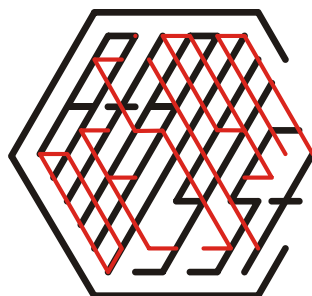


Boreskov Institute of Catalysis SB RAS, Russia

Kazan National Research Technological University, Russia

Russian Foundation for Basic Research, RFBR



SCIENTIFIC PROGRAM

4th International School - Conference on Catalysis
for Young Scientists “CATALYST DESIGN. From Molecular to Industrial Level”

September 5-6, 2015

Kazan, Russia



Kazan-2015

Dear Colleagues!

We are pleased to invite you to participate in the 4th International School-Conference on Catalysis for Young Scientists “**CATALYST DESIGN. From Molecular to Industrial level**” (**ISCC-2015**). This is a satellite event of XIIth European Congress on Catalysis (30th August to 4th September 2015, Kazan, Russia). This event continues the tradition established in Novosibirsk (2002), Altay (2005) and Yekaterinburg region (2009). The School-Conference is directed to young researchers, Ph.D. students and undergraduates involved in different fields of catalysis research. Catalysis is a fast developing multidisciplinary area facing the challenges of novel chemical technologies. The School will provide the students with approaches for acquiring a deep know-how and a strong background on the fundamentals of catalysis. The lectures of leading scientists will provide the basics of preparation, characterization and modeling of new catalysts, catalytic systems and catalytic processes. Particular attention will be paid to the mechanisms and the role of catalysis in fine organic synthesis and environmental protection. Participants will have a unique opportunity to discuss their own research with leading experts in various fields.

You are welcome to School-Conference!

Organizing Committee

PROGRAM SCIENTIFIC COMMITTEE

Chairman- Professor Oleg N. Martyanov, Boreskov Institute of Catalysis SB RAS, Novosibirsk

Co-Chairman- Professor German S. Dyakonov, Kazan National Research Technological University, Kazan

Professor Alexander M. Kochnev, Kazan National Research Technological University, Kazan

Professor Sergey Z. Vatsadze, M.V. Lomonosov Moscow State University, Moscow

Professor Andrey A. Pimerzin, Samara State Technical University, Samara

Professor Vladimir A. Reznikov, Novosibirsk State University, Novosibirsk

Dr. Alexey A. Vedyagin, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Novosibirsk

Dr. Andrey V. Matveev, Federal Agency for Scientific Organizations, Novosibirsk

ORGANIZING COMMITTEE

Professor Ilnur A. Abdullin, Kazan National Research Technological University, Kazan

Dr. Tatiana Yu. Kardash, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Novosibirsk

Dr. Dzhalil F. Khabibulin, Boreskov Institute of Catalysis SB RAS, Novosibirsk

Dr. Roman V. Gulyaev, Boreskov Institute of Catalysis SB RAS, Novosibirsk

Dr. Ekaterina A. Kozlova, The Department of Natural Science Novosibirsk State University, Novosibirsk

Dr. Elena A. Melgunova, Boreskov Institute of Catalysis SB RAS, Novosibirsk

Dr. Aleksey A. Shutilov, Boreskov Institute of Catalysis SB RAS, Novosibirsk

Dr. Lidiya S. Kibis, Boreskov Institute of Catalysis SB RAS, Novosibirsk

Dr. Daniil I. Kolokolov, Boreskov Institute of Catalysis SB RAS, Novosibirsk

SCHOOL-CONFERENCE SECRETARY

Dr. Guzel G. Garifzianova, Kazan National Research Technological University, Kazan

Marina A. Klyusa, Boreskov Institute of Catalysis SB RAS, Novosibirsk

SCIENTIFIC PROGRAM

The Organizing committee has received materials from **100** young scientists from **5** countries. The program of the School-Conference consists of **9** plenary lecturers, **19** oral presentations, **14** short oral presentation and about **50** posters.

The major topics of the school will be:

- ☒ Catalysis for environmental protection, photocatalysis
- ☒ Catalysis in energy production, electrocatalysis
- ☒ Catalysis for fine organic synthesis, natural gas and petroleum chemistry
- ☒ Kinetics and modeling of catalytic reactions and reactors
- ☒ Mechanisms of heterogeneous catalysis, methods of catalyst characterization
- ☒ Preparation of catalysts and adsorbents

PLENARY LECTURERS:

1. Dr. Miguel Costas Salgueiro

University of Girona, Girona, Spain

E-mail: miquel.costas@udg.edu

www.udg.edu/qbis

2. Prof. Emrah Özensoy

Bilkent University, Ankara, Turkey

E-mail: ozensoy@fen.bilkent.edu.tr

<http://www.fen.bilkent.edu.tr/~ozensoy/>

3. Prof. Oksana A. Kholdeeva

Boriskov Institute of Catalysis SB RAS, Novosibirsk, Russia

E-mail: khold@catalysis.ru

http://www.en.catalysis.ru/block/index.php?print_version=yes&ID=19&SECTION_ID=1309

4. Prof. Esfir M. Sulman

Tver State Technical University, Tver, Russia

E-mail: sulman@online.tver.ru

5. Prof. Elena R. Savinova

Université de Strasbourg, France

E-mail: elena.savinova@unistra.fr

<http://icpees.unistra.fr/catalyses-et-procedes-pour-lenergie/ece/personnel/elena-savinova/>

6. Prof. Dmitry Yu. Murzin

Abo Akademi University, Turku, Finland

E-mail: Dmitry.Murzin@abo.fi

<http://users.abo.fi/dmurzin>

7. Professor Artem N. Bezrukov

Kazan National Research Technological University

E-mail: artem_bezrukov@kstu.ru

http://www.kstu.ru/article.jsp?id_e=52273

8. Prof. Andrey V. Simakov

Centro de Nanociencias y Nanotecnologia, UNAM, Ensenada, BC

E-mail: andrey@cryn.unam.mx

www.cryn.unam.mx

9. Prof. Sergey A. Beloshapkin

Materials & Surface Science Institute, University of Limerick, Limerick, Ireland

E-mail: serguei.belochapkin@ul.ie

<http://scieng.ul.ie/staff-profile/sergey-beloshapkin>

SCHOOL-CONFERENCE LANGUAGE

The official language of the School-Conference is **English**.

SCHOOL-CONFERENCE PUBLICATIONS

Abstracts of the plenary lectures and accepted oral and poster presentations will be published in the USB flash drive with an assigned **ISBN** and available at the registration desk. Each participant or registered person will also receive the final scientific program-brochure.

VENUE

The School-Conference will take place in the Conference Hall of Kazan National Research Technological University, Kazan, Russia (Building B, 72 Karl Marx street, Kazan 420015, Republic of Tatarstan, Russia)

SCIENTIFIC PROGRAM

September 5 (Saturday)
Conference hall

9:00 Opening

PLENARY LECTURES
Chairperson: Oleg N. Martyanov

9.30
PL-1 Professor Miguel **Costas Salgueiro**

Cussó O., Canta M., Font D., Prat I. and Costas M.
**BIOLOGICALLY INSPIRED CATALYSTS for SELECTIVE C-H and C=C
OXIDATION REACTIONS**
University of Girona, Girona, Spain

10.00
PL-2 Professor Emrah **Özensoy**

EXHAUST EMISSION CONTROL CATALYSTS
Bilkent University, Ankara, Turkey

10.30
PL-3 Professor Oksana A. **Kholdeeva**

LIQUID PHASE SELECTIVE OXIDATION via HETEROGENEOUS CATALYSIS
Boreskov Institute of catalysis SB RAS, Novosibirsk, Russia

11.00
PL-4 Professor Esfir M. **Sulman**

NANO-CATALYTIC PROCESSES for ENERGY APPLICATIONS
Tver State Technical University, Tver, Russia

11.30 – 11.50 Coffee – break

Chairperson: Renat R. Nazmutdinov

11.50
PL-5 Professor Elena R. **Savinova**

**ELECTROCATALYSIS for ENERGY CONVERSION SYSTEMS: INSIGHTS
from NEAR-AMBIENT PRESSURE XPS**
Université de Strasbourg, Strasbourg, France

ORAL SECTION

Section VI: **Preparation of catalysts and adsorbents**

12:20
OP-1 Anton **Koskin**

Koskin A.P., Larichev Y.V.
**DEVELOPMENT of ACID CARBON MATERIALS: PREPARATION and USE as
ACID CATALYSTS**
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

12:35
OP-2

Elza **Sultanova**

Sultanova E.D., Salnikov V.V., Mukhitova R.K., Zuev Yu.F., Zakharova L.Ya.,
Ziganshina A.Y., Konovalov A.A.

**SYNTHESIS and CATALYTIC ACTIVITY of the POLYMER-STABILIZED
PALLADIUM NANOPARTICLES**

*Arbuzov Institute of Organic and Physical Chemistry, Kazan Scientific Center,
Russian Academy of Sciences*

12:50
OP-3

Ekaterina **Asalieva**

Asalieva E.Yu., Kulchakovskaya E.V., Sineva L.V., Mordkovich V.Z.

**PREPARATION of PELLETIZED COMPOSITE FISCHER–TROPSCH
CATALYST with RANEY COBALT as an ACTIVE COMPONENT**

*Federal state bugetary institution “Technological institute for superhard and novel
carbon materials”, Moscow, Russia*

13.05 – 15.00

Lunch

September 5 (Saturday)
Conference hall

ORAL SECTION

Chairperson: Sergey A. Beloshapkin

Section V: **Mechanisms of heterogeneous catalysis, methods of catalyst characterization**

15:00
OP-5

Daniil **Kolokolov**

Kolokolov D.I., Arzumanov S.S., Jobic H., Stepanov A.G.

**EXPERIMENTAL DETECTION of MOBILITY of HYDROCARBONS in ZEOLITE-
BASED CATALYSTS by MEANS of SOLID STATE ²H NMR**

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

15:15
OP-6

Roman **Gulyaev**

Gulyaev R.V., Kardash T.Yu., Malykhin S.E., Izaak T.I., Ivanova A.S., Boronin A.I.

**DIVALENT DOPED CERIA: A TOOL for DESIGN of HIGH THERMOSTABLE
CATALYSTS of LOW-TEMPERATURE CO OXIDATION**

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

15:30
OP-7

Elena **Bessudnova**

Bessudnova E.V., Shikina N.V., Ismagilov Z.R.

**STUDY and CHARACTERIZATION of NANOSCALE RUTILE TiO₂
SYNTHESIZED by SOL-GEL METHOD**

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

15:45
OP-8

Lukas **Mayr**

Mayr L., Klötzer B., Zemlyanov D., Penner S.
PREPARATION and CHARACTERIZATION of PALLADIUM-ZIRCONIUM and COPPER-ZIRCONIA UHV MODEL CATALYSTS for C₁-SURFACE REACTIONS
University of Innsbruck (Innsbruck), Austria

16:00
OP-9

Simon **Penner**

Penner S., Thalinger R., Opitz A. K., Heggen M., Stroppa D., Schmidmair D., Fleig J., Klötzer B.
WATER-GAS-SHIFT and METHANE REACTIVITY on REDUCIBLE PEROVSKITE-TYPE OXIDES
University of Innsbruck (Innsbruck), Austria

16.15 –16:35

Coffee – break

September 5 (Saturday)
Conference hall

FLASH – PRESENTATIONS OF POSTERS
Chairperson: Roman V. Gulyaev

Section VI: **Preparation of catalysts and adsorbents**

16:35
FP-1

Evgeniya **Ishchenko**

Ishchenko E.V., Kardash T.Y., Andrushkevich T.
MoVTenNb CATALYST in the SELECTIVE OXIDATIVE TRANSFORMATIONS of PROPANE
Borshkov Institute of Catalysis SB RAS, Novosibirsk, Russia

16:40
FP-2

Ivan **Shamanaev**

Shamanaev I.V., Deliy I.V., Gerasimov E.Y., Pakharukova V.B., Kvon R.I., Rogov V.A., Bukhtiyarova G.A.
DEVELOPMENT and OPTIMIZATION of Ni₂P/SiO₂ CATALYSTS for METHYL PALMITATE HYDRODEOXYGENATION
Borshkov Institute of Catalysis SB RAS, Novosibirsk, Russia

Section III: **Catalysis for fine organic synthesis, natural gas and petroleum chemistry**

16:45
FP-3

Irina **Tokareva**

Tokareva I.V., Mishakov I.V., Vedyagin A.A.
SYNTHESIS of CARBON-CARBON COMPOSITES via CATALYTIC PROCESSING of HYDROCARBONS
Borshkov Institute of Catalysis SB RAS, Novosibirsk, Russia

16:50
FP-5

Anton **Salnikov**

Salnikov A., Yashnik S., Kerzhentsev M., Ismagilov Z., Yaming J., Koseoglu O.
INFLUENCE of the NATURE of SULFUR-ORGANIC MOLECULES on ODS CATALYTIC ACTIVITY of MODIFIED CuZnAl-O CATALYST
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

16:55
FP-6

Nikolay **Gromov**

Gromov N.V., Semeikina V. S., Taran O. P., Parkhomchuk E.V., Aymonier C., Parmon V. N.
DEVELOPMENT of SOLID ACID CATALYSTS BASED on CARBON and METAL OXIDES for CONVERSION of CELLULOSE into 5-HYDROXYMETHYLFURFURAL
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

17:00
FP-7

Vasily **Evtushok**

Evtushok V.Yu., Zalomaeva O.V., Skobelev I.Y., Maksimov G.M., Kholdeeva O.A.
SELECTIVE OXIDATION OF PSEUDOCUMENE WITH HYDROGEN PEROXIDE CATALYZED BY DIVANADIUM-SUBSTITUTED γ -KEGGIN POLYOXOMETALATE
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

17.00 – 18.00

POSTER SESSION

PP-1

Julia **Khatsrinova**

Khatsrinova J., Khatsrinov A.

STRUCTURE and PROPERTIES of CATALYSTS CONTAINING Mo
Kazan National Research Technological University, Kazan, Russia

PP-2

Alya **Khusnuriyalova**

THE NEW METHODS of OBTAINING and ACTIVATION ORGANONICKEL CATALYSTS for OLIGOMERIZATION and POLYMERIZATION of ETHYLENE

Kazan State University, Kazan, Russia

PP-3

Arcady **Kuramshin**

Kuramshin A., Nikolaev A.A., Cherkasov R.A., Galkin V.I.

SOLVENT INFLUENCE on DIALKYLPHOSPHITES' INTERACTION with HEXACARBONYLMETALS(0)

Kazan State University, Kazan, Russia

PP-4

Mariya **Pisareva**

ENERGY and RESOURCE-SAVING METHOD of PRODUCING MOLYBDENUM CATALYST for the EPOXIDATION of OLEFINS

Kazan National Research Technological University, Kazan, Russia

PP-5

Tatyana **Sergeeva**

Sergeeva T.Yu., Sultanova E.D., Mukhitova R.K., Nizameev I.R., Kadirov M.K., Ziganshina A.Y., Konovalov A.I.

APPLICATION of SODIUM OCTACARBOXYLATE RESORCINARENES in SYNTHESIS of SILVER NANOPARTICLES

Arbuzov Institute of Organic & Physical Chemistry, Kazan, Russia

PP-6 Evgeny Faingold
Faingold E.E., Babkina O.N., Saratovskikh S.L., Panin A.N., Bravaya N.M.
SYNTHESIS and APPLICATION of ARYLOXYISOBUTYLALUMINUM COMPOUNDS as EFFECTIVE ACTIVATORS of METALLOCENE COMPLEXES in OLEFIN POLYMERIZATION
Institute of Problems of Chemical Physics RAS, Chernogolovka, Russia

PP-7 Anna Gavrilova
Gavrilova A.A., Shikina N., Yashnik S., Ushakov B., Ischenko A., Ismagilov Z.R.
THE STRUCTURE of Mn-La MONOLITHIC CATALYSTS SYNTHESIZED by the "SOLUTION COMBUSTION" METHOD
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

PP-8 Nurgul Shadin
Shadin N.A., Zakarina N.A., Volkova L.D.
RESEARCH and DESIGN of HZSM - 5 ZEOLITECONTAINING CATALYST on AL - PILLARED MONTMORILLONITE for VACUUM GAS OIL CRACKING
D.V. Sokolskiy Institute of Organic Catalysis and Electrochemistry, Almaty, Kazakhstan

PP-9 Yuliya Razuvayeva
Razuvayeva Y.S., Usmanova Y.K.
EFFECT of LIGAND of CATALYST on the DECAY of CUMENE HYDROPEROXIDE
Kazan National Research Technological University, Kazan, Russia

PP-10 Aliya Sadykova
Sadykova A.I., Yakevich E.I., Mirgorodskaya A.B., Zakharova L.Ya.
CATALYTIC PROPERTIES of CATIONIC SURFACTANTS
Kazan National Research Technological University, Kazan, Russia

PP-11 Yulduz Usmanova
Usmanova Y., Razuvayeva Y.
DECOMPOSITION of CUMENE HYDROPEROXIDE UNDER THE ACTION of MAGNESIUM and CALCIUM 2-ETHYLHEXANOATES
Kazan National Research Technological University, Kazan, Russia

PP-12 Guzel Ziatdinova
ETHYLBENZENE HYDROPEROXIDE DECOMPOSITION in the PRESENCE of VANADYL ACETYLACETONATE
Kazan National Research Technological University, Kazan, Russia

PP-13 Anastasiya Shesterkina
Shesterkina A.A., Kirichenko O.A., Kustov L.M.
EFFECT of PREPARATION CONDITIONS on HYDROGENATION of PHENYLACETYLENE over the Pd-Fe/SiO₂ CATALYSTS
N.D. Zelinsky Institute of Organic Chemistry RAS Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

18:30

Welcome Reception

September 6 (Sunday)
Conference hall

PLENARY LECTURES
Chairperson: Oxana A. Kholdeeva

9.00
PL-6

Professor Dmitry Yu. **Murzin**

CATALYSIS for BIOREFINERY
Abo Akademi University, Turku, Finland

9.30
PL-7

Professor Artem N. **Bezrukov**

Bezrukov A.N., Shamov A.G., Khapkovskiy G.M.
RESEARCH in CATALYSIS at KAZAN NATIONAL RESEARCH TECHNOLOGICAL UNIVERSITY
Kazan National Research Technological University, Kazan, Russia

10.00
PL-8

Professor Andrey V. **Simakov**

NANOREACTORS in CATALYSIS
Centro de Nanociencias y Nanotecnología, UNAM, Ensenada, BC

10.30
PL-9

Professor Sergey A. **Beloshapkin**

TIME-of-FLIGHT SECONDARY ION MASS SPECTROMETRY: TECHNIQUES AND APPLICATIONS for the CHARACTERIZATION of CATALYSTS
Materials & Surface Science Institute, University of Limerick, Limerick, Ireland

11.00 – 11:20

Coffee – break

September 6 (Sunday)
Conference hall

ORAL SECTION
Chairperson: Andrey V. Simakov

Section IV: **Kinetics and modeling of catalytic reactions and reactors**

11:20
OP-10

Dmitry **Krasnikov**

Krasnikov D.V.^{1,2}, Kuznetsov V.L.², Shmakov A.N.², Selyutin A.G.¹, Ischenko A.V.¹
A MODEL for the ACTIVATION of METALLIC CATALYSTS for MULTI-WALLED CARBON NANOTUBE GROWTH
¹*Novosibirsk State University, Novosibirsk, Russia*
²*Boriskov Institute of catalysis SB RAS, Novosibirsk, Russia*

11:35
OP-11

Shokirbek **Shermukhamedov**

Shermukhamedov S.A., Glukhov D.V., Nazmutdinov R.R.,
MONTE CARLO SIMULATIONS OF NiCu NANOPARTICLES
Kazan National Research Technological University, Kazan, Russia

11:50
OP-12 Max **Nazarov**

Nazarov M., Urtyakov P.V., Lamberov A.A.
**MATHEMATICAL ANALYSIS OPTIONS to UPGRADE DEHYDROGENATION
ISOAMYLENES to ISOPRENE PLANTS and CONDUCT PILOT TESTS**
Kazan State University, Kazan, Russia

Section III: **Catalysis for fine organic synthesis, natural gas and petroleum chemistry**

12:05
OP-13 Hamidreza **Arandiyani**

**COLLOIDAL CRYSTAL TEMPLATING of THREE-Dimensionally ORDERED
MACROPOROUS PEROVSKITE: APPROACHES to CATALYST with
HIERARCHICAL POROSITY**
*Particles and Catalysis Research Group, School of Chemical Engineering, The
University of New South Wales, Sydney, Australia*

12:20
OP-14 Ekaterina **Kulchakovskaya**

Kulchakovskaya E., Asalieva E., Sineva L., Mordkovich V.
**IMPACT of ALUMINUM FLAKES SIZE on PERFORMANCE of Co-BASED
CATALYST in FISCHER-TROPSCH SYNTHESIS**
*Federal state budgetary institution "Technological institute for superhard and novel
carbon materials", Moscow, Russia*

12:35
OP-15 Samira **Suleymanova**

Khanmetov A., Khamiyev M., Aliyeva N., Suleymanova S.A., Ismailov E.
**ZIRCONIUM PHENOLATE BASED CATALYSTS for ETHYLENE
OLIGOMERIZATION: SYNTHESIS, COMPOSITION, STRUCTURE and
ACTIVITY**
Institute of Petrochemical Processes of ANAS, Baku, Azerbaijan

12:50
OP-16 Raffael **Rameshan**

Rameshan R., Mayr L., Penner S., Franz D., Vonk V., Stierle A., Klötzer B., Knop-
Gericke A., Schlögl R.
**CARBIDE and GRAPHENE GROWTH, SUPPRESSION and DISSOLUTION in
Ni MODEL SYSTEMS STUDIED by in-situ XPS AND SXRD**
University of Innsbruck (Innsbruck), Austria (Innsbruck), Austria

13.05-14.30

Lunch

September 6 (Sunday)
Conference hall

ORAL SECTION
Chairperson: Elena R. Savinova

Section II: Catalysis in energy production, electrocatalysis

14:30
OP-17 **Dmitriy Potemkin**

Potemkin D.I.^{1,2}, Konishcheva M.¹, Snytnikov P.¹, Sobyenin V.¹

SELECTIVE CO METHANATION OVER Ni-, Co- AND Fe/CeO₂ CATALYSTS

¹*Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia*

²*Novosibirsk State University, Novosibirsk, Russia*

14:45
OP-18 **Ramona Thalinger**

Thalinger R., Heggen M., Schmidmair D., Klötzer B., Penner S.

METALS (Ni, Rh, CO) on PEROVSKITES (LSF, STF) for SOFC USAGE

University of Innsbruck (Innsbruck), Austria

15:00
OP-19 **Marina Arapova**

Arapova M.V., Pavlova S.N., Parkhomenko K.V., Glasneva T.S., Larina T.V., Rogov V.A., Krieger T.A., Sadykov V.A., Roger A.-C.

HYDROGEN PRODUCTION via STEAM REFORMING OF BIO-OIL'S LIGHT COMPONENTS – ETHANOL and GLYCEROL - OVER SUPPORTED NIKELATES

Boreskov Institute of catalysis SB RAS, Novosibirsk, Russia

Section I: Catalysis for environmental protection, photocatalysis

15:15
OP-20 **Artem Gushchin**

Recatala D., Llusar R., Gushchin A.L.

MOLYBDENUM CLUSTER SULPHIDES AS CATALYSTS FOR HYDROGEN PRODUCTION FROM WATER

Nikolaev Institute of Inorganic Chemistry of SB RAS, Novosibirsk, Russia

15:30 – 16:00

Coffee – break

September 6 (Sunday)
Conference hall

FLASH – PRESENTATIONS OF POSTERS
Chairperson: Tatyana Yu. Kardash

Section V: **Mechanisms of heterogeneous catalysis, methods of catalyst characterization**

16:00
FP-8 Dmitry **Svintsitskiy**

Svintsitskiy D.A., Kardash T.Yu., Slavinskaya E.M., Izaak T.I., Stonkus O.A.,
Stadnichenko A.I., Boronin A.I.

EFFECT of COPPER OXIDE SINTERING on CATALYTIC CO OXIDATION
Boreskov Institute of catalysis SB RAS, Novosibirsk, Russia

16:05
FP-9 Alexandr **Khudozhitkov**

Khudozhitkov A.E., Kolokolov D.I., Arzumanov S.S., Toktarev A.V., Stepanov
A.G.,

**STUDYING of the MOBILITY of METHANE in MFI-TYPE ZEOLITES: H-ZSM-5,
Ag/H-ZSM-5 and SILICALITE-1 by MEANS of SOLID STATE 2H NMR**
Novosibirsk State University, Novosibirsk, Russia

Section I: **Catalysis for environmental protection, photocatalysis**

16:10
FP-11 Artemyi **Ayusheev**

Taran O.P., Yashnik S.A., Ayusheev A.B., Prihod'ko R.V., Ismagilov Z.R.,
Goncharuk V.V., Parmon V.N.

**Cu-SUBSTITUTED ZSM-5 ZEOLITE AS CATALYSTS FOR WET PEROXIDE
OXIDATION OF RHODAMIN 6G**
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

16:15
FP-12 Roman **Shutilov**

Shutilov R.A., Zenkovets G.A., Gavrilov V.Y.

**Cu/ZSM-5 PREPARATION with CuOx SPECIES of DIFFERENT STRUCTURE
and THERE CATALYTIC PROPERTIES in SCR NO with PROPANE**
Boreskov Institute of catalysis SB RAS, Novosibirsk, Russia

16:20
FP-13 Anna **Kurenkova**

Kurenkova A.Y., Semeykina V.S., Kozlova E.A.

**PHOTOCATALYTIC HYDROGEN PRODUCTION on Cd_{1-x}Zn_xS and
Cd_{0.4}Zn_{0.6}S/TiO₂ CATALYSTS under VISIBLE LIGHT**
Novosibirsk State University, Novosibirsk, Russia

16:25
FP-14 Ngo **Quyen**

Quyen N., Sibagatullin A.A., Sitmuratov T.S., Grigoriev E.I., Petukhov A.A.

**ENHANCEMENT of the OZONATION PROCESS of WASTEWATER by USING
the ADDITIVES**
Kazan National Research Technological University, Kazan, Russia

16:30 Vladimir Rogozhnikov
FP-15

Rogozhnikov V.N., Porsin A.V., Kulikov A.V., Zaikovskii V.I.
**DEEP OXIDATION of PROPANE-BUNTANE MIXTURE on Pt-
WO₃/Al₂O₃/METAL GAUZE CATALYST**
Boreshkov Institute of Catalysis SB RAS, Novosibirsk, Russia

Section IV: **Kinetics and modeling of catalytic reactions and reactors**

16:35 Gulnaz Arslanova
FP-16

Arslanova G.G., Saygitbatalova S.S., Cherezova E.N.
**GETTING EFFECTIVE METHYLENEBIS PHENOLIC STABILIZERS USING
CATION EXCHANGE RESINS**
Kazan National Research Technological University, Kazan, Russia

16:40 Valery Ustyugov
FP-17

Ustyugov V.V., Finkelstein E.A., Lashina E.A., Chumakova N.A., Gornov A.Y.,
Kaichev V.V., Bukhtiyarov V.V.
**INFLUENCE OF OXYGEN BULK DIFFUSION ON OSCILLATORY REGIMES IN
METHANE OXIDATION OVER NICKEL: MATHEMATICAL MODELLING**
Boreshkov Institute of Catalysis SB RAS, Novosibirsk, Russia

16.45 – 17.30

POSTER SESSION

PP-14 Tatyana Kardash

Kardash T.Yu., Neder R.B., Gulyaev R.V., Malikhin S.E., Boronin A.I.
Pd LOCALIZATION in Ce_{1-x}Pd_xO_{2-δ} SOLID SOLUTIONS by ANOMALOUS X-RAY PDF
¹*Boreshkov Institute of Catalysis SB RAS, Novosibirsk, Russia*
²*Novosibirsk State University, Novosibirsk, Russia*

PP-15 Guzel Galiullina

**CONFORMATION ANALYSIS of the SILVER(1)-P-TOLUENESULFONATE MOLECULE BY
USING QUANTUM CHEMICAL METHODS**
Kazan National Research Technological University, Kazan, Russia

PP-16 Ilgiza Shaimukhametova

Shaimukhametova I.P., Garifzianova G.G.
**THEORETICAL STUDY of the PLATINUM (0)-1,3-DIVINYL-1,1,3,3-
TETRAMETHYLDISILOXANE COMPLEX STRUCTURE**
Kazan National Research Technological University, Kazan, Russia

PP-17 Elina Vasiljeva

Vasiljeva E., Garifzianova G.G.
**THEORETICAL STUDY of the STRUCTURE of DICHLOROBIS(4-METHYLPYRIMIDINE)-
BIS(TRIPHENYLPHOSPHINE)RUTHENIUM(II)**
Kazan National Research Technological University, Kazan, Russia

- PP-18** Marina Yakunina
Yakunina M., Abroskina M.
DESIGN CONFORMATION of the ((2-METHOXPENTAN-3-YL)-OXY)DIOXOOSMIUM with QUANTUM CHEMICAL METHODS
Kazan National Research Technological University, Kazan, Russia
- PP-19** Lidiya Kibis
Kibis L.S., Stadnichenko A.I., Kosheev S.V., Zaykovskii V.I., Boronin A.I.
The XPS STUDY of HIGHLY OXIDIZED RHODIUM NANOPARTICLES: CHARGING STATES, THERMAL STABILITY and REACTIVITY
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-20** Faik Ayupov
MODELING of the STRUCTURE (2,6-BIS((DICHLOROPHOSPHINO)METHYL)-PHENYL)(2,2,2-TRIFLUOROACETOXY)PALLADIUM
Kazan National Research Technological University, Kazan, Russia
- PP-21** Sergey Kobzhev
AB INITIO MODELING of COMPLEX RUTHENIUM (II)
Kazan National Research Technological University, Kazan, Russia
- PP-22** Dmitry Troshin
Troshin D.P., Shishlov O. F., Valova M.S., Markov A.A., Menshikov S.Yu.
ANALYSIS of the GAS PHASE DURING OXIDATION METHANOLE at PRESENCE of the CATALYST on BASE of $Fe_2(MoO_4)_3$
JSC "Uralchimplast", Nigniy Tagil, Russia
- PP-23** Valentina Starshinova
Starshinova V.L., Shinkarev A.A., Gnevashev S.G., Abdullin I.S.
INFLUENCE of PLASMA-CHEMICAL TREATMENT on the PILLARED MATERIALS CATALITIC ACTIVITY
Kazan National Research Technological University, Kazan, Russia
- PP-24** Igor Zharkov
Zharkov I.V., Bravaya N.M., Faingold E.E.
 1H NMR STUDY of COMPLEXATION REACTION of THF with SEVERAL ORGANOALUMINIUM COMPOUNDS OPERATING as ACTIVATORS of IVB METALLOCENE COMPLEXES
Institute of Problems of Chemical Physics RAS, Chernogolovka, Russia
- PP-25** Julia Gulyaeva
Gulyaeva Yu.A., Simonov M.N., Demidova Y., Simakova I.
KINETIC STUDY of the ONE-POT PROCESS of VALERIC ACID into N-NONANE
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-26** Uliana Efanova
Efanova U., Vernikovskaya N.V., Pavlova T.L., Noskov A.S.
MATHEMATICAL MODELING of SOOT TRAPPING BOTH INSIDE and ABOVE POROUS MATERIALS of CATALYTIC FILTERS
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

PP-27* Albert **Galiullin**

Galiullin A.N., Bravaya N.M., Faingol'd E.E., Panin A.N., Saratovskikh S.L., Vasiliev S.G., Dremova N.N.

NEW NANOCOMPOSITE MATERIALS BASED on ETHYLENE - PROPYLENE COPOLYMER and MODIFIED NAFENTM

Lomonosov Moscow State University, Moscow, Russia

PP-28* Andrey **Kirsankin**

HYDROGEN and OXYGEN INTERACTION with SINGLE SUPPORTED GOLD NANOPARTICLES

Semenov Institute of Chemical Physics RAS, Moscow, Russia

PP-29* Elena **Povarova**

Povarova E.I., Mikhaleiko I.I., Pylinina A.I.

PLASMA CHEMICAL TREATMENT as METHOD of MODIFICATION of the CATALYTIC PROPERTIES of CONDUCTORS TYPE of NASICON and BIMEVOX

Peoples' Friendship University of Russia, Moscow, Russia

PP-30* Alexandra **Mukharinova**

Mukharinova A.I., Zubkevich S.V., Gagieva S. Ch., Tuskaev V.A., Bulychev B.M.

TITANIUM (+4) POLYMETALLIC COMPOUNDS with OO-TYPE LIGANDS as CATALYSTS for ETHYLENE POLYMERIZATION

Lomonosov Moscow State University, Moscow, Russia

PP-31* Alper **Sevinç**

Sevinç A., Karakaş G., Atamer İ.B.

CATALYST for COMPLETE OXIDATION of NITROGEN CONTAINING SAMPLES

Middle East Technical University Technical University, Ankara, Turkey

PP-32* Markovskaya D.V., Kozlova E.A., Parmon V.N.

THE SYNTHESIS OF CATALYSTS BASED ON Ni- AND Cu-DOPED Cd_{0.3}Zn_{0.7}S for PHOTOCATALYTIC HYDROGEN PRODUCTION UNDER VISIBLE LIGHT

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

PP-33* Ottenbacher R.V., Bryliakov K.P., Talsi E.P.

ASYMMETRIC EPOXIDATION OF OLEFINS WITH H₂O₂ CATALYZED BY NON-HAEM AMINOPYRIDINE MANGANESE COMPLEXES: INFLUENCE OF STERIC AND ELECTRONIC PROPERTIES OF LIGANDS ON ENANTIOSELECTIVITY

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

PP-34* Bauman Y.I., Mishakov I.V., Shubin Y.V., Rudnev A.V., Vedyagin A.A., Buyanov R.A.

SELF-ORGANIZING CATALYSIS for DECOMPOSITION of INDUSTRIAL ORGANOCHLORINE WASTES

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

PP-35* Antonov A.A., Semikolenova N.V., Zakharov V.A., Talsi E.P., Bryliakov K.P.

2-IMINOPYRIDYL NICKEL(II) COMPLEXES BEARING ELECTRON-WITHDRAWING GROUPS in the LIGAND CORE: ETHYLENE OLIGOMERIZATION and POLYMERIZATION BEHAVIOR

Boreskov Institute of catalysis SB RAS, Novosibirsk, Russia

- PP-36*** Zima A., Lyakin O.Yu., Bryliakov K.P., Talsi E.P.
EPR SPECTROSCOPIC STUDY of the ACTIVE SPECIES of CATALYTIC ALKENE EPOXIDATION MEDIATED by BIOMIMETIC FERRIC COMPLEXES
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-37*** Banzaraktsaeva S.P., Ovchinnikova E.V., Vernikovskaya N.V., Chumachenko V.A.
SIMULATION of ETHANOL to ETHYLENE DEHYDRATION on ALUMINA CATALYST in MULTITUBULAR REACTOR
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-38*** Brayko A.S., Kirillov V.A., Amosov Y.I.
CATALYSTS BASED on FOAM MATERIALS for STEAM REFORMING of NATURAL GAS to SYNTHESIS GAS
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-39*** Sychenko D., Volodin A., Larichkin V.
DEVELOPMENT of TECHNOLOGY for PVC RECYCLING by CATALYTIC THERMOLYSIS to OBTAIN STRUCTURED CARBON and IRON CHLORIDES
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-40*** Pogodkina S., Gribovskiy A., Ovchinnikova E., Vernikovskaya N., Chumachenko V., Makarshin L.
MICROCHANNEL REACTOR for METHANOL to FORMALDEHYDE OXIDATION: EXPERIMENTAL STUDIES and SIMULATION
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-41*** Koshevoy E.I., Mikenas T.B., Zakharov V.A.
STUDY OF TITANIUM COMPOUNDS AND THEIR TRANSFORMATION INTO THE ACTIVE SITES OF SUPERACTIVE 'LOW-PERCENTAGE' TITANIUM-MAGNESIUM CATALYSTS FOR ETHYLENE POLYMERIZATION
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-42*** Babenko I.A., Vilms A.I.
THE BEHAVIOR OF A CATALYST SYSTEM DEPENDING ON THE NATURES OF THE STARTING CHROMIUM(III) COMPLEX COMPOUND
Irkutsk State University (Irkutsk), Russia
- PP-43*** Abbasov V., Ismailov E., Aliyeva L., Afandiyeva L., Nuriyev L., Suleymanova S., Seidahmadova F.
LIQUID-PHASE AEROBIC OXIDATION of PETROLEUM HYDROCARBONS in the PRESENCE of PENTANUCLEAR CR-COMPLEXES
Institute of Petrochemical Processes, Azerbaijan National Academy of Sciences (Baku), Azerbaijan
- PP-44*** Andreev A.S., Kazakova M.A., Lapina O.B., Kuznetsov V.L.
FERROMAGNETIC ⁵⁹Co NMR STUDY of Co NANOPARTICLES SUPPORTED on MULTI-WALL CARBON NANOTUBES for CATALYTIC APPLICATIONS
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-45*** Barsukov D.V., Subbotina I.R.
ENHANCED PHOTOCATALYTIC OXIDATION of CO on TITANIA DEPOSITED with Ag NANOPARTICLES
Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

- PP-46*** Boldushevsky R. E., Grudanova A.I., Kozlov A.M., Stepanova T.A.
ANALYSIS of COKE DEPOSITS on DIESEL DEWAXING LABORATORY CATALYSTS SAMPLES
Gubkin Russian State University of oil and gas (Moscow), Russia
- PP-47*** Irgashev Yo.T., Ziyadullaev O.E., Turabdjanov S.M., Nurmanov S.E.
HOMOGENOUS CATALYTIC VINYLATION of AROMATIC ACETYLENE ALCOHOLS in the HIGHER SYSTEM
Tashkent chemical technological Institute (Tashkent), Uzbekistan
- PP-48*** Kadirov Kh.I., Turabdjanov S.M., Ziyadullaev O.E.
RECEIVING of ZINCATE (1-HYDROXY-1-PHOSPHONOETHYL) PHOSPHONIC ACID and SCALE INHIBITOR COMPOSITION
Tashkent chemical technological Institute (Tashkent), Uzbekistan
- PP-49*** Kharitonov V.A., Grishin M.V., Shub B.R.
INFLUENCE of CHARGING due SUBSTRATE on the CATALYTIC PROPERTIES of ORGANOBORON NANOPARTICLES in the AMMONIA DECOMPOSITION REACTION
Semenov Institute of Chemical Physics RAS (Moscow), Russia
- PP-50*** Kochurova N.M., Salanov A.N.
SCANNING ELECTRON MICROSCOPY OBSERVATION of PLATINUM SURFACE TRANSFORMATION in OXYGEN ATMOSPHERE
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-51*** Koklyuhin A.S., Salnikov V.A., Nikulshin P.A.
FEATURES OF THE CO-HYDROTREATING OF DIESEL CUTS AND VEGETABLE OILS OVER $\text{Co}(\text{Ni})_6\text{-PMo}_{12}\text{S}/\text{Al}_2\text{O}_3$ CATALYSTS
Samara State Technical University (Samara), Russia
- PP-52*** Moiseenko A.P., Netskina O.V, Komova O.V, Simagina V.I.
EFFECT of CARBON PROPERTIES on ADSORPTION-CATALYTIC PURIFICATION of WATER from 1,2-DICHLOROBENZENE
Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia
- PP-53*** Pinchuk A.V., Rozdyalovskaya T.A., Astafyeva S.A.
AN INVESTIGATION of $\text{CuO}/\gamma\text{-Al}_2\text{O}_3$ CATALYST for CHLOROBENZENE TOTAL OXIDATION
Institute of technical chemistry of ural branch of ras (Perm), Russia
- PP-54*** Prikhodko O.V., Belov V.V.
AMINATION of ETHANOL by AMMONIA at NEW Cu(Zn)-CONTAINING CATALYSTS
Ukrainian State University of Chemical Technology (Dnipropetrovsk), Ukraine
- PP-55*** Sheldaisov-Meshcheryakov A.A., Nikulshin P.A
INFLUENCE of MIXED HETEROPOLYACIDS KEGGIN STRUCTURE $\text{H}_4[\text{SiW}_{12}\text{Mo}_{12-n}\text{O}_{40}]$ on THEIR ACTIVITY in the OXIDATIVE DESULFURIZATION of DIBENZOTHIOPHENE
Samara State Technical University (Samara), Russia

PP-56* Tarabrina D.A.¹, Vasilyeva M.S.¹, Kolycheva V.B.¹, Rudnev V.S.², Nedorozov P.M.

PLASMA ELECTROLYTIC FORMATION of Zn-CONTAINING OXIDE COATINGS on TITANIUM and the STUDY of THEIR STRUCTURE and PHOTOCATALYTIC ACTIVITY
Far Eastern Federal University (Vladivostok), Russia

PP-57* Zimina I.A., Tortseva T.V., Popova N.R.

CATALYTIC OXIDATION of FERULIC ACID by PEROXIDE COMPOUNDS with HPA-5-Mn

Northern (Arctic) Federal University (Arkhangelsk), Russia

PP-58* Ziyadullaev O.E., Turabdjanov S.M., Ikramov A.I., Abdurakhmanova S.S.

HOMOGENEOUS CATALYTIC VINYLATION of AROMATIC ACETYLENE ALCOHOLS
Tashkent chemical technological Institute (Tashkent), Uzbekistan

18.00

Closing

(Conference hall)

20.00

Excursion