ni-catalyzed C-H activation
Valentine Ananikov	Artificial intelligence in chemical research: what to expect in the 21st century?
Irina Beletskaya	Metal catalysis in the substitution and addition reactions
Vladimir Fedin	Luminescent Metal-organic Frameworks for Detection of Biologically Active Substances and Environmental Pollutants
Igor Fedushkin	Compounds with Low-Valent p-Block Elements
Yulia Gorbunova	Tetrapyrrolic Photosensitizers: Design, Synthesis and Application in Medicine
Stepan Kalmykov	Approaches to radiopharmaceuticals with targeted delivery
Andrey Karasik	Phosphine ligands with dynamic 3D architecture - a new tool of coordination chemistry.
Sergey Konchenko	Coordination Chemistry of Functionalized Group 14 and 15 Amides
Elena Shubina	Non-covalent interactions in hydride chemistry: from stoichiometric reactions to catalytic processes

REMOTE LECTURES	
Pierre Dixneuf	Catalysis: a key to Polypyridines, Fused Heterocycles, Functional Phosphines and to catalyst improvement
Maurizio Peruzzini	Synthesis, reactivity and catalytic applications of 2D-materials based on exfoliated black phosphorus

Rinaldo Poli	A new pathway for borrowing hydrogen transformations under Cp*Co^{III} catalysis
Armando Pombeiro	Coordination Polymers and Metal-Organic Frameworks (MOFs) in Selected Catalytic Reactions

INVITED LECTURES

Alexander Artem'ev	Renaissance of phosphorescent Mn(II) complexes: the selected stories
Ashot Arzumanyan	Hydrosilylation – Key Catalytic Approach to Si–C-Bonds Formation
Andrey Asachenko	Catalytic addition reactions of alkynes
Irina Balova	Intramolecular Nicholas reaction in the synthesis of cyclic alkynes and diynes
Konstanin Brylev	Luminescent octahedral cluster complexes of molybdenum and rhenium: from synthesis to applications
Vladimir Burlakov	From acetylene complexes of titanocene to five-membered metalla-cyclocumulenes and metallacyclopentynes, compounds that should not have existed
Denis Chusov	Amines are our everything and more
Elena Grachova	Organometallic compounds of transition metals: bright stars of Universe of molecular emitters
Olga Fedorova	Azacrown compounds and their conjugates with nanoparticles, antibodies and peptides as a platform for radiopharmaceuticals
Sergey Karlov	Metal Complexes in the Synthesis of Biodegradable Polymers: New Challenges
Sergey Ketkov	Specific Features of Metallocene Molecular and Electronic Structures Unveiled by Threshold Ionization Spectroscopy and DFT Calculations

Vladimir Larionov	Chiral NNO Type Cu(II) and Ni(II) Complexes in Asymmetric Reactions
Jianfeng Li	Rare-Earth-Catalyzed Selective Hydrosilylation
Dmitry Loginov	Indenyl rhodium complexes: from synthesis to asymmetric catalysis
Elena Milaeva	The field of metal-based drugs in medicinal chemistry
Valentine Nenajdenko	Dichlorodiazadienes - new versatile building blocks
Sergey Osipov	C-H Activation/annulation (hetero)arenes with functionalized alkynes
Dmitry Perekalin	Noble metals vs Earth-abundant metals in C-H activation catalysis: unexpected results of cost analysis
Alexandr Piskunov	Design and tuning of electronic properties for LL'CT metal complexes
Zheyu Shen	Magnetic Resonance Imaging Contrast Agents and their Applications for Tumor Theranostics
Igor Sivaev	Substituted nido-Carboranes and Metallacarboranes Thereoff. Various Aspects.
Maksim Sokolov	Coordination of organometallic units to polyoxometals – a rational way to organometallic oxides
Alexey Timoshkin	Structures and stability of group 13-14-15 hydrides stabilized by Lewis bases and Lewis acids
Juliya Shakirova	Aggregation induced emission in Pt(II) complexes: from molecular systems to nanoaggregates and metallopolymers.
Dmitry Yakhvarov	Organonickel sigma-complexes: synthesis, structure and catalytic activity in ethylene oligomerization process
Alexandra Yurkovskaya	Recent advances in parahydrogen induced hyperpolarization

ORAL COMMUNOCATIONS

Oleg Afanasyev	Towards the ideal catalyst for the borrowing hydrogen amination
Mikhail Arsenov	Synthesis of Isocoumarin-substituted Isoquinolinium Cations by Tandem Rhodium-catalyzed CH Activation/Annulation
Rinat Aysin	The delocalization of multicentered metal-carbon bonds
Pavel Bandurist	Structure and catalytic properties of $NiCu_{11}X_6$ clusters (X = S, O) in dry reforming of methane: active site model
Dmitrii Bolotin	Onium Salts as Noncovalent Organoelement Catalysts
Sergey Bukalov	Molecular reorientation motion in plastic crystalline C_{60} under low power laser exposition
Nikolai Bushkov	W-based Silica-Supported Oxo/Imido Heterometathesis Catalysts
Tatiana Chulkova	Synthesis of C,N-chelated Diaminocarbene Complexes of Palladium and Platinum and Their Application in Catalysis
Alexander Goloveshkin	Structural significance of weak intermolecular and host-guest interactions for assembly of MoS_2-organic layered compounds
Ivan Grishin	Ruthenacarboranes with chelate ligands: synthesis, isomerism and catalytic application
Dmitriy Kholodkov	Silica-Based Aerogels with Tunable Properties: The Highly Efficient Amphoteric F-containing Catalysts for Aerogels Preparation and Look inside Their Structure
Mikhail Khrizanforov	Unusual ways of using electrochemical data in assessing the properties of organometallic systems

Mikhail Kinzhalov	Photo- and Electroluminescence of Platinum Group Metal Complexes with Acyclic Diaminocarbene Ligands
Alexey Kiryutin	Parahydrogen combined with photoisomerization allows persistently hyperpolarize long-lived ^{15}N nuclear spin state of azobenzene
Kristina Kisel	An approach to biocompatible sensors based on the Re(I) luminophores
Tatyana Koptseva	Transformation of Heteroallenes with Acenaphthene-1,2-diimine Aluminum Compounds
Svetlana Kuznetsova	Palladium Nanoparticles Entrapped In Hydrogen Bonded Crystalline Organic Salt Matrixes as Selective Heterogeneous Reduction Catalysts
Galina Loukova	Ligand-to-metal charge transfer excited states in organometallics
Mikhail Minyaev	Rare-earth anthracenide complexes in ethylene polymerization
Stanislav Nikolaevskii	Complexes of 3d and 3d-4f metal carboxylates with N-heterocyclic carbenes as ancillary ligands
Alsu Nugmanova	Highly Efficient Ambivalent Hybrid Photocatalysts Based on Porphyrin SURMOFs and Graphene Oxide
Darya Pichugina	Gold Nanoclusters Protected by Thiolate: Special Structure and Catalytic Properties
Petr Prikhodchenko	Peroxocomplexes of p-block elements
Dmitrii Roitershtein	Structural diversity of the rare-earth polyarylcyclopentadienyl complexes

Dmitry Suslov	Cationic Palladium Cyclopentadienyl and Acetylacetonate Complexes Containing Tertiary Phosphines: Synthesis, Structure and Catalytic Properties
Lyudmila Telegina	Cymantrenylalkylptalimides as photo- and electroactive compoumds
Mariya Timofeeva	Insights into the structure-property-activity relationship of zeolitic imidazolate frameworks for cycloaddition of CO_2 to epoxides
Olesya Trofimova	Mixed-ligand metal-organic coordination polymers based on redox-active linkers of the anilate type
Irina Utepova	Oxidative C-H functionalizations for synthesis of metallocene ligand systems and pharmacologically active compounds
Nina Volkova	Catalytic and Photocatalytic Activity of TiO_2 Nanoparticles in Polycarbonate Nanocomposites Degradation Reactions
Almaz Zagidullin	Recent advances in the chemistry of phosphacyclopentadienide derivatives
Dmitry Zimonin	Electrochemical study of new platinum and nickel bis((diphenyl)phosphinoxy)phen pincer complexes

YOUNG SCIENTIST COMMUNICATIONS	
Farida Akhmatkhanova	Chiral ferrocenylphosphinates: structural features and physico-chemical properties
Irina Goncharova	[M]-/Organo-Catalyzed Aerobic Oxidation as the Green Way for the Preparation of Functionalized Organosilicon Compounds
Vadim Ermolaev	Ferrocene Containing Sterically Hindered Phosphonium Salts

Alena Lakomkina	Synthesis and coordination properties of 2,3,4,5-tetraaryl-1-mono- phosphaferrocenes
Vladislav Potseleev	Synthesis of complex compounds of gold for cancer diagnosis and nanocomposite materials based on them
Viktoriia Simonova	NMR and UV-Vis studies of the oxotransfer reaction's mechanism involving a tungsten enzymes' model
Mikhail Frolov	A new method for the synthesis of five-membered metallacyclocumulenes. Protolysis of the zirconacyclocumulene complex and its reaction with ketones
Vladimir Kharitonov	Triphenylcyclopentadienyl rhodium complexes: synthesis and application for catalytic C-H annulations
Dmitry Tsymbarenko	Polynuclear and polymeric lanthanide carboxylates - self-assembly, structure and application for catalysis
Elina Antonova	Polymorph-Dependent Phosphorescence of Platinum(II) Complexes
Mariya Golosnaya	Structure and catalytic properties of Au_4 cluster protected by bis(dimethylphosphinomethyl) and phenylacetylide ligands
Andrey Rumyantsev	Catalytic imidation of lactones via oxo/imido heterometathesis

POSTER PRESENTATIONS

Olga Adzhieva	Ru-assisted synthesis of graft copolymers based on 5-succinylcyclooctene
Iuliia Akishkina	Reactions of Five-Membered Metallacyclocumulene Complexes of Zirconocene and Hafnocene with Acetonitrile

Yana Albrekht	Investigation study of nitrogen dioxide capture by metal-organic frameworks
Yulia Aleksandrova	Supramolecular materials based on amidopyridine pillar[5]arene derivatives and Cu(II) and Pd(II) cations as efficient sorbents and electrochemical sensors
Daniil Bardonov	Ligand-to-ligand charge transfer state in polyphenylcyclopentadienyl-bipyridine lanthanide complexes
Natalya Bazyakina	1D coordination polymers of europium and ytterbium
Daria Burmistrova	Electrocatalytic Transformations of Isomeric Butanethiols and Hexene-1 in the Presence of Metal Complexes
Daria Burmistrova	Organotin (IV) complexes with thio-Schiff bases bearing phenol fragment: synthesis, spectral and electrochemical properties
Semyon Dudkin	Preparation of new iron(II) phthalocyaninatoclathrochelates and their functionalization giving the carboranyl-containing polytopic derivatives
Elizaveta Durova	Pt(II) complexes with NNC pincer ligands capable of aggregation-induced emission (AIE). Study of the effect of substituents on their photophysical properties
Mikhail Emelyanov	Diastereomeric Co(III) Complexes with Two Types of Chirality: Synthesis and Application in Catalysis
Kirill Erdelyi	Synthesis of new tungsten carbonyl complexes with thioether carboranyl ligands
Vasiliy Fokin	Synthesis, structure and electrochemical transformations of diphenylgermanium (IV) catecholate complexes

Zalina Gugkaeva	Preparation of Chiral β-Aminoalanine Derivatives via Michael Addition of Amides, Imides and Isatins to a Dehydroalanine Ni(II) Complex
Timur Ivanenko	A series of new photoluminescent materials based on lead(II) halide complexes with N,N'-dimethylthiourea
Mikhail Kaverin	Synthesis, Redox study, and DFT calculations of ferrocene-containing betulonic acid conjugate
Olga Khromova	Direct Modification of Chiral-at-Metal Co(III) "Organocatalysts in Disguise" by Suzuki-Miyaura Cross-Coupling Reaction
Ekaterina Kitushina	The interaction of the Zn complex tetra(4-pyridyl)porphyrin with sodium hexamolybdenonickelate in aqua-organic medium
Ekaterina Kitushina	Hybrid structures based on hemin and sodium hexamolibdenonickelate
Aleksey Kolesnikov	Synthesis of hybrid nanostructures based on monoamino acids derivatives of fullerene C60 and vitamin B_{12}
Elizaveta Kormes	Investigation of the nature of metal-ligand interaction in pincer complexes based on Ni(II) by quantum chemistry methods
Pavel Koroteev	Catalytic activity of novel Ln cymantrenecarboxylate complexes with ferrocene phosphine oxido ligand in polymerization of vinyl monomers
Vitaly Kozinenko	Parahydrogen induced hyperpolarization of insensitive nuclei at ultralow magnetic fields
Ekaterina Kozlova	Experimental-theoretical investigation of the topology of electron density in mercaptobenzothiazolate complexes of Nd^{3+} and TB^{3+}

Ilya Krizhanovskij	Influence of the length of the hydrocarbon spacer between silicon and sulfur on the reactivity of sulfur-containing silanes in the hydrosilylation reaction
Viktor Kulikov	Overcoming mycobacterial resistance to isoniazid
Uliana Kutiavina	Interaction of Zirconacyclopentadiene Complexes of Zirconocene with Dicarbonyl Compounds
Anna Lazareva	A role of N,N'-linker in the solvothermal synthesis of MOFs based on ferrocenyl-R-phosphinates
Galina Loukova	Effective computational route to unravel geometry of d^0 titanocene with promising photo-, tribo-, and mechanoluminescent properties
Galina Loukova	Ligand-to-metal charge transfer excited states based on group 4 bent metallocenes
Daria Lukina	1D coordination polymer dysprosium based dpp-bian
Svetlana Madieva	Photophysical parameters of micelles loaded with the cyclometalated Ir(III) diimine phosphorescent complex.
Arina Maleeva	New zinc complexes based on functionalized o-quinones with N-ligands
Danil Markelov	SABRE hyperpolarization of ^{15}N nuclei at high magnetic fields based on adiabatically modulated radiofrequency magnetic fields
Darina Nasyrova	Unexpected Coordination of the Nitronyl Nitroxide Radical to the Au (I) Atom: A Crystallographic Study
Arina Olbrykh	Complexation of trinuclear silver(I) pyrazolates with pyridine-chalcones

Elena Petrushkina	Copper-catalyzed cross-coupling of a monoterpenyl derivatives with benzyl Grignard reagents
Elena Rogatkina	Influence of the substituent in ferrocenyl acetate on the reaction with 5-(p-aminophenyl)-10,15,20-triphenylporphyrin
Mozhgan Samandarsangari	Phosphorescent O_2-sensors Based on Ir(III) Complexes for Bioimaging Applications
Artem Semenov	Synthesis and Structure Study of Copper(I) Complexes Bearing 1,2,4-Oxadiazolate Ligands With Dibenzohalolium(III) Stabilizing Counterion
Nadezhda Sevostyanova	Ester Synthesis From Secondary Alcohols And CO In The Presence Of Palladium-Phosphine Catalytic Systems
Roman Shilov	Platinum(II) Block Copolymer Based on Polyvinylpyrrolidone
Ekaterina Shremzer	π-Expanded porphyrins - a promising platform for new photosensitizers
Alexander Snadin	Singlet-triplet conversion in molecular hydrogen on a homogeneous catalyst in parahydrogen induced polarization experiments
Nadezhda Stoletova	Rh(III)-catalyzed Coupling of Aryl Hydroxamates with Chiral Ni(II) Complexes: Access to α-Amino Acids with an Isoquinolone Core
Maria Stukalova	Regiodivergent Addition of CF_3-containing Azomethine Ylides to a Chiral Dehydroalanine Ni(II) Complex
Andrey Tyutyunov	Synthesis of fluorinated aluminum alkoxides and magnesium alkoxyaluminates

Darya Varlamova	Ferrocene-modified pyrimidines as anticancer drugs
Anastasiya Visotskaya	Encapsulation of halide anions with biphenylene four-mercury anticrown
Darya Volkova	Synthetic approaches to the M-C bond formation in the σ-alkynyl complexes of iron, nickel and platinum
Gleb Yakovlev	Tetranuclear Cu(I) and Ag(I) Pyrazolate Complexes with bibenzimidazole: Synthesis, Structures and Photoluminescence
Anastasiya Yazikova	Robust Radical-Decorated materials as a Prospective nitrogen monoxide sorbents

FOR NOTES

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