



ADVANCES IN SYNTHESIS AND COMPLEXING

**The Fourth International Scientific Conference  
“Advances in Synthesis and Complexing”**

**PROGRAM**

Moscow, RUDN University

24-28 April 2017



## ADVANCES IN SYNTHESIS AND COMPLEXING

**24 April, MONDAY.**

**Arrival of participants.**

**15.00 – 19.00 Registration**

(Ordgonikidze st. 3, Science Faculty, RUDN University, room 102).

*Attention! The entrance in RUDN University facilities is possible only with a passport!*

**25 April, TUESDAY**

**9.00 - 10.00 Registration** (Ordgonikidze st. 3, room 102).

**10.00 - 13.00 Plenary lectures** (Ordgonikidze st. 3, club)

**13.00 - 14.00 Dinner**

**15.00 - 18.00 The first German-Russian interdisciplinary Student Workshop: “Nanoscale interdisciplinary research: physics, chemistry, biology, mathematics”** (Miklukho-Maklaya st. 6, Main Building)

**19.00 – 21.00 Get-together party**

### **Plenary Lectures**

(Ordgonikidze st. 3, club)

10.00-10.20	Prof. Dr. Leonid G. Voskressensky (Dean of the Science Faculty)	Greetings
10.20-11.00	Prof. Dr. Valentine P. Ananikov (Zelinsky IOC, Russia)	Dynamic phenomena in catalytic transformations: influence on efficiency and selectivity
11.10-11.50	Prof. Dr. Vladimir N. Gevorgyan (University of Illinois at Chicago, USA)	Development of Novel C–H Functionalization Methodologies
12.00-12.40	Prof. Dr. Frédéric Lamaty (Institut des Biomolécules Max Mousseron, France)	Mechanochemistry : a powerful sustainable approach in organic and organometallic synthesis
12.50-14.00	<i>LUNCH</i>	
15.00-18.00	The first German-Russian interdisciplinary Student Workshop: “Nanoscale interdisciplinary research: physics, chemistry, biology, mathematics”	
19.00	Party	



26 April, WEDNESDAY

**SECTION OF PHYSICAL AND COLLOIDAL CHEMISTRY IS  
DEDICATED TO THE MEMORY OF PROF. DR. V.M. GRYAZNOV****10.00 - 11.20 Plenary lectures** (Ordgonikidze st. 3, room 102).**13.00 - 14.00 Lunch****14.00 – 15.40 Section of Physical and Colloidal Chemistry****16.30-17.30 Poster session**

<i>Chair - Yrii Mikhailovich Serov, Dr. Sc., Prof.</i>		
10.00-10.10	Chair - Yrii Mikhailovich Serov (Peoples' Friendship University of Russia)	Greetings
10.10-10.20	Nataliya Robertovna Roshan ( Baikov Institute of Metallurgy and Materials Science, RAS)	On the SCIENTIFIC HERITAGE Of V. M. GRYAZNOV
10.20-10.30	Nicolai Lukich Basov (Topchiev Institute of Petrochemical Synthesis, RAS)	On the SCIENTIFIC HERITAGE Of V. M. GRYAZNOV
10.30-10.50	Konstantin Victorovich Bozhenko (Institute of Problems of Chemical Physics, RAS; Peoples' Friendship University of Russia)	Quantum-chemical modeling of exchange coupling in the magnetic sublattice of bifunctional compounds
10.55-11.05	Aleksandr Aleksandrovich Kochubeev (A.V. Topchiev Institute of Petrochemical Synthesis, RAS)	Synthesis of ethylene carbonate from ethylene glycol and urea in the presence of cobalt oxide nanoparticles
11.10-11.20	Spartak Spiridonovich Khutsishvili (A.E.Favorsky Irkutsk Institute of Chemistry of the Siberian Branch of the Russian Academy of Sciences)	Multifunctional magnetic iron-containing nanocomposites based on natural polysaccharide arabinogalactan
11.15-11.40	<b><i>Coffee-Break</i></b>	
11.50-12.00	Irena Gennad'evna Bratchikova (Peoples' Friendship University of Russia)	
12.05-12.15	Adeliya Rinatovna Sayfutdinova (Moscow Technological University; A.N. Frumkin Institute of Physical chemistry and Electrochemistry, RAS)	The influence of adsorbed surfactants on the wettability of syperhydrophobic coatings by water



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12.20-12.30	Ekaterina Aleksandrovna Kononova (Peoples' Friendship University of Russia)	The effect of acrylic acid on the properties of Ag nanoparticles in thin films
12.35-12.45	Anton V. Rozhnov (Peoples' Friendship University of Russia)	Peculiarities of interaction of hydrogen with two-layer clusters of iron and manganese
12.50-13.00	Tat'yana A. Kryuchkova (Peoples' Friendship University of Russia)	Synthesis, physical and chemical and catalytic properties of manganese-containing layered oxides
13.00-14.00	<b>LUNCH</b>	
14.10-14.20	Aleksander O. Shvetsov (Peoples' Friendship University of Russia)	Li-rich layered oxide cathodes for next-generation Li-ion batteries
14.25-14.35	Kseniya Vladimirovna Kozhikhova (Ural Federal University)	Synthesis of nanosized mucoadhesive pectinic hydrogel for local anesthesia
14.40-14.50	Larisa D. Coleva (Peoples' Friendship University of Russia)	Synthesis and characterization of new complex Co-Zr-phosphates in catalytic transformations of isobutanol
15.00-15.10	Diana Olegovna Kuznetsova (Ural Federal University)	Preparation of novel nanoscaled delivery system based on proliposomes
15.15-15.20	Indira A. Hayrullina (Peoples' Friendship University of Russia)	Photoluminescence properties of thin films of zinc oxide upon interaction with methemoglobin
15.25-15.35	Yelizaveta Olegovna Belyankova (Kazakh-British Technical University Kazakhstan)	Synthesis of (1-chloro-3-(3-methylimidazolidin-1-yl)propan-2-yl diphenylphosphinite chloride) (chloro $\eta^4$ -1,5-cyclooctadiene rhodium(I))
16.30-17.30	<b>Coffee-Break. Poster Session</b>	



## ADVANCES IN SYNTHESIS AND COMPLEXING

**27 April, THURSDAY**

**10.00 - 11.20 Plenary lectures** (Ordgonikidze st. 3, room 102).

**13.00 - 14.00 Lunch**

**14.00-15.00 Section of Physical and Colloidal Chemistry**

**15.00 - 20.00 Cultural Program**

<i>Chair - Tat'yana Fedorovna Sheshko, Dr. Sc., Prof.</i>		
10.00-10.20	Evgeniy Aleksandrovich Miroshnichenko (Semenov Institute of Chemical Physics, RAS)	Thermochemical properties of biphenyls and biphenyl-oxides. Energy characteristics of their radicals and bonds
10.25-10.45	Frank Roessner (Carl von Ossietzky University of Oldenburg, Institute of Chemistry, Industrial Chemistry II)	Activation of ammonia on Fischer-Tropsch-catalysts
10.50-11.00	Georgiy Anatol'evich Yurasik (Photochemistry Research Center, Russian Academy of Sciences)	Ink-jet printed chemosensing layers based on surface-functionalized silica nanoparticles
11.00-11.30	<b><i>Coffee-Break (club)</i></b>	
11.35-11.45	Andreas Thomé (Carl von Ossietzky University of Oldenburg, Institute of Chemistry, Industrial Chemistry II)	Modified Mesoporous Silica as Basic Hybrid Materials
11.50-12.00	Sofya Garicovna Chuklina (Peoples' Friendship University of Russia)	Direct formation of diethyl ether from ethanol conversion on complex ZrO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> oxide catalytic systems
12.05-12.15	Madita Einemann (Carl von Ossietzky University of Oldenburg, Institute of Chemistry, Industrial Chemistry II)	Zeolites as nano-reactores - Alkylation of phenol derivatives with methanol
12.20-12.40	Evgenii M. Kasatkin (Peoples' Friendship University of Russia)	Adsorption of methylene blue by activated carbons depending on timeoperating
12.45-12.55	A.O. Konakov (Belarusian State University)	Composition and microstructure of nanoparticles in SnO <sub>2</sub> sol used in medicine diagnostics and in processec of metal electroplating
13.00-14.00	<b><i>LUNCH</i></b>	
14.00-14.10	Nicolai I. Baranov (Peoples' Friendship University of Russia)	The analysis of chemical bonding in benzene, cyclobutadiene and cyclopentadienyl ions. The test for the presence of conflicting aromaticity



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14.15-14.25	Do Thuy Mai (Peoples' Friendship University of Russia)	Ethanol transformations over $\gamma$ -Al <sub>2</sub> O <sub>3</sub> and TiO <sub>2</sub> -anatase with Cu, Ag, Au
14.30-14.40	Denis A. Zaev (Peoples' Friendship University of Russia)	Photostimulated adsorption of dyes on TiO <sub>2</sub> with Au and Cu
14.45-14.50	Yahya Absalan (Peoples' Friendship University of Russia)	Synthesis TiO <sub>2</sub> and modified TiO <sub>2</sub> by salt metal to prepare CoTiO <sub>3</sub> under thermal decomposition of titanium butoxide (IV)
15.00-20.00	<i>Cultural Program</i>	



## ADVANCES IN SYNTHESIS AND COMPLEXING

**28 April, FRIDAY**

**9.00 - 12.00 Plenary lectures** (Ordgonikidze st. 3, club).

**13.00 - 14.00 Lunch**

**16.00 - 16.40 Poster Session**

**18.00 - 18.30 Conference closure**

(Ordgonikidze st. 3, club)

9.00- 9.40 P40	Andrei Antonchick  (Technical University of Dortmund, Germany)	Advances in Heterocycle Synthesis
9.40- 10.20 P40	Oliver Reiser  (Universität Regensburg, Germany)	Converting hay to gold with modern spinning wheels: Non-edible, renewable resources as starting materials for the synthesis of fine chemicals utilizing light, flow and mag(net)ic catalysts
10.20- 11.00 P40	Thomas J.J. Mueller  (Dusseldorf University)	Sequentially Pd-catalyzed one-pot syntheses of functional heterocycles
<b>11.00- 11.30</b>	<b><i>Coffee-Break</i></b>	
11.30- 12.00 P30	Tatiana V. Timofeeva  (New Mexico Highlands University, USA)	Structural Tuning of Luminescent and Magnetic Properties of Porous Metal Organic Frameworks
12.00- 12.20	Aksenov Alexander Victorovich  (North Caucasus Federal University)	Applications of \"intelligent\" reaction media in synthesis of polynuclear heterocyclic compounds
12.20- 12.40	Petrosyan Vladimir Anushavanovich (N.D. Zelinsky Institute of Organic Chemistry RAS)	Electroinduced «Metal-Free» C-H Functionalization of (Hetero)Aromatic Systems
12.40- 13.00	Brunschweiger Andreas Michael  (Technical University of Dortmund, Germany)	Avenues to DNA-encoded small molecule libraries – of a chemoresistant sequence and nanoreactors
<b>13.00- 14.00</b>	<b><i>LUNCH</i></b>	
14.00- 14.20	<i>Free time</i>	
<b>16.00- 16.45</b>	<b><i>Coffee-Break. Poster Session</i></b>	
<b>18.00- 18.30</b>	<b><i>Reward Ceremony, Conference Closure</i></b>	