



Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Institute of Catalysis and Petroleochemy, CSIC, Madrid, Spain

International conference

Nanostructured catalysts and catalytic processes for the innovative energetics and sustainable development

Devoted to the Year of Spain in Russia and of Russia in Spain

June 5-8, 2011

SCIENTIFIC PROGRAM

Novosibirsk, Russia – 2011

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Vladislav Sadykov, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

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Financial support

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SCIENTIFIC PROGRAM

of the International Conference

NANOSTRUCTURED CATALYSTS AND CATALYTIC PROCESSES FOR THE INNOVATIVE ENERGETICS AND SUSTAINABLE DEVELOPMENT

2011 – Year of Russia in Spain and Year of Spain in Russia

June 6, Monday

9.15 Opening

Chairperson – Professor Oleg Martyanov, Boreskov Institute of Catalysis SB RAS, Russia

9.30

KL-1

Joaquín Pérez-Pariente

R & D ACTIVITIES OF THE INSTITUTE OF CATALYSIS AND PETROLEUM CHEMISTRY (ICP) IN THE FRAME OF THE SPANISH NATIONAL RESEARCH COUNCIL (CSIC)

Institute of Catalysis and Petroleochemy, ICP-CSIC, Madrid, Spain

10.00

KL-2

Vladimir A. Likhobolov

ACTIVITY OF THE INSTITUTE OF HYDROCARBONS PROCESSING SB RAS IN THE FIELD OF NANOSTRUCTURED CATALYSTS

Institute of Hydrocarbons Processing SB RAS, Omsk, Russia

10.30

KL-3

Valentin N. Parmon

CATALYSIS IN RENEWABLE AND NON-TRADITIONAL ENERGETICS

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

11.00–11.30 C o f f e e b r e a k

Chairperson – Professor Vladimir A. Likhobolov, Institute of Hydrocarbons Processing SB RAS, Omsk, Russia

11.30

KL-4

Alfonso Caballero^{*}, V. M. Gonzalez-de la Cruz^{*}, J. P. Holgado^{*}, T. Herranz^{}, M. Salmeron^{**}**

STRONG METAL-SUPPORT INTERACTION (SMSI) OBSERVED BY AMBIENT PRESSURE PHOTOEMISSION SPECTROSCOPY (APPES) IN A Ni/CeO₂ SYSTEM

**Institute of Materials Science of Seville, University of Seville/CSIC, Seville, Spain*

***Molecular Foundry. Lawrence Berkeley National Laboratory*

12.00

KL-5

Vicente Cortés-Corberán, P. Navarro-López

USE OF CO₂ FOR SELECTIVE OXIDATION IN PETROCHEMISTRY

Institute of Catalysis and Petroleochemy, ICP-CSIC, Madrid, Spain

12.30

KL-6

Zinfer R. Ismagilov^{*,}, S. I. Zherebtsov^{*}**

ALKYLATION OF BROWN COALS AND PEAT BY ALCOHOLS

**Institute of Coal Chemistry and Material Science SB RAS, Kemerovo, Russia*

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

13.00

KL-7

Ekaterina V. Parkhomchuk^{*,}, K.A. Sashkina^{**}, N.A. Rudina^{*}, S.V. Bogdanov^{*}, V.N. Parmon^{*,**}**

SYNTHESIS AND PERFORMANCES OF 3-D ORDERED MACROPOROUS MATERIALS

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

** *Novosibirsk State University, Novosibirsk, Russia*

13.30 – 14.30 Lunch

**Chairperson – Professor Valerii I. Bukhtiyarov, Boreskov Institute of Catalysis SB RAS,
Novosibirsk, Russia**

14.30

KL-8

Boris N. Kuznetsov, V.E. Tarabanko, S.A. Kuznetsova, V.G. Danilov, O.V. Yatsenkova

NEW INTEGRATED CATALYTIC PROCESSES OF WOOD BIOMASS TRANSFORMATION TO PLATFORM
CHEMICALS, BIOETHANOL AND LIQUID HYDROCARBONS

Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia

15.00

KL-9

Vadim A. Yakovlev, M. Bykova, Svetlana A. Selischeva, Victoria O. Dundich, Valentin N. Parmon

DESIGN OF CATALYTIC PROCESSES FOR BIOFUELS PRODUCTION

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

15.30

KL-10

Jose Manuel Guisan

IMMOBILIZATION-STABILIZATION OF INDUSTRIAL ENZYMES

Institute of Catalysis and Petroleochemy, ICP-CSIC, Madrid, Spain

16.00

KL-11

Kseniya N. Sorokina

MICROALGAE BIOMASS AS A SOURCE OF BIOFUELS AND VALUABLE CHEMICALS

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

16.30-17.00 C o f f e e b r e a k

**Chairperson – Professor Jose Carlos Conesa Cegarra, Institute of Catalysis and Petroleochemy,
ICP-CSIC, Madrid, Spain**

17.00

KL-12

Gerardo Colón^{*}, A. Kubacka^{}, M. Fernández-García^{**}**

NEW APPROACHES IN VISIBLE PHOTOCATALYSIS FOR ENVIRONMENTAL APPLICATIONS

**Institute of Materials Science of Seville, University of Seville/CSIC, Seville, Spain*

***Institute of Catalysis and Petroleochemy, ICP-CSIC, Madrid, Spain*

17.30

KL-13

Alexander V. Vorontsov, D. Tsydenov, M. Nasalevich, A. Besov, E. Kozlova,

Denis Kozlov, Valentin Parmon

DEVELOPMENT OF PHOTOCATALYTIC PROCESSES FOR OXIDATION AND HYDROGEN PRODUCTION

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

June 7, Tuesday

**Chairperson – Professor Boris N. Kuznetsov, Institute of Chemistry and Chemical Technology
SB RAS, Krasnoyarsk, Russia**

9.00

KL-14

Valerii I. Bukhtiyarov, Boris L. Moroz

PREPARATION OF NANOSTRUCTURED GOLD-BASED CATALYSTS FOR ENVIRONMENTAL
PROTECTION AND CHEMICALS PRODUCTION FROM THE RENEWABLE SOURCES

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

9.30

KL-15

Maria Jesus Lazaro, Celorio V., Calvillo L., Moliner R.

ELECTROCATALYSTS FOR PEM FUEL CELLS BASED ON NANOSTRUCTURED CARBON SUPPORTS

Institute of Carbochemistry (CSIC), Zaragoza, Spain

10.00

KL-16

Jose Carlos Conesa Cegarra, Martínez-Arias A., López-Cámara A., Gamarra D., Olea D., Monte M.

COPPER-CERIA CATALYSTS FOR PROX AND WGS PROCESSES IN H₂ PRODUCTION

Institute of Catalysis and Petroleochemy, ICP-CSIC, Madrid, Spain

10.30

KL-17

**Vladislav A. Sadykov, N.V. Mezentseva, G. M. Alikina, N.N. Sazonova, A. I. Lukashevich, V.S. Muzykantov,
A. S. Bobin, T. A. Krieger, V. A. Rogov, E. M. Sadovskaya.**

MODIFIED CERIA-BASED CATALYSTS OF RED-OX REACTIONS: SYNTHESIS AND PERFORMANCE

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Novosibirsk State University, Novosibirsk, Russia

11.00-11.30 C o f f e e b r e a k

**Chairperson – Professor Jose Manuel Guisan, Institute of Catalysis and Petroleochemy,
ICP-CSIC, Madrid, Spain**

11.30

KL-18

Oxana P. Taran^{*}, Valentin N. Parmon^{*,}**

NANOCATALYSTS FOR OXIDATIVE WASTEWATER TREATMENT

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

***Novosibirsk State University, Novosibirsk, Russia*

12.00

KL-19

Antonio Rodriguez Delgado, Juan Cámpora, Pilar Palma, María Ángeles Cartés

POLYOLEFINS CATALYST DESIGN BASED ON ANCHORING EARLY-LATE BINUCLEAR SINGLE-SITE SYSTEMS

Institute for Chemical Research, University of Seville/CSIC, Seville, Spain

12.30

KL-20

Enrique Sastre, Álvaro-Muñoz T., Pérez-Pariente J., Márquez-Álvarez C.

IMPROVED SYNTHESIS OF SAPO-34 SILICOALUMINOPHOSPHATES FOR THE METHANOL TO OLEFINS (MTO) PROCESS

Institute of Catalysis and Petroleochemystry, ICP-CSIC, Madrid, Spain

13.00

KL-21

Maria N. Timofeeva *, A. Gil **, V.N.Panchenko *, Yu.A. Chesalov *, S.V.Tsybulya *, T.P. Sorokina *, V.A. Likhobolov *****

SYNTHESIS OF PROPYLENE GLYCOL METHYL ETHER FROM METHANOL AND PROPYLENE OXIDE OVER Al, Al, Zr- AND Zr-PILLARED MONTMORILLONITES

* Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

** Department of Applied Chemistry, Public University of Navarra, Pamplona, Spain

*** Institute of Hydrocarbons Processing SB RAS, Omsk, Russia

13.30 – 14.30

Lunch

Chairperson – Professor Vicente Cortés Corberán, Institute of Catalysis and Petroleochemystry, ICP-CSIC, Madrid, Spain

14.30

KL-22

Andrey Zagoruiko

NEW DEVELOPMENTS IN THE AREA OF NONSTATIONARY AND SORPTION-ENHANCED CATALYTIC PROCESSES

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

15.00

KL-23

Alexey A. Vedyagin *, Shelepova E.V. *, Il'ina E.V. * Mishakov I.V. *****

OXIDATIVE DEHYDROGENATION OF PROPANE IN MEMBRANE REACTOR: THEORETICAL PREDICTIONS AND CATALYTIC EXPERIMENTS

* Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

** Novosibirsk State Technical University, Novosibirsk, Russia

15.30

KL-24

Ilya Y. Pakharukov, Parmon V.N. *, Bobrov N.N.**

DIFFERENT FLOW METHODS FOR ACCURATE COMPARISON OF CATALYTIC ACTIVITY OF HETEROGENEOUS CATALYSTS

* Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

** Novosibirsk State University, Novosibirsk, Russia

16.00 Round table – discussion

Jose Prieto Barranco

EXPERIENCES IN STARTING A SPIN-OFF COMPANY

*PID Eng&Tech reactor engineering company/ Institute of Catalysis and Petroleochemy, ICP-CSIC,
Madrid, Spain*

16.30 Poster session

June 8, Wednesday

**Chairperson – Professor Alexey A. Vedyagin, Boreskov Institute of Catalysis SB RAS,
Novosibirsk, Russia**

9.00

KL-25

Vladimir N. Sidelnikov, Y.V.Patrushev

MULTICAPILLARY COLUMNS FOR HIGH SPEED GAS CHROMATOGRAPHY

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

9.30

KL-26

José Antonio Odriozola*, O.H. Laguna*, O. Sanz, M.A. Centeno*, G. Arzamendi ***, L.M. Gandía***,
F.J. Echave**, M. Montes****

HYDROGEN PRODUCTION IN MICROCHANNEL REACTORS

**University of Seville/CSIC, Seville, Spain*

*** University of the Basque Country, San Sebastian, Spain*

**** Public University of Navarra, Pamplona, Spain*

10.00

KL-27

Mario Montes

CATALYTIC COATING OF METALLIC MONOLITHS AND MICROCHANNEL REACTORS

Department of Applied Chemistry, University of the Basque Country, San Sebastian, Spain

10.30

KL-28

Oleg N. Martyanov

ELECTRON SPIN RESONANCE FOR CATALYSIS. FROM SUPPORTED NANOPARTICLES TO PARAMAGNETIC CLUSTERS IN SUPERCRITICAL FLUIDS

Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

11.00

Closing, Coffee

POSTER SESSION

- PP-1. **Afanasev D.S., Anufrienko V.F., Lisitsyn A.S., Kuznetsova N.I.**
STUDY OF OPTICAL AND CATALYTIC PROPERTIES OF AG DESPENSED ON OXIDE SUPPORTS
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-2. **Andreev D.V., Makarshin L.L., Gribovskii A.G., Parmon V.N.**
CATALYTIC PARTIAL OXIDATION OF METHANE IN MICROCHANNEL REACTORS WITH CO-CURRENT AND COUNTERCURRENT REAGENT FLOWS
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-3. **Baronskaya N.A., Minyukova T.P., Demeshkina M.P., Yurieva T.M.**
SINGLE-STAGE WATER GAS SHIFT PROCESS OVER THE HEAT-CONDUCTING CATALYSTS
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-4. **Belopukhov E.A., Belyi A.S., Kiryanov D.I., Smolikov M.D.**
HYDROISOMERIZATION OF BENZENE ON PLATINUM MORDENITE-ALUMINA CATALYSTS
Institute of Hydrocarbons Processing of SB RAS (Omsk), Russia
- PP-5. **Bezrukov A.A.* , Ismagilov I.Z.* , Afanasiev A.P.* , Kuzovkin M.N.* , Kerzhentsev M.A.* , Ismagilov Z.R.*,****
DEVELOPMENT OF LABORATORY SETUP FOR OXIDATIVE METHANE CONVERSION PROCESSES
**Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
***Institute of Coal Chemistry and Material Science SB RAS, Kemerovo, Russia*
- PP-6. **Blokhina A.S.* , Kurzina I.A.**** , Vodyankina O.V.* , Sobolev V.I.*** , Chuhlomina L.N.**** , Koltunov K.Y.*****
SELECTIVE OXIDATION OF ALCOHOLS OVER Ag-CONTAINING Si_3N_4 CATALYSTS
**Tomsk State University (Tomsk), Russia*
***Tomsk Polytechnic University, Tomsk, Russia*
**** Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
*****Department of Structural MacrokINETICS SB RAS, Tomsk, Russia*
- PP-7. **Boronin A.I., Gulyaev R.V., Slavinskaya E.M., Stonkus O.A., Zaikovskii V.I., Danilova I.G., Amosov Yu.I., Ivanova A.S.**
THE ROLE OF Pd CLUSTERS AND $\text{Pd}_x\text{Ce}_{1-x}\text{O}_2$ SURFACE PHASE IN LOW-TEMPERATURE CO OXIDATION
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-8. **M.A. Bochkarev *'** , I.G. Danilova ** , E.M. Slavinskaya ** , A.S. Ivanova ****
THE ROLE of H_2O IN LOW TEMPERATURE CARBON MONOXIDE OXIDATION ON Pd/CeO₂ CATALYSTS
**Novosibirsk State Technical University (Novosibirsk), Russia*
***Boreskov Institute of Catalysis SB RA (Novosibirsk), Russia*
- PP-9. **Bulushev D.A., Jia L., Beloshapkin S.* , Ross J.R.**
FORMIC ACID DERIVED FROM BIOMASS FOR HYDROGEN PRODUCTION AND OLEFINS HYDROGENATION
Chemical & Environmental Sciences Department, University of Limerick, (Limerick), Ireland
**University of Limerick, Materials & Surface Science Institute (Limerick), Ireland*
- PP-10. **Bykova M.V., Khromova S.A., Lebedev M.Y., Yakovlev V.A.**
FAST PYROLYSIS OIL CATALYTIC HYDROTREATMENT FOR BIOFUEL PRODUCTION: MODEL COMPOUND STUDY
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

- PP-11. Demidova Y., Moroz B., Reshetnikov S., Estrada M.* , Bukhtiarov V., Simakov A. **,
Murzin D. ***, Simakova I., Parmon V.N., Prosvirin I.

REACTION KINETICS MEASUREMENTS AND ANALYSIS OF CATALYST DEACTIVATION FOR
CONVERSION OF α -PINENE OVER Au/ γ -Al₂O₃

Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

*Posgrado de Física de Materiales de CICESE-UNAM, Ensenada, México

**Nanociencias y Nanotecnología, UNAM, Ensenada, Mexico

***Åbo Akademi University, Process Chemistry Centre, Turku/Åbo, Finland

- PP-12. Desyatikh I.V. **, Vedyagin A.A. ***, Mishakov I.V. ***, Shubin Y.V. ****

CATALYTICALLY ACTIVE MEMBRANES BASED ON COPPER AND CERIUM OXIDES: EFFECT OF DOPING

*Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

**Novosibirsk State University, Novosibirsk, Russia

***Novosibirsk State Technical University, Novosibirsk, Russia

****Nikolaev Institute of Inorganic Chemistry of SB RAS (Novosibirsk), Russia

- PP-13. Fattahov I.M. *, Shiriyazdanov R.R. *, Davletshin A. **, Hasanov T.A. *, Gilmutdinov A.T. *

Co-PROCESSING BENZENE FRACTION OF GASOLINE OBTAINED BY CATALYTIC REFORMING AND C3
FRACTION OF REFINERY GAS

*Ufa State Petroleum Technical University (Ufa), Russia

**Institute of Petroleum Refining and Petrochemistry of the Republic of Bashkortostan, Ufa, Russia

- PP-14. Golyazimova O.V., Politov A.

IMPROVEMENT OF ENZYME HYDROLYSIS OF CELLULOSE BY MECHANICAL TREATMENT OF
REAGENTS

Institute of Solid State Chemistry and Mechanochemistry SB RAS (Novosibirsk), Russia

- PP-15. Koskin A.P. *, Golohvast K.S. **, Vedyagin A.A. *, Melgunov M.S. ***, Mishakov I.V. *, Danilova I.G. *,
Noskov A.S.*

SYNTHESIS OF AROMATIC NITROCOMPOUNDS BY VAPOR-PHASE NITRATION OVER NATURAL
ZEOLITES

*Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

**Far Eastern Federal University, Vladivostok, Russia

**V.S. Sobolev Institute of Geology and Mineralogy SB RAS, Novosibirsk, Russia

- PP-16. Kukushkin R.G., Sorokina K.N., Yakovlev V.A., Selishcheva S.A., Piligaev A.V.

INVESTIGATION OF MICROALGAE CATALYTIC PROCESSING

Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

- PP-17. Kuznetsov A.N. ***, Zaikovskii V. *, Savinova E. **, Parmon V. *

CO ELECTROOXIDATION ON NANOSTRUCTURED PLATINUM PARTICLES WITH SELECTIVELY BLOCKED
SITES

*Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

**ECPM-UdS (Strasbourg), France

- PP-18. Larichev Y. ***, Tuzikov F.B. ***, Berdnikova P. *, Pai Z. *

SOLVENTS INFLUENCE ON THE STRUCTURE OF TUNGSTEN PEROXO COMPLEX

[CH₃(N-C₈H₁₇)₃N]₂[HPO₄[WO(O₂)₂]] AS A CATALYST FOR SELECTIVE OLEFIN EPOXIDATION

*Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

**Novosibirsk State University, Novosibirsk, Russia

- PP-19. **Ovchinnikov I.*, Kaprielova K.M.***, Lisitsyn A.***
TOWARDS THE EFFICIENT GREEN OXIDATION OF ALCOHOLS
**Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
***Novosibirsk State University, Novosibirsk, Russia*
- PP-20. **Ozerova A., Simagina V., Komova O., Netskina O., Odegova G., Bulavchenko O.**
NANOSIZE COBALT BORIDE FORMATION IN REACTION MEDIUM OF BORON-BASED COMPLEX HYDRIDES
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-21. **Pavlova T.L., Vernikovskaya N.V., Ermakova A., Mokrinskii V.V., Kashkin V.N., Noskov A.S.**
KINETIC MODELLING OF CATALYZED OXIDATION OF SOOT
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-22. **Shiriyazdanov R.R.*, Davletshin A.**, Hasanov T.A.*, Gilmutdinov A.T.*, Rahimov M.N.***
OLIGOMERIZATION OF OLEFINS REFINERY GASES IN CATALYTIC SYSTEMS «HPA/MCM-41»
**Ufa State Petroleum Technical University (Ufa), Russia*
***Institute of Petroleum Refining and Petrochemistry of the Republic of Bashkortostan, Ufa, Russia*
- PP-23. **Shiriyazdanov R.R.*, Davletshin A.***, Smirnov V.K.****
FAU STRUCTURE ZEOLITES AND IONIC LIQUIDS - MODERN TRENDS IN THE DEVELOPMENT OF ALKYLATION PROCESS
**Ufa State Petroleum Technical University (Ufa), Russia*
***«CATACHEM Company», Moscow, Russia*
****Institute of Petroleum Refining and Petrochemistry of the Republic of Bashkortostan, Ufa, Russia*
- PP-24. **Shtertser N.V.*, Minyukova T.P.***, Khassin A.A.*,****
MEMBRANE REACTORS FOR HYDROGENATION REACTIONS
**Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
***Novosibirsk State University, Novosibirsk, Russia*
- PP-25. **Simakova I., Simonov M., Zaiceva Y., Mäki-Arvela P.*, Estrada M.**, Simakov A.**, Murzin D.*, Parmon V.N., Shutilov A., Zenkovets G.**
SYNTHESIS OF GREEN DIESEL THROUGH DEOXYGENATION AND KETONIZATION OF CARBOXYLIC ACIDS
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
**Åbo Akademi University, Process Chemistry Centre, Turku/Åbo, Finland*
***Centro de Nanociencias y Nanotecnología, UNAM, Ensenada, Mexico*
- PP-26. **Streltsov I.A., Bauman Y.I., Zhukova E.A., Dmitriev S.V., Mishakov I.V., Vedyagin A.A., Buyanov R.A.**
PECULIARITIES OF CARBON NANOSTRUCTURES FORMATION FROM DIFFERENT CARBON-CONTAINING PRECURSORS
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-27. **Taran O., Ayusheev A.B., Isupova L., Ogorodnikova O., Parmon V.*,****
PEROSKITE-LIKE CATALYSTS FOR THE CATALYTIC WET PEROXIDE AND WET AIR OXIDATION OF PHENOL
**Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
***Novosibirsk State University, Novosibirsk, Russia*

- PP-28. **Tokareva I., Streltsov I.A., Mishakov I.V., Vedyagin A.A., Buyanov R.A.**
REMOVAL AND RECOVERY OF METAL CATALYSTS VIA INTERACTION WITH CO
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-29. **Tuzikov F.B.^{*,**}, Larichev Y.^{*,**}, Tuzikova N.^{*}**
APPLICATION SAXS TECHNIQUE FOR STUDY DISPERSITY OF NANOPARTICLES IN THE HETEROGENEOUS CATALYSTS FOR OXIDATION PROCESSES
**Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
***Novosibirsk State University, Novosibirsk, Russia*
- PP-30. **Vagin D.V.^{*,**}, Bobrova L.*, Soloveychik Y.N.^{**}, Sadykov V.^{*}, Parmon V.^{*}**
NUMERICAL SIMULATION OF THE HEAT SHIELD IN A SHORT CONTACT TIME REACTOR
**Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia*
***Novosibirsk State Technical University (Novosibirsk), Russia*
- PP-31. **Vanag S.V., Zagoruiko A.N.**
PROCESS OF COMBINED OXIDATION OF CO AND SO₂ IN WASTE GASES OF NON-FERROUS SMELTERS AT PLATINUM GLASS-FIBER CATALYST
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
- PP-32. **Velichkina L., Korobitsyna L., Vosmerikov A.**
CONVERSION OF A STRAIGHT-RUN GASOLINE FRACTION OF PETROLEUM OVER ZEOLITES SYNTHESIZED IN DIFFERENT WAYS
Institute of Petroleum Chemistry SB RAS (Omsk), Russia
- PP-33. **Vosmerikova L.N., Vosmerikov A.V.**
INFLUENCE OF PLATINUM ADDITION ON THE PROPERTIES OF GALLOALUMOSILICATE IN ETHANE AROMATIZATION
Institute of Petroleum Chemistry SB RAS (Tomsk), Russia
- PP-34. **Yashnik S.A., Ismagilov Z.R.^{**}, Stadnichenko A.I., Svintsitskiy D.A., Boronin A.I., Urguntsev G., Alieva S.G.^{*}, Ismagilov E.G.^{*}**
NANOSTRUCTURED PtPd-ZEOLITE CATALYST FOR DEEP DESULFURIZATION OF LOW-SULFUR DIESEL FRACTION
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
**Institute of Petrochemical Processes of ANAS (Baku), Azerbaijan*
***Institute of Coal Chemistry and Material Science SB RAS, Kemerovo, Russia*
- PP-35. **Zakharenko V.S., Daibova E.^{*}**
PHENOMENA UNDER ILLUMINATION OVER TITANIA PARTICLES PRODUCED BY GRINDING OF RUTILE CRYSTAL UNDER AMBIENT AIR
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia
**Tomsk State University (Tomsk), Russia*
- PP-36. **Zazhigalov S., Chumakova N., Zagoruiko A.**
MODELLING OF THE ADSORPTION-CATALYTIC PROCESSES IN THE MULTI-DISPERSED BED
Boreskov Institute of Catalysis SB RAS (Novosibirsk), Russia

PP-37. **Zelenkina O.I., Gavrilov M.S., Vedyagin A.A., Mishakov I.V., Shubin Y.V. *, Rubinskaya A.A. ***

METHODS TO INCREASE THE STABILITY OF THREE-WAY CATALYSTS FOR EXHAUST GASES
AFTERBURNING

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**Nikolaev Institute of Inorganic Chemistry SB RAS (Novosibirsk), Russia*

PP-38. **Zheivot V.I.**

ZHEOLITES: ADSORBENTS, SUPPORTS AND MODIFIERS IN MOLECULAR GAS CHROMATOGRAPHY

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PP-39. **Timofeeva M.N. *, Gil A.B. ** , Panchenko V.N. *, Vicente M.A. *** , Chesalov Y.A. *, Tsybulya S.V. *, Andreev A.S. ***

PREPARATION AND PROPERTIES OF ZRO₂-Al₂O₃ MATERIALS

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PP-40. **V.V. Kriventsov¹, I.L. Simakova¹, E.P. Yakimchuk¹, A.Simakov², E. Smolentseva², M.Estrada³, B.N. Novgorodov¹, D.I. Kochubey¹, S.Fuentes², S.F. Nechepurenko⁴, O.A. Simakova^{1,5}, A.-R. Leino⁶, D.Yu. Murzin⁵**

APPLICATION OF XAFS SPECTROSCOPY TO STUDYING PERSPECTIVE NANO-DISPERSED GOLD CATALYSTS

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PP-41. **V.V. Kriventsov¹, E.P. Yakimchuk¹, B.N. Novgorodov¹, D.I. Kochubey¹, A.V. Chistyakov², K.B. Golubev², M.V. Chudakova², V.Yu. Murzin², M.V. Tsodikov²**

APPLICATIONS OF XAFS SPECTROSCOPY FOR STUDYING OF NANO-SIZED CATALYSTS USED FOR SYNTHESIS OF BIOFUEL COMPONENTS

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