Boreskov Institute of Catalysis, Novosibirsk, Russia
N.D. Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia
Lomonosov Moscow State University, Moscow, Russia
Russian Mendeleev Chemical Society, Novosibirsk Department
Siberian Branch of the Russian Academy of Sciences

XI International Conference

MECHANISMS of CATALYTIC REACTIONS

Sochi, Krasnodar Region, Russia
October 7-11, 2019

SCIENTIFIC PROGRAM

Novosibirsk-2019

Boreskov Institute of Catalysis, Novosibirsk, Russia
N.D. Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia
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XI International Conference
"Mechanisms of Catalytic Reactions"

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SCIENTIFIC PROGRAM

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CONFERENCE ORGANIZERS

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UNDER THE AUSPICES OF

European Federation of Catalysis Societies

National Catalytic Society of Russia

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The XI Conference “Mechanisms of Catalytic Reactions” is the event in the series of International MCR-Conferences started in 1974 in Moscow. Traditionally, the Conferences on the Mechanisms of Catalytic Reactions focus on advances in understanding the mechanisms of chemical reactions occurring in the presence of catalysts, ranging from homogeneous molecular catalysts (inorganic, organic, metal complex based) to heterogeneous catalysts.

The scientific program of MCR XI includes 6 plenary lectures (40 min) and 5 keynote lectures (30 min); 57 oral presentations (20 min) are scheduled in three parallel sessions. The Conference Program also includes 105 poster presentations.

The Conference is accompanied by the School-Conference for young scientists «CATALYSIS FOR ENERGY, FUELS, RENEWABLES» containing 15 oral presentation (duration 15 min).

Conference Exhibition of compact installations and devices, as well as promotional materials, will be held throughout the Conference, on October 7-11.

Presentation

The time of presentation (including time for questions) is 40 min for a plenary lecture, 30 min for a keynote lecture, 20 min for an oral presentation.

Multimedia LCD projectors will be available. Organizers recommend the authors to prepare computer presentations in *.ppt format (Microsoft Office PowerPoint).

Poster dimensions should correspond to the format: vertical, 100 cm x 100 cm format A0 (1189 x 841 мм). The authors are requested to place their posters on October 9 (Wednesday) from 09.00 to 19.00 at hall for coffe breakes, and remove them after 19.00, at the end of poster session.

Conference Publications

The abstracts of all accepted presentations will be published electronically with an assigned ISBN and placed at the website.

Selected Conference papers will be published in the special issues of Kinetics and Catalysis and Topics in Catalysis.

Special Issue of «Kinetics and Catalysis»

To publish the article, it is necessary to prepare an article in English and send it to the editorial office of the journal by **December 01, 2019**. In your cover letter, please indicate "**Conference "Mechanisms of Catalytic Reactions-2019**". The estimated time of release is the second half-year of 2020. Please consult the journal guidelines at *http://pleiades.online/en/journal/kincat/guid/*

Together with the article, you also need to send a completed Copyright Transfer Agreement, which is available on the journal's website (you can fill only the part in English).

Contacts for sending articles: *Galina Polyakova*
head. the editorial board
kincat@ioc.ac.ru
Tel / Fax: +7 (499) 135-5358

Special Issue of «Topics in Catalysis»

Authors of selected invited and oral contributions will be invited to publish full papers in the special issue of the "**Topics in Catalysis**". The authors will receive personal submission links.

The submission deadline is November 01, 2019. The instructions for authors and related information are available at the journal website:
https://www.springer.com/chemistry/catalysis/journal/11244/PSE

Venue

The Conference will take place in three conference halls at the business center of the Golden Tulip hotel**** (**Ballroom hall, Eindhoven hall and Amersfort hall**)

Meals

Lunches will be served at the restaurant «Branche» of Golden Tulip hotel, on the 1st floor. Vouchers for 3 lunches will be included in the participant package. Morning and afternoon coffee breaks will be provided.

Registration

Registration will take place at the Golden Tulip hotel, at 1,5th floor hall, on October 7 from 12.00 till 16.00 and on October 8 from 8.00 till 13.00.

Social events

The participants are invited to the Welcome reception at 18.30 on October 7 (the restaurant «Branche» of the Golden Tulip hotel).

The Conference banquet will be held at the the «Branche» restaurant of the Golden Tulip hotel, on October 9 at 19.00 (*ticket, 4000 Rub*).

The participants and guests are offered a special sightseeing program:
Sightseeing walk *«Around Rosa Khutor», October 10, 2019 after closing ceremony*

The post tour "The trip aroun big Sochi"*, October 11, 2019*
(from 09.00 till 18.00; ticket, 2800-3500 Rub)
The excursion and the tour start from the Hotel Golden Tulip.

Registration Fee

The fee covers registration for the Conference, editorial expenditures, delegate bag, auditorium rent, coffee-breaks, three lunches, Welcome Party, sightseeing excursion around Rosa Khutor.

Weather

In early October, the temperature in Sochi is usually 16-20 °C. The Organizing Committee advises the Conference participants to bring umbrellas and warm overclothes.

Scientific Sections

Section I

– Basic concepts, theory and modeling in catalysis

Section II

– Physical methods, including in situ and operando techniques, in catalysis

Section III

– Kinetics and mechanisms of catalyzed processes

Section IV

– Advanced catalyst systems addressing current challenges: energy, materials, sustainability

School-Conference for young scientists **«CATALYSIS FOR ENERGY, FUELS, RENEWABLES»**

SCIENTIFIC PROGRAM

Monday, October 7, 2019

*The hotel Golden Tulip, Rosa Khutor 4**
(Naberezhnaya Panorama 3, Estosadok, Russia)

12.00-16.00 Registration: 1,5th hall for coffee, the Golden Tulip hotel

Ballroom Hall

16.00-16.20 Opening ceremony

Chairmen: Academician Valerii I. Bukhtiyarov
Academician Valentin N. Parmon

PLENARY LECTURES

PL-1; 16.20-17.00
Presenting author: Academician Valentin N. Parmon
Kirill Zamaraev: The life devoted to science and catalysis
Siberian Branch of the Russian Academy of Sciences
Boreskov Institute of Catalysis, Novosibirsk, Russia

PL-2; 17.00-17.40
Presenting author: Dr. Oxana A. Kholdeeva
Mechanisms of Hydrogen Peroxide Activation over Ti(IV) and Nb(V) Single Sites
Boreskov Institute of Catalysis, Novosibirsk, Russia
Novosibirsk State University, Novosibirsk, Russia

17.40 Conference Photo
18.30-20.30 Welcome Reception
(the «Branche» restaurant, 1st floor of the Golden Tulip hotel)

Tuesday, October 8

*The hotel Golden Tulip, Rosa Khutor 4**
(Naberezhnaya Panorama 3, Estosadok, Russia)

Ballroom Hall

Chairmen: Prof. Dr. Konstantin P. Bryliakov
Prof. Dr. Jun Li

PLENARY LECTURES

PL-3; 9.00-9.40
Presenting author: Prof. Dr. Graham Hutchings
Catalysis Using Nanomaterials
Cardiff Catalysis Institute, School of Chemistry, Cardiff University, Cardiff, UK

PL-4; 9.40-10.20
Presenting author: Prof. Dr. Paolo Fornasiero
Smart Catalysts and Today's Energy and Environmental Challenges
Department of Chemical and Pharmaceutical Sciences, ICCOM-CNR and INSTM, University of Trieste, Trieste, Italy

KEYNOTE LECTURE

KL-1; 10.20-10.50
Presenting author: Prof. Dr. Christian Limberg
Lokare K.S.[1], Frank N.[1], Manicke N.[1], Pinkert D.[1], Braun-Cula B.[1], Goikoetxea I.[1], Jorewitz M.[2], Kelly J.T.[2], Herwig C.[1], Leach S.[1], Baldauf C.[3], Asmis K.[2], Sauer J.[1], Limberg C.[1]
Molecular Aluminium and Iron Siloxide Compounds as Models for Active Sites in the Pores of Zeolites
1 – Humboldt-Universität zu Berlin, Institut für Chemie, Berlin, Germany
2 – Wilhelm-Ostwald-Institut für Physikalische und Theoretische Chemie, Universität Leipzig, Leipzig, Germany
3 – Fritz-Haber-Institut der Max-Planck Gesellschaft, Berlin, Germany

10.50 *Coffee break*

Ballroom Hall

ORAL PRESENTATIONS

Section I. Basic concepts, theory and modeling in catalysis

Chairman: Prof. Dr. Konstantin M. Neyman

IOP-I-1; 11.20-11.40
Presenting author: Dr. Kirill V. Kovtunov
Kovtunov K.V., Koptyug I.V.
Robust In Situ Investigation of Heterogeneous Hydrogenation Mechanisms with Parahydrogen
International Tomography Centre SB RAS, Novosibirsk, Russia

OP-I-2; 11.40-12.00
Presenting author: Dr. Xiao-Ming Cao
Xiao-Ming Cao[1], Wende Hu[1], P. Hu[2]
Synergistic Effect of Multi Active Sites with Low-Coordination Lattice Oxygen on Catalytic Combustion of Methane over Co_3O_4(110)
1 – Center for Computational Chemistry and Research Institute of Industrial Catalysis, East China University of Science and Technology, Shanghai, China
2 – School of Chemistry and Chemical Engineering, The Queen's University of Belfast, Belfast, UK

OP-I-3; 12.00-12.20
Presenting author: Dr. Mikhail Yu. Sinev
Interrelations between Apparent Kinetics and Mechanism in Catalytic Processes of Redox Type: Oxygen Activation and Pathways in Light Alkane Oxidation
Semenov Institute of Chemical Physics RAS, Moscow, Russia

OP-I-4; 12.20-12.40
Presenting author: Dr.Aleksandr R. Cholach
Cholach A.R., Bryliakova A.A.
Resonance-Coordinated Active Sites in the Catalytic Synthesis of Ammonia
Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-I-5; 12.40-13.00
Presenting author: Dr. Victor M. Chernyshev
Chernyshev V.M.[1], Astakhov A.V.[1], Chikunov I.E.[1], Tyurin R.V.[1], Eremin D.B.[2], Ranny G.S.[1], Khrustalev V.N.[3], Ananikov V.P.[1,2]
"Mercury Test" and Fundamental Problems of Catalyst Poisoning in the Studies of Reaction Mechanisms
1– Platov South-Russian State Polytechnic University (NPI), Novocherkassk, Russia
2– Zelinsky Institute of Organic Chemistry, RAS, Moscow, Russia
3– National Research Center «Kurchatov Institute», Moscow, Russia

13.00 *Lunch*

Ballroom Hall

ORAL PRESENTATIONS

Section I. Basic concepts, theory and modeling in catalysis

Chairman: Prof. Dr. Justin S.J. Hargreaves

OP-I-6; 14.30-14.50

Presenting author: Prof. Wei Sun

Sun W., Du J.Y., Sun Q.S.

Mechanistic Insights into the Enantioselective Oxidation Reactions Catalyzed by Chiral Manganese Catalysts

State Key Laboratory for Oxo Synthesis and Selective Oxidation, Center for Excellence in Molecular Synthesis, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, P. R. China

OP-I-7; 14.50-15.10

Presenting author: Prof. Dr. Konstantin M. Neyman

Metal/Metal-Oxide Interface Effects in Catalytic Materials: Theory Versus Experiment

ICREA (Institució Catalana de Recerca i Estudis Avançats), Barcelona, Spain Dept. de Ciència dels Materials i Química Física, Universitat de Barcelona, Barcelona, Spain

OP-I-9; 15.10-15.30

Presenting author: Dr. Daria A. Pichugina

Pichugina D.A., Nikitina N.A., Kuz'menko N.E.

Structure, Stability and Catalytic Properties of Gold Protected Nanoclusters from DFT Calculation

Department of Chemistry, Lomonosov Moscow State University, Moscow, Russia

OP-I-10; 15.30-15.50

Presenting author: Dr. Elena A. Lashina

Lashina E.A.[1,3], Chumakova N.A.[1,3], Chumakov G.A.[2,3], Kaichev V.V.[1,3]

Self-Sustained Oscillations in Oxidation of CH_4, C_2H_6 and C_3H_8 over Metallic Catalysts: Mathematical Modelling Using the Quasi-Steady-State Approximations

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia

3 – Novosibirsk State University, Novosibirsk, Russia

OP-I-11; 15.50-16.10

Presenting author: Dr. Marina M. Slinko

Makeev A.G., Peskov N.V., Slinko M.M., Bychkov V.Yu., Haritonov V.A., Korchak V.N.

Spatial and Temporal Self-Organization during CO Oxidation over Ni

Semenov Institute of Chemical Physics RAS, Moscow, Russia
Faculty of Comput. Math. and Cybernet., Lomonosov Moscow State University, Moscow, Russia

16.30 *Coffee break*

Ballroom Hall

ORAL PRESENTATIONS

Section II. Physical methods, including in situ and operando techniques, in catalysis

Chairman: Dr. Kirill V. Kovtunov

OP-II-12; 17.00-17.20
Presenting author: Dr. Vyacheslav L.Yurpalov
Yurpalov V.L., Drozdov V.A., Nepomnyashchiy A.A., Buluchevskiy E.A., Lavrenov A.V.
Deactivation Study of Pt/WO_3–Al_2O_3 Catalysts for Vegetable Oil Hydrodeoxygenation by EPR Spectroscopy and Thermal Analysis
Center of New Chemical Technologies BIC, Omsk, Russia

OP-II-13; 17.20-17.40
Presenting author: Dr. Andrey V. Vorotyntsev
Vorotyntsev A.V., Petukhov A.N., Markov A.N.
Tandem Operando FTIR with GCMS Analysis for Evaluation Chlorosilanes Disproportionation Mechanism on the Supported Ionic Liquids Like Phase (SILLPs) Catalysts
Nizhny Novgorod State Technical University n.a. R.E. Alekseev, Nizhny Novgorod, Russia

OP-II-14; 17.40-18.00
Presenting author: Dr. Alexey A. Tsyganenko
Application of Isotopic Substitution in the IR Studies of Catalysts
V.A.Fock Institute of Physics, St.Petersburg State University, St.Petersburg, Russia

Eindhoven Hall

ORAL PRESENTATIONS

Section III. Kinetics and mechanisms of catalyzed processes

Chairman: Prof. Dr. Paolo Fornasiero

IOP-III-1; 11.20-11.40

Presenting author: Dr. Simon Penner
Bonmassar N.[1], Schlicker L.[2], Gili A.[2], Gurlo A.[2], Heggen M.[3], Yunxua G.[3], Doran A.[4], Bernardi J.[5], Penner S.[1]

***In situ* - Determined Structural Dynamics as a Mechanistic Key Parameter in the Reactivity of LaNiO3-based Methane Dry Reforming Catalysts**

1 – Institute of Physical Chemistry, University of Innsbruck, Innsbruck, Austria
2 – Fachgebiet Keramische Werkstoffe/Chair of Advanced Ceramic Materials, Institut für Werkstoffwissenschaften und -technologien, Technische Universität Berlin, Berlin, Germany
3 – Ernst Ruska Center for Spectroscopy and Microscopy with Electrons, Jülich, Germany
4 – Advanced Light Source, Lawrence Berkeley National Laboratory Berkeley, California, USA
5 – University Service Center for Transmission Electron Microscopy, TU Wien, Vienna, Austria

OP-III-2; 11.40-12.00

Presenting author: Prof. Dr. Vladislav A. Sadykov
Sadykov V.A.[1,2], Eremeev N.F.[1], Rogov V.A.[1,2], Sadovskaya E.M.[1,2], Bobin A.S.[1,2], Avdeev V.I.[1], Chesalov Yu.A.[1], Smal E.A.[1], Lukashevich A.I.[1], Krasnov A.V.[1], Simonov M.N.[1,2], Roger A.C.[3]

Detailed Mechanism of Ethanol Transformation into Syngas on Nanocomposite Catalysts

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia
3 – University of Strasbourg, Strasbourg, France

OP-III-3; 12.00-12.20

Presenting author: Dr. Boris N. Kuznetsov

Kuznetsov B.N.[1], Sudakova I.G.[1], Garyntseva N.V.[1], Tarabanko V.E.[1], Djakovitch L.[2], Rataboul F.[2]

Kinetic Studies and Optimization of Heterogeneous Catalytic Oxidation Processes for the Green Biorefinery of Wood

1 – Institute of Chemistry and Chemical Technology SB RAS, FRC KSC SB RAS, Krasnoyarsk, Russia

2 – IRCELYON, Lyon, France

OP-III-4; 12.20-12.40

Presenting author: Dr. Alexey A. Vedygin

Vedyagin A.A.[1], Kenzhin R.M.[1], Tashlanov M.Y.[1,2], Stoyanovskii V.O.[1], Plyusnin P.E.[2,3], Shubin Y.V.[2,3], Slavinskaya E.M.[1], Mishakov I.V.[1,2]

Impact of Metal Ratio in the Bimetallic Three-Way Catalyst on Mechanism of the Catalysed Reactions

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – Novosibirsk State University, Novosibirsk, Russia

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

OP-III-5; 12.40-13.00

Presenting author: Dr. Galina A. Bukhtiyarova

Vlasova E.N.[1,2], Shamanaev I.V.[1], Aleksandrov P.V.[1,2], Nuzhdin A.L[2], Bukhtiyarova G.A.[1,2]

The Benefit of Catalytic Materials Cooperation in the Hydrodeoxygenation of Aliphatic Oxygenates

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – Novosibirsk State University, Novosibirsk, Russia

13.00 *Lunch*

Eindhoven Hall

ORAL PRESENTATIONS

Section III. Kinetics and mechanisms of catalyzed processes

Chairman: Dr. Oxana A. Kholdeeva

OP-III-6; 14.30-14.50
Presenting author: Dr. Svetlana A. Yashnik
Yashnik S.A., Ismagilov Z.R.
Some Regularity and Peculiarity of SCR NO-NH3 Behaviour of Cu-ZSM-5 with Different Copper Electronic State
Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-III-7; 14.50-15.10
Presenting author: Dr. Alexander M. Khenkin
Mechanism of Activation of Molecular Oxygen by Homogeneous Vanadium Substituted Polyoxometalates
Weizmann Institute of Science, Rehovot, Israel

OP-III-8; 15.10-15.30
Presenting author: Dr. Olga V. Zalomaeva
Zalomaeva O.V.[1], Evtushok V.Yu.[1,2], Glazneva T.S.[1,2], Kholdeeva O.A.[1,2]
Mechanistic Study on the Oxidation of Organic Sulfides and Sulfoxides with H_2O_2 over Zr-Based Metal-Organic Frameworks
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

OP-III-9; 15.30-15.50
Presenting author: Dr. Anton A. Gabrienko
Gabrienko A.A.[1,2], Yashnik S.A.[1], Stepanov A.G.[1,2]
Methane Activation on Cu/H-ZSM-5 Zeolites: A Spectroscopic Investigation of Methane Interaction with different Cu-Sites
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

OP-III-10; 15.50-16.10
Presenting author: Dr. Anna A. Kurokhtina
Kurokhtina A.A., Larina E.V., Yarosh E.V., Lagoda N.A., Schmidt A.F.
Differential Selectivity Patterns of Mizoroki-Heck Reaction: Novel Data on the Reaction Mechanism and Active Species Nature
Chemical Department of Irkutsk State University, Irkutsk, Russia

OP-III-11; 16.10-16.30
Presenting author: Dr. Maria L. Gringolts
Morontsev A.A.[1], Denisova Yu.I.[1], Gringolts M.L.[1], Peregudov A.S.[2], Kudryavtsev Y.V.[1], Finkelshtein E.Sh.[1]
New Macromolecular Cross-Metathesis Reaction in the Mixtures of Polynorbornene with Polydienes Mediated by Grubbs' Catalysts: A Kinetic Study
1 – A.V. Topchiev Institute of Petrochemical Synthesis RAS, Moscow, Russia
2 – A.N. Nesmeyanov Institute of Organoelement Compounds, RAS, Moscow, Russia

16.30 *Coffee break*

Eindhoven Hall

ORAL PRESENTATIONS

Section III. Kinetics and mechanisms of catalyzed processes

Chairman: Prof. Dr. Ekaterina S. Lokteva

OP-III-12; 17.00-17.20
Presenting author: Prof. Dr. Alexander G. Stepanov
Arzumanov S.S., Gabrienko A.A., Toktarev A.V., Stepanov A.G.
Different Efficiency of Zn^{2+} Cations and ZnO Species in Activation of Propane on Zn-Modified Zeolite BEA
Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-III-13; 17.20-17.40
Presenting author: Dr. Svetlana S. Sigaeva
Sigaeva S.S., Anoshkina E.V., Temerev V.L., Shlyapin D.A.
Interaction of Ethylene with Methane and its Pyrolysis Products on a Resistive FeCrAl Alloy Catalyst
Center of New Chemical Technologies BIC, Omsk, Russia

OP-III-18; 17.40-18.00
Presenting author: Samir Mammadov
S. Mammadov, L. Socaciu-Siebert, M. Meyer, P. Dietrich,
O. Schaff and A. Thissen
Near Ambient Pressure XPS: New Horizons
SPECS Surface Nano Analysis GmbH, Berlin, Germany

Wednesday, October 9

*The hotel Golden Tulip, Rosa Khutor 4**
(Naberezhnaya Panorama 3, Estosadok, Russia)

Ballroom Hall

Chairmen: Prof. Dr. Graham Hutchings
Prof. Dr. Christian Limberg

PLENARY LECTURE

PL-5; 9.00-9.40
Presenting author: Prof. Dr. Hendrik Bluhm
Heterogeneous Chemistry at Liquid/Vapor Interfaces Investigated with Photoelectron Spectroscopy
Department of Inorganic Chemistry, Fritz Haber Institute of the Max Planck Society, Berlin, Germany

KEYNOTE LECTURES

KL-2; 09.40-10.10
Presenting author: Prof. Dr. Günther Rupprechter
In Situ Surface Spectroscopy and Microscopy of Reactions on Zirconia Based Model Catalysts
Institute of Materials Chemistry, Technische Universität Wien, Vienna, Austria

KL-5; 10.10-10.40
Presenting author: Prof. Dr. Jorge Gascon
Gascon J.
Multi-Scale Engineering of Catalytic Systems for the Hydrogenation of Carbon Dioxide
King Abdullah University of Science and Technology, KAUST Catalysis Center (KCC), Advanced Catalytic Materials, Thuwal, Saudi Arabia

10.40 *Coffee break*

Ballroom Hall

ORAL PRESENTATIONS

Section II. Physical methods, including in situ and operando techniques, in catalysis

Chairman: Prof. Dr. Alexander G. Stepanov

IOP-II-1; 11.20-11.40
Presenting author: Dr. Evgenii V. Kondratenko
Zhang Ya.[1,2], Otroshchenko T.[1], Han Sh.[1,2], Rodemerck U.[1], Linke D.[1], Jiang G.[2], Kondratenko E.V.[1]
The Potential of Time-Resolved Operando UV-vis Spectroscopy for Deriving Insights into Coke Formation and Removal in Propane Dehydrogenation
1 – Leibniz-Institut für Katalyse e.V. an der Universität Rostock, Rostock, Germany
2 – State Key Laboratory of Heavy Oil Processing, China University of Petroleum Beijing, Beijing, China

OP-II-2; 11.40-12.00
Presenting author: Sonja Keller
Keller S., Rabeah J., Bentrup U., Brückner A.
Impact of V and M on mechanism and performance of V/$Ce_{1-x}M_xO_{2-\delta}$ (M=Fe, Bi, Sb) catalysts in NH_3-SCR of NOx assessed by operando spectroscopy
Leibniz-Institut für Katalyse an der Universität Rostock (LIKAT), Rostock, Germany

OP-II-3; 12.00-12.20
Presenting author: Dr. Vasily V. Kaichev
Kaichev V.V.[1,2], Chesalov Yu.A.[1,2], Saraev A.A.[1,2], Tsapina A.M.[1]
Dehydrogenation of Propane over Vanadia-Titania Catalysts: Active Sites and Reaction Mechanism
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

OP-II-4; 12.20-12.40

Presenting author: Raffael Rameshan

Rameshan R.[1], Lindenthal L.[1], Ruh T.[1], Raschhofer[1], Nenning A.[2], Opitz A.[2], Rameshan C.[1]

Enhancing Catalytic Activity of Perovskites by Tailored Exsolution

1 – Technische Universität Wien, Institute of Materials Chemistry, Vienna, Austria

2 – Technische Universität Wien, Institute of Chemical Technologies and Analytics, Vienna, Austria

OP-II-5; 12.40-13.00

Presenting author: Dr. Dmitry A. Svintsitskiy

Svintsitskiy D.A.[1,2], Kardash T.Yu.[1,2], Lazareva E.V.[1], Saraev A.A.[1], Derevyannikova E.A.[1], Vorokhta M.[3], Šmíd B.[3], Bondareva V.M.[1]

Bi-Modified MoVNbTeO Catalysts for Oxidative Dehydrogenation of Ethane: NAP-XPS and In Situ XRD Study

1– Boreskov Institute of Catalysis, Novosibirsk, Russia

2– Novosibirsk State University, Novosibirsk, Russia

3 – Charles University, Department of Surface and Plasma Science, Faculty of Mathematics and Physics, Prague, Czech Republic

13.00 *Lunch*

Ballroom Hall

ORAL PRESENTATIONS

Section II. Physical methods, including in situ and operando techniques, in catalysis

Chairman: Dr. Vasily V. Kaichev

OP-II-6; 14.30-14.50
Presenting author: Dr. Aram L. Bugaev
Bugaev A.L.[1], Guda A.A.[1], Lomachenko K.A.[2], Usoltsev O.A.[1], Skorynina A.A.[1], Groppo E.[3], Safonova O.[4], van Bokhoven J.[4]
Determination of Active Species in Pd Catalysts by Time-Resolved X-Ray Absorption Spectroscopy
1 – The Smart Materials Research Institute, Southern Federal University, Rostov-on-Don, Russia
2 – European Synchrotron Radiation Facility, Grenoble, France
3– University of Turin, Turin, Italy
4– Paul Scherrer Institute, Villigen, Switzerland

OP-II-7; 14.50-15.10
Presenting author: Dr. Vadim Yu. Murzin
Murzin V.[1,2], Caliebe W.[1], Welter E.[1]
X-ray Absorption Spectroscopy Studies of Catalysts at P64/P65 Beamlines
1 – Deutsches Elektronen-Synchrotron DESY, Hamburg, Germany
2 – University of Wuppertal, Wuppertal, Germany

OP-II-8; 15.10-15.30
Presenting author: Dr. Andrey A. Saraev
Saraev A.A.[1], Tsapina A.M.[1], Fedorov A.V.[1], Trigub A.L.[2], Murzin V.Yu.[3], Kaichev V.V.[1]
CuFeAl Nanocomposite Catalysts of CO Oxidation: *Operando* XAS Study
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – National Research Centre Kurchatov Institute, Moscow, Russia
3 – Deutsche Elektronen-Synchrotron, Hamburg, Germany

OP-II-9; 15.30-15.50

Presenting author: Dr. Alexander Yu. Klyushin

Klyushin A.Yu.[1,2], Jones T.[2], Li X.[2], Timpe O.[2], Huang X.[2], Lunkenbein T.[2], Bukhtiyarov A.V.[3], Prosvirin I.P.[3], Bukhtiyarov V.I.[3], Hävecker M.[4], Knop-Gericke A.[2,4], Schlögl R.[1,2,4]

Au Activation via Strong Metal Support Interaction in CO oxidation

1 – Helmholtz-Zentrum Berlin/BESSY II, Berlin, Germany
2 – Fritz Haber Institute of the Max Planck Society, Department of Inorganic Chemistry, Berlin, Germany
3 – Boreskov Institute of Catalysis, Novosibirsk, Russia
4 – Max Planck Institute for Chemical Energy Conversion, Department of Heterogeneous Reactions, Mülheim an der Ruhr, Germany

OP-II-10; 15.50-16.10

Presenting author: Dr. Andrey V. Bukhtiyarov

Bukhtiyarov A.V.[1], Prosvirin I.P.[1], Mamatkulov M.[1], Yudanov I.V.[1], Klyushin A.Yu.[2], Knop-Gericke A.[2], Neyman K.M.[3,4], Bukhtiyarov V.I.[1]

CO Oxidation on the Model Pd-Au/HOPG Catalysts: NAP XPS and MS Study

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Fritz-Haber-Institute der Max Planck Society, Berlin, Germany
3 – Departament de Ciència de Materials i Química Física and Institut de Quimica Teòrica I Computacional, Universitat de Barcelona, Barcelona, Spain
4 – ICREA (Institució Catalana de Recerca i Estudis Avançats), Barcelona, Spain

OP-II-11; 16.10-16.30

Presenting author: Dr. Olga A. Bulavchenko

Bulavchenko O.A.[1,2], Vinokurov Z.S.[1,2], Afonasenko T.N.[1], Tsyril'nikov P.G.[3], Ivanchikova A.V.[2], Gerasimov E.Y.[1,2], Saraev A.A.[1,2], Kaichev V.V.[1,2], Tsybulya S.V.[1,2]

***In Situ* XRD and XPS Study of the Reduction of Mixed Mn-Zr and Mn-Co Oxide Catalysts of CO Oxidation**

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia
3 – Center of New Chemical Technologies BIC, Omsk, Russia

16.30 *Coffee break, Poster session*

Eindhoven Hall

ORAL PRESENTATIONS

Section IV. Advanced catalyst systems addressing current challenges: energy, materials, sustainability

Chairman: Prof. Dr. Vladislav A. Sadykov

IOP-IV-1; 11.20-11.40
Presenting author: Prof., Dr. Ekaterina V. Scorb
Ryzhkov N.V.[1], Nesterov P.[1], Nikolaev K.[1], Yurchenko S.O.[2], Skorb E.V.[1]
Coupling Multilayers Regulated by pH with Photocatalytically Active Surface for Bionic Devices and Infochemistry
1 – ITMO University, Saint Petersburg, Russia
2 – Bauman Moscow State Technical University, Moscow, Russia

OP-IV-2; 11.40-12.00
Presenting author: Dr. Andrey A. Rempel
Rempel A.A.[1,2,3], Valeeva A.A[2,3], Weinstein I.A.[2], Kozlova E.A.[4], Dorosheva I.B.[1,2,3], Kuznetsova Yu.V.[3], Selishchev D.S.[4]
Organic Molecules Oxidation on Hybrid Titania – Cadmium Sulfide Photocatalyst Active under Visible Light
1 – Institute of Metallurgy UB RAS, Ekaterinburg, Russia
2 – NANOTECH Centre, Ural Federal University, Ekaterinburg, Russia
3 – Institute of Solid State Chemistry UB RAS, Yekaterinburg, Russia
4 – Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-IV-3; 12.00-12.20
Presenting author: Prof. Dr. Irina I. Mikhalenko
Pylinina A.I., Mikhalenko I.I.
Isobutanol Dehydration over Ag-ZP catalysts Obtained by Sol-Gel Method
Peoples Friendship University of Russia (RUDN-University), Moscow, Russia

OP-IV-4; 12.20-12.40

Presenting author: Dr. Ekaterina A. Kozlova

Kozlova E.A.[1,2], Lyulyukin M.N.[1,2], Markovskaya D.V.[1,2], Kozlov D.V.[1,2]

Photocatalytic CO_2 Reduction over $Cd_{1-x}Zn_xS$-Based Photocatalysts: Effect of the Phase Composition on the Reaction Rate and Product Distribution

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – Novosibirsk State University, Novosibirsk, Russia ¶

OP-IV-5; 12.40-13.00

Presenting author: Dr. Yulia S. Demidova

Demidova Yu.S.[1,2], Suslov E.V.[3], Mozhajcev E.S.[3], Simakova O.A.[4], Volcho K.P.[2,3], Salakhutdinov N.F.[2,3], Simakova I.L.[1,2], Murzin D.Yu.[5]

Hydrogenation of Monoterpenoids Catalyzed by Gold and Platinum Catalysts

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – Novosibirsk State University, Novosibirsk, Russia

3 – Novosibirsk Institute of Organic Chemistry, Novosibirsk, Russia

4 – Georgia Institute of Technology, Atlanta, USA

5 – Åbo Akademi University, Turku/Åbo, Finland

13.00 *Lunch*

Eindhoven Hall

ORAL PRESENTATIONS

Section IV. Advanced catalyst systems addressing current challenges: energy, materials, sustainability

Chairman: Dr. Evgenii V. Kondratenko

OP-IV-6; 14.30-14.50
Presenting author: Prof. Dr. Ekaterina S. Lokteva
Lokteva E.S., Kaplin I.Yu., Golubina E.V., Maslakov K.I., Zhilyaev K., Shishova V.V., Tikhonov A.V.
The Effect of Template Nature and the Composition of Double and Triple Oxide Catalysts Based on CeO_2 in CO Oxidation
Lomonosov Moscow State University, Moscow, Russia

OP-IV-7; 14.50-15.10
Presenting author: Prof. Dr. Tomasz P. Maniecki
Maniecki T.P.[1], Shtyka O.[1], Ciesielski R.[1], Kędziora A.[1], Maniukiewicz W.[1], Zakrzewski M.[1], Dubkov S.[2], Gromov D.[2]
Photocatalytic Reduction of CO_2 over Me (Pt, Ru, Pd, Au)/TiO_2 catalysts
1 – Technical University of Lodz Faculty of Chemistry, Institute of General and Ecological Chemistry, Lodz, Poland
2 – Moscow Institute of Electronic technology (MIET), Moscow, Russia

OP-IV-9; 15.10-15.30
Presenting author: Dr. Alexey A. Pimerzin
Pimerzin Al.A.[1], Martynenko E.A.[1], Savinov A.A.[1], Verevkin S.P.[1,2], Pimerzin A.A.[1]
The Features of the Decalin Dehydrogenation over Platinum Catalysts Supported over Various Silica-Alumina Carriers
1 – Samara State Technical University, Samara, Russia
2 – Institute of Chemistry, University of Rostock, Germany

OP-IV-10; 15.30-15.50
Presenting author: Dr. Sukhe D. Badmaev
Badmaev S.D., Pechenkin A.A., Paukshtis E.A., Belyaev V.D., Sobyanin V.A.
Catalytic Chemistry of Dimethoxymethane: Carbonylation, Steam Reforming and Partial Oxidation
Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-IV-11; 15.50-16.10
Presenting author: Dr. Evgeny I. Vovk
Vovk E.I.[1], Zhou X.[1], Liu Z.[1], Guan C.[1], Yang Y.[1], Kong W.[2], Si R.[3]
Why Ni/Silicalite-1 Catalyst Shows High Stability and Reactivity in Dry Reforming of Methane?
1 – ShanghaiTech University, Shanghai, China
2 – Shanghai Advanced Research Institute, Shanghai, China
3 – Shanghai Synchrotron Radiation Facility, Shanghai, China

16.30 *Coffee break, Poster session*

Amersfoort Hall

ORAL PRESENTATIONS

School-Conference for young scientists «CATALYSIS FOR ENERGY, FUELS, RENEWABLES»

Chairmen: Prof. Dr. Jorge Gascon
Prof. Dr. Tomasz Maniecki

OPS-1; 11.20-11.35
Presenting author: Elena A. Stolyarova
Stolyarova E.A.[1], Saiko A.V.[1], Zaikina O.O.[1,2], Sosnin G.A.[1,2], Yeletsky P.M.[1], Klimov O.V.[1], Yakovlev V.A.[1], Noskov A.S.[1]
NiMoP Catalyst in the Hydroprocessing of Mixture of Straight-Run Diesel Fuel and Secondary Light Fractions Obtained by Catalytic Steam Cracking of Vacuum Residue
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

OPS-2; 11.35-11.50
Presenting author: Dr. Mateusz L. Zakrzewski
Zakrzewski M., Shtyka O., Ciesielski R., Kedziora A., Maniecki T.
Determination of the Type and Reactivity of Carbon Deposits in the Mixed Reforming of Methane
Lodz University of Technology, Institute of General and Ecological Chemistry, Lodz, Poland

OPS-3; 11.50-12.05
Presenting author: Igor A. Chetyrin
Chetyrin I.A., Bukhtiyarov A.V., Prosvirin I.P., Bukhtiyarov V.I.
***In situ* XPS and MS Study of Methane Oxidation over Bimetallic Pt-Pd/Al_2O_3 Catalysts**
Boreskov Institute of Catalysis, Novosibirsk, Russia

OPS-4; 12.05-12.20
Presenting author: Anna M. Tsapina
Tsapina A.M.[1], Selivanova A.V.[1], Saraev A.A.[1], Fedorov A.V.[1], Vorokhta M.[2], Šmíd B.[2], Kaichev V.V.[1]
***In situ* NAP-XPS Study of Cu-Fe-Al-Based Nanocomposite Catalysts of CO Oxidation**
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Charles University, Prague, Czech Republic

OPS-5; 12.20-12.35
Presenting author: Aleksandra V. Selivanova
Selivanova A.V.[1], Tsapina A.M.[1], Medvedeva Yu.I.[2], Saraev A.A.[1], Kaichev V.V.[1], Bukhtiyarov V.I.[1]
***In situ* Study of Methanol Adsorption on Pt(111) and Pd(111) at Low Temperatures by Polarization Modulation infrared Reflection Absorption Spectroscopy**
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State Technical University, Novosibirsk, Russia

OPS-6; 12.35-12.50
Presenting author: Daria V. Glyzdova
Glyzdova D.V.[1], Afonasenko T.N.[1], Domanina T.P.[1], Leont'eva N.N.[1], Prosvirin I.P.[2], Bukhtiyarov A.V.[2], Shlyapin D.A.[1]
Study of the Zinc Addition Influence on the Pd/Sibunit Catalyst of Selective Acetylene Hydrogenation
1 – Center of New Chemical Technologies BIC, Omsk, Russia
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

OPS-7; 12.50-13.05
Presenting author: Sergey V. Zubkevich
Zubkevich S.V.[1], Tuskaev V.A.[1,2], Gagieva S.Ch.[1], Pavlov A.A.[2], Bulychev B.M.[1]
The Formation of Precatalysts for Selective Ethylene Dimerization in System $NiBr_2$[bis(3,5-Dimethylpyrazol-1-yl)Methane]/PPh_3
1 – Moscow State University, Chemical Department, Moscow, Russia
2 – Nesmeyanov Institute of Organoelement Compounds, RAS, Moscow, Russia

13.00 *Lunch*

Amersfoort Hall

ORAL PRESENTATIONS

School-Conference for young scientists «CATALYSIS FOR ENERGY, FUELS, RENEWABLES»

Chairmen: Dr. Simon Penner
Dr. Anton A. Gabrienko

OPS-8; 14.30-14.45
Presenting author: Rob J.G. Nuguid
Nuguid R.J.G.[1,2], Nachtegaal M.[2], Ferri D.[2], Kröcher O.[1,2]
Mechanistic Insights into the Selective Catalytic Reduction of NO Revealed by Modulated-Excitation Raman Spectroscopy
1 – Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland
2 – Paul Scherrer Institut, Villigen, Switzerland

OPS-9; 14.45-15.00
Presenting author: Nadezhda A. Nikitina
Nikitina N.A., Pichugina D.A., Kuz'menko N.E.
DFT Simulation of the Molecular Structure of VO_x/TiO_2 Catalysts
Lomonosov Moscow State University, Moscow, Russia

OPS-10; 15.00-15.15
Presenting author: Mikhail A. Salaev
Salaev M.A., Salaeva A.A., Vodyankina O.V.
A Theoretical Study of the Effects of Promoters of Silver Catalysts for Ethylene Epoxidation
Tomsk State University, Tomsk, Russia

OPS-11; 15.15-15.30
Presenting author: Alina A. Skorynina
Skorynina A.A.[1], Olsbye U.[2], Lillerud K.P.[2], Lamberti C.[1,3], Soldatov A.V.[1], Bugaev A.L.[1]
Theoretical Investigation of Active Metal Sites in Pt- and Pd-Functionalized Metal-Organic Frameworks
1 – Southern Federal University, Rostov-on-Don, Russia
2 – University of Oslo, Oslo, Norway
3 –University of Turin, Turin, Italy

OPS-13; 15.30-15.45
Presenting author: Anna Yu. Kurenkova
Kurenkova A.Yu.[1], Markovskaya D.V.[1,2], Kozlova E.A.[1,2]
Photocatalytic Hydrogen Evolution from Glucose Aqueous Solutions under Visible Light Irradiation
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

OPS-14; 15.45-16.00
Presenting author: Maria V. Dmitrieva
Dmitrieva M.V., Zolotukhina E.V., Gerasimova E.V., Dobrovolskiy Yu.A.
Kinetic Features of Mediator Bioelectrocatalytic Oxidation of Glucose by «Crude» Bacterial Extracts
Institute of Problems of Chemical Physics Chernogolovka, Russia

OPS-15; 16.00-16.15
Presenting author: Nikita S. Kovalevskiy
Kovalevskiy N.S.[1,2], Selishchev D.S.[1,2], Svintsitskiy D.A.[1,2], Selishcheva S.A.[1,2], Kozlov D.V.[1,2]
Synergetic Effect of Polychromatic Irradiation in the Reactions of Photocatalytic Oxidation on the Surface of N-Doped Titanium Dioxide
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

16.30 *Coffee break, Poster session*

Thursday, October 10

*The hotel Golden Tulip, Rosa Khutor 4**
(Naberezhnaya Panorama 3, Estosadok, Russia)

Ballroom Hall

Chairmen: Prof. Dr. Günther Rupprechter
Prof. Dr. Hendrik Bluhm

PLENARY LECTURE

PL-6; 9.00-9.40
Presenting author: Prof. Dr. Jun Li
Nano-Catalysis vs. Dynamic Single-Atom Catalysis: Insights from Computational Modelling
Theoretical Chemistry Center, Department of Chemistry, Tsinghua University, Beijing, China

KEYNOTE LECTURES

KL-3; 09.40-10.10
Presenting author: Prof. Dr. Konstantin P. Bryliakov
Ottenbacher R.V.[1,2], Talsi E.P.[1,2], Bryliakov K.P.[1,2]
Dynamic Nonlinear Effects in Asymmetric Catalysis
1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

KL-4; 10.10-10.40
Presenting author: Prof. Dr. Justin S. J. Hargreaves
Mechanistic Considerations Related to Ammonia Synthesis
School of Chemistry, Joseph Black Building, University of Glasgow, Glasgow, UK

10.40 *Coffee break*

Ballroom Hall

ORAL PRESENTATIONS

Section III. Kinetics and mechanisms of catalyzed processes

Chairman: Prof. Dr. Mikhail Yu. Sinev

OP-III-14; 11.20-11.40
Presenting author: Prof. Dr. Valentina G. Matveeva
Matveeva V.G., Protsenko I.I., Nikoshvili L.Zh., Sulman E.M.
Kinetics of Levulinic Acid Hydrogenation to Gamma-Valerolactone Using Ru-Containing Polymeric Catalysis
Tver Technical University, Tver, Russia

OP-III-15; 11.40-12.00
Presenting author: Dr. Vladimir A. Zakharov
Zakharov V.A., Nikolaeva M.I., Matsko M.A., Barabanov A.A., Sukulova V.V.
Stereospecific Propylene Polymerization over Supported Titanium-Magnesium Catalysts: Study of the Effect of Catalyst Composition on the Distribution of Active Sites According to Stereospecificity
Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-III-16; 12.00-12.20
Presenting author: Ildar I. Salakhov
Olefins and Dienes Polymerization over Ziegler-Natta Catalysts Modified with Various Chlorohydrocarbons*R&D Centre PJSC Nizhnekamskneftekhim, Nizhnekamsk, Russia*

OP-III-17; 12.20-12.40
Presenting author: Viktor Yu. Bychkov
Bychkov V.Yu., Tulenin Yu.P., Slinko M.M., Korchak V.N.
Effect of Surface Oxidation Degree on Catalytic Activity of Metallic Ni and Co
Semenov Institute of Chemical Physics RAS, Moscow, Russia

Ballroom Hall

13.00 **Closing ceremony**

13.20 *Lunch*

15.00 ***Excursion around Rosa Khutor***

Eindhoven Hall

ORAL PRESENTATIONS

Section IV. Advanced catalyst systems addressing current challenges: energy, materials, sustainability

Chairman: Dr. Ekaterina A. Kozlova

OP-IV-12; 11.20-11.40
Presenting author: Prof. Dr. Oxana P. Taran
Taran O.P.[1,2], Yashnik S.A.[2], Boltenkov V.V.[2], Parkhomchuk E.V.[2], Sashkina K.A.[2], Babushkin D.E.[2], Parmon V.N.[2]
Formic Acid Production via Methane Peroxide Oxidation over Oxalic Acid Activated Fe-MFI Catalysts. Mechanistic Insights
1 – Institute of Chemistry and Chemical Technology SB RAS, FRC KSC SB RAS, Krasnoyarsk
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

OP-IV-13; 11.40-12.00
Presenting author: Dr. Radoslaw Ciesielski
Ciesielski R., Zakrzewski M., Kubicki J., Maniukiewicz W., Kedziora A., Maniecki T.P.
Mechanistic Studies of Methanol Synthesis Reaction over Cu and Pd-Cu Catalysts
Lodz University of Technology, Lodz, Poland

OP-IV-14; 12.00-12.20
Presenting author: Dr. Tamara S. Kharlamova
Kharlamova T., Timofeev K., Vodyankina O.
The Role of Structural, Redox and Acid-Base Properties of Monolayer $MgVO_x/Al_2O_3$ Catalysts in Oxidative Dehydrogenation of Propane
Tomsk State University, Tomsk, Russia

OP-IV-15; 12.20-12.40

Presenting author: Dr. Liudmila B. Okhlopkova
Okhlopkova L.B.[1], Kerzhentsev M.A.[1], Ismagilov Z.R.[1,2]

Titania-Zirconia Coatings of a Capillary Microreactor for the Selective Hydrogenation of 2-Methyl-3-Butyn-2-ol Using a PdZn/$Ti_xZr_{1-x}O_2$ Catalyst: Stability, Effect of the Catalyst's Activation Conditions and a Kinetic Study

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Institute of Coal Chemistry and Material Science FRC CCC SB RAS, Kemerovo, Russia

Ballroom Hall

13.00 **Closing ceremony**

13.20 *Lunch*

15.00 ***Excursion around Rosa Khutor***

POSTER PRESENTATIONS

Section I. Basic concepts, theory and modeling in catalysis

PP-I-1
Belozertseva N.E., Belinskaya N.S.
Computer Simulation System for the Catalytic Dewaxing Process
Tomsk Polytechnic University, Tomsk, Russia

PP-I-3
Dyusembaeva A.A., Vershinin V.I.
Computer Simulation of the Kinetics of a Multistage Process as a Method of Studying the Mechanism of Catalytic Naphtha Reforming
Dostoevsky Omsk State University, Omsk, Russia

PP-I-4
Grinvald I.I., Kalagaev I.Yu., Spirin I.A., Kapustin R.V., Petukhov A.N.
Catalysis of Hydrogen Atom Transfer in Water Complexes with Organic Compounds
Nizhny Novgorod State Technical University, Nizhny Novgorod, Russia

PP-I-6
Kolesnikov I.M.
Generalized Quantum-Chemical Principle and the Theory of Catalysis by Polyedres as a Basis Formulating the Mechanisms of Chemical and Catalytic Processes
Gubkin Russian State University of Oil and Gas, Moscow, Russia

PP-I-9
Mashkovsky I.S., Rassolov A.V., Smirnova N.S., Baeva G.N., Bragina G.O., Stakheev A.Yu.
Tuning the Structure of Active Sites and Catalytic Performance of Pd-Ag/Al_2O_3 Selective Hydrogenation Catalyst by CO and O_2 Adsorption-Induced Segregation
N.D. Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

PP-I-10

Mashkovsky I.S.[1], Smirnova N.S.[1], Markov P.V.[1], Baeva G.N.[1], Bragina G.O.[1], Bukhtiyarov A.V.[2], Prosvirin I.P.[2], Bukhtiyarov V.I.[2], Stakheev A.Yu.[1]

Mild Oxidative-Reductive Treatments as an Effective Way to Tune the Surface Structure and Catalytic Properties of PdIn Catalyst in Liquid-Phase Hydrogenation of Substituted Alkynes

1 – N.D. Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-I-12

Mytareva A.I., Bokarev D.A., Baeva G.N., Belyankin A.Yu., Stakheev A.Yu.

Dual-Zone Zeolite Catalyst for Complex Abatement of Power Plant and Automotive Emissions

N.D. Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

PP-I-16

Vovdenko A.G.[1], Vovdenko M.K.[1], Koledina K.F[1,2], Gubaydullin I.M.[1,2]

Mathematical Modeling of Reaction Benzylbutyl Ethersynthesis

1 – Institute of Petrochemistry and Catalysis RAS, Ufa, Russia
2 – Ufa State Petroleum Technological University, Ufa, Russia

Section II. Physical methods, including in situ and operando techniques, in catalysis

PP-II-1

Vinokurov Z.S.[1,2], Bulavchenko O.A.[1,2], Afonasenko T.N.[3], Tsybulya S.V.[1,2]

Influence of CO oxidation conditions on the MnOx-ZrOx catalyst structure: in situ XRD and MS study

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia
3 – Center of New Chemical Technologies BIC, Omsk, Russia

PP-II-2

Parfenov M.V., Ivanov D.P., Dubkov K.A., Kharitonov A.S.

Gas-Phase Selective Oxidation of Propane-Propylene Mixture with Nitrous Oxide

Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-II-3

Gabrienko A.A.[1,2], Danilova I.G.[2], Stepanov A.G.[1,2]

Zeolite Brønsted Acidity: Direct Quantitative Characterization by Joint FTIR Spectroscopy and Solid-State ^{1}H MAS NMR Approach

1 – Novosibirsk State University, Novosibirsk, Russia
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-II-4

Kamyshova E., Skorynina A., Bugaev A., Soldatov A.

X-ray Absorption Spectroscopy Study of Metal-Organic Frameworks Functionalized by Pd for Catalytic Hydrogenation of CO_2

Southern Federal University, Rostov-on-Don, Russia

PP-II-5

Klokov S.V.[1], Lokteva E.S.[1], Golubina E.V.[1], Maslakov K.I.[1], Isaikina O.Y.[1], Trenikhin M.V.[2,3]

The Nature of Active Sites in PdCo/C Catalysts Prepared by Pyrolysis of Wood Sawdust Impregnated with $Pd(NO_3)_2$ and $Co(NO_3)_2$ in Hydrodechlorination of Chlorobenzene

1 – Lomonosov Moscow State University, Moscow, Russia
2 – Omsk State Technical University, Omsk, Russia
3 – Omsk Scientific Centre of SB RAS, Omsk, Russia

PP-II-7

Köpfle N.[1], Götsch T., Grünbacher M.[1], Carbonio E. A.[2], Hävecker M.[2], Knop-Gericke A.[2], Schlicker L.[3], Doran A.[4], Kober D.[3], Gurlo A.[3], Penner S.[1], Klötzer B.[1]

Zirconium-Assisted Activation of Palladium to Boost Syngas Production by Methane Dry Reforming

1 – Institute of Physical Chemistry, University of Innsbruck, Innsbruck, Austria
2 –Department of Inorganic Chemistry Fritz-Haber-Institute of the Max-Planck-Society, Berlin, Germany
3 – Fachgebiet Keramische Werkstoffe/Chair of Advanced Ceramic Materials, Institut für Werkstoffwissenschaften und -technologien, Technische Universität Berlin, Berlin, Germany
4 –Advanced Light Source, Lawrence Berkeley National Laboratory Berkeley, California, USA

PP-II-8

Selivanova A.V.[1], Kurenkova A.Y.[1], Tsapina A.M.[1], Saraev A.A.[1,2], Kozlova E.A.[1,2], Kaichev V.V.[1,2]

Photocatalytic Hydrogen Production over Titania-Based Photocatalysts

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

PP-II-9

Shemet D.B., Pryadchenko V.V., Menshikov V.S., Nevelskaya A.K., Guterman V.E., Bugaev L.A.

Atomic Structure and Catalytic Properties of Bimetallic Nanoparticles PtM (M = Ni, Co, Cu) in Metall-Carbon PtM/C Electrocatalysts for Low-Temperature Fuel Cells

Southern Federal University, Rostov-on-Don, Russia

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Shilina M.I.[1], Gloriozov I.P.[1], Zhidomirov G.M.[1,2]

Adsorption and Oxidation of Carbon Monoxide on Co - ZSM-5 Zeolites

1 – Lomonosov Moscow State University, Moscow, Russia
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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Shmakov A.N., Nesterov N.S., Yakushkin S.S., Martyanov O.N.

***In Situ* High Energy XRD Study of Reduction Process of Transition Metal Oxides in Supercritical Isopropanol**

Boreskov Institute of Catalysis, Novosibirsk, Russia

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Spirin I.A., Grinvald I.I., Kalagaev I.Yu., Kapustin R.V.

IR Study of Hydrogen Atom Transfer in Hydrates of Alkali Metal Halides

Nizhny Novgorod Technical State University n.a. R.E. Alekseev, Nizhny Novgorod, Russia

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Usoltsev O.A.[1], Bugaev A.L.[1], Skorynina A.A.[1], Tereshchenko A.A.[1], Lomachenko K.A.[2], Guda A.A.[1], Groppo E.[3], Pellegrini R.[4], Lamberti C.[1,3], Soldatov A.V.[1]

Dynamics of the Atomic and Electronic Structure of Nanoparticles of Noble Metals during Catalytic Reactions

1 – Southern Federal University, Rostov-on-Don, Russia
2 – European Synchrotron Radiation Facility, Grenoble, France
3 – University of Turin, Turin, Italy
4 – Chimet SpA - Catalyst Division, Arezzo, Italy

Section III. Kinetics and mechanisms of catalyzed processes

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Agafonov Yu.A.[1], Gaidai N.A.[1], Botavina M.A.[2], Lapidus A.L.[1]

Specifics of Propane Dehydrogenation over Silica Supported Gallium Catalysts

1 – N.D.Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia
2 – University of Torino, Department of IPM Chemistry and NIS Centre, Torino, Italy

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Luu Cam Loc[1], Dao Thi Kim Thoa[2], Nguyen Tri[1], Ha Cam Anh[2], Gaidai N.A.[3], Agafonov Yu.A.[3], Lapidus A.L.[3]

HZSM-5 Supported Pt- and Pd-Catalysts Doped by Ni for Hydro-Isomerisation of n-Hexane

1 – Institute of Chemical Technology, Vietnam Acad. Sci. Techn., Ho Chi Minh City, Vietnam
2 – Ho Chi Minh City University of Technology, Ho Chi Minh City, Vietnam,
3 – N.D. Zelinsky Institute of Organic Chemistry, Russian Acad. Sci., Moscow, Russia

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Badyrova N.M., Nindakova L.O.

Hydrogenation of Dimethyl Itaconate over Rhodium Nanoparticles, Modified by Optically Active Quarternary Ammonium Salts

Irkutsk National Research Technical University (IRNITU), Irkutsk, Russia

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Investigation the Transformations Regularities of Stable Gas Condensate Hydrocarbons during Their Processing on Zeolite Catalysts

Tomsk Polytechnic University, Tomsk, Russia

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Benzylic C-H Hydroxylations in the Presence of Bioinspired Mn Complexes: the Origin of Acetate Products

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – Novosibirsk State University, Novosibirsk, Russia

3 – State Key Laboratory for Oxo Synthesis and Selective Oxidation, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, China

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

Palladium-Catalyzed Allylation and Hydroallylation of Norbornadiene: Key Intermediates and Mechanism

MIREA – Russian Technological University, Institute of Fine Chemical Technologies named after M.V. Lomonosov, Moscow, Russia

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Elimanova G.G., Batyrshin N.N., Kharlampidi Kh.E.

The Mechanism of Decomposition and Stabilization of Molybdenum Epoxidation Catalysts for Olefinic Hydrocarbons

Kazan National Research Technological University, Kazan, Russia

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Kinetic Experiment of Dry Reforming of Methane on $Mo_2C/CeZrO_2$ Catalysts

D. Mendeleev University of Chemical Technology, Moscow, Russia

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Golub F.S.[1], Beloshapkin S.A.[2], Bolotov V.A.[1], Parmon V.N.[1], Bulushev D.A.[1]

Hydrogen Production from Formic Acid Decomposition over Pd/C Catalysts: Effect of Deposition of N-Containing Precursors on Carbon Support

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

2 – University of Limerick, Limerick, Ireland

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Gorokhova E.O.[1], Kulchakovskaya E.V.[1], Asalieva E.Yu.[1], Sineva L.V.[1,2], Mordkovich V.Z.[1,2]

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1 – Technological Institute for Superhard and Novel Carbon Materials, Troitsk, Moscow, Russia
2 – INFRA Technology LLC, Moscow, Russia

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1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

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Kaichev V.V., Maksimov G.M., Fedorov A.V., Gerasimov E.Yu., Tsapina A.M., Selivanova A.V., Saraev A.A.

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Boreskov Institute of Catalysis, Novosibirsk, Russia

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Koledina K.F.[1,2], Koledin S.N.[2], Gubaydullin I.M.[1,2]

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1 – Institute of Petrochemistry and Catalysis, Russian Academy of Sciences, Ufa, Russia
2 – Ufa State Petroleum Technological University, Ufa, Russia

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Larina E.V., Lagoda N.A., Yarosh E.V., Kurokhtina A.A, Schmidt A.F.

Differential Selectivity Measurements of Phosphine-Containing and Phosphine-Free Catalytic Systems of Mizoroki-Heck Reaction with Aromatic Carboxylic Anhydrides

Irkutsk State University, Chemical Department, Irkutsk, Russia

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1 – Lomonosov Moscow State University, Moscow, Russia

2 – Baku Branch of Lomonosov Moscow State University, Baku, Azerbaijan

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Nikoshvili L.Zh.[1], Matveeva V.G.[1], Sulman E.M.[1], Kiwi-Minsker L.[2]

Influence of the Affinity of Metal Precursor to Polymeric Support on Activity of Ligandless Catalysts of Suzuki Cross-Coupling

1 – Tver Technical University, Tver, Russia

2 – Tver State University, Tver, Russia

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Butlerov Institute of Chemistry KFU, Kazan, Russia

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Semenov Institute of Chemical Physics, Russian Academy of Science, Moscow, Russia

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Investigation of the Mechanism of Triethoxysilane Dismutation over Ion-Exchange Resign in a Free Base Form via Operando FTIR Technique

Nizhny Novgorod State Technical University n.a. R.E. Alekseev, Nizhny Novgorod, Russia

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Catalytic Generation of Radicals in Mixed Micelles {Acetylcholine – Hydroperoxide}

Semenov Institute of Chemical Physics RAS, Moscow, Russia

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Rishina L.A.[1], Kissin Y.V.[2], Gagieva S.Ch.[3], Lalayan S.S.[1]

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1 – Semenov Institute of Chemical Physics, Rus. Acad. Sci., Moscow, Russia
2 – Rutgers, The State University of New Jersey, Department of Chemistry and Chemical Biology, USA
3 – Moscow State University, Department of Chemistry, Moscow, Russia

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Shangareev D.R., Antonova T.N., Sivova T.S., Abramov I.G.

The Mechanism of Cyclooctene Epoxide Formation in the Process of Catalytic Liquid-Phase Oxidation of Cyclooctene by Molecular Oxygen

Yaroslavl State Technical University, Yaroslavl, Russia

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Shorayeva K.A.[1], Massalimova B.K.[1], Sadykov V.A.[2], Nauryzkulova S.M.[1], Altynbekova D.T.[1], Jetpisbayeva G.D.[1]

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1 – Taraz State University, Taraz, Kazakhstan
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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Simakova I.L.[1,2], Demidova Yu.S.[1,2], Devi N.[3], Dhepe P.[3], Bokade V.[3]

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1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia
3 – CSIR-National Chemical Laboratory, Pune, India

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1 – Center of New Chemical Technologies BIC, Omsk, Russia
2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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Oxidation of N-(Phosphonomethyl) Iminodiacetic Acid with Hydrogen Peroxide in Phase-Transfer Conditions

Boreskov Institute of Catalysis, Novosibirsk, Russia

Section IV. Advanced catalyst systems addressing current challenges: energy, materials, sustainability

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Alikin E.A.[1], Denisov S.P.[1], Baksheev E.O.[1,2], Kenzhin R.M.[3], Vedyagin A.A.[3]

The Effect of Barium on Behaviour of the OSC-Material in the Composition of Three-Way Catalysts

1 – Ecoalliance LTD, Novouralsk, Russia
2 – Ural Federal University, Yekaterinburg, Russia
3 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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The Influence of Synthesis Parameters on Surface Characteristics of Alumina

Ural Federal University, Ekaterinburg, Russia

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Oxidative Desulfurization of Diesel Fuel Catalysed by Brønsted Acidic Ionic Liquids with Heteropolyacids Immobilized on γ-Al_2O_3 and Silica

1 – M.V. Lomonosov Moscow State University, Moscow, Russia
2 – Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen, Germany
3 – Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Moscow, Russia

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Gubkin Russian State University of Oil and Gas, Moscow, Russia

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2,4,6-Triphenylpyridine as "Metal-Free" Electrocatalyst of Hydrogen Evolution Reaction (HER)

Mordovian Ogarev State University, Saransk, Russia

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National Research University of Electronic Technology - MIET, Zelenograd, Russia

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1 – Semenov Institute of Chemical Physics RAS, Moscow, Russia
2 – Kurnakov Institute of General and Inorganic Chemistry RAS, Moscow, Russia

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Lomonosov Moscow State University, Moscow, Russia

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The Effect of Sr Substitution in Bulk and Supported $La_{1-x}Sr_xFeO_3$ Perovskites on the Catalytic Activity in NH_3 Oxidation and N_2O Decomposition Reactions

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia
3 – ShanghaiTech University, Shanghai, China

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Ivanova Y.A.[1], Sutormina E.F.[1], Nartova A.V.[1,2], Isupova L.A.[1]

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1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

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2 – VSB-TU of Ostrava, Institute of Environmental Technology, Ostrava, Czech Republic

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Kabachkov E.N.[1,2], Balikhin I.L.[1,2], Vershinin N.N.[1], Efimov O.N.[1], Kurkin E.N.[1,2]

Synthesis and Properties of Catalyst Based on Titanium Dioxide Modified by Nanomaterials and Catalytic Metals (Pt, Pd) Used in Air Purifiers

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2 – Scientific Center of the Russian Academy of Sciences in Chernogolovka, Chernogolovka, Moscow region, Russia

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Lomonosov Moscow State University, Moscow, Russia

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1 – Institute of Environmental Technology, VSB – Technical University of Ostrava, Ostrava, Czech Republic
2 – Centre Energy Units for Utilization of Non-traditional Energy Source, VSB-Technical University of Ostrava, Ostrava, Czech Republic
3 – Institute of Chemical Process Fundamentals of the CAS, Prague, Czech Republic

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1 – Samara State Technical University, Samara, Russia
2 – All-Russia Research Institute of Oil Refining, Moscow, Russia

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Koskin A.P.[1], Vedyagin A.A.[1,2]

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2 – National Research Tomsk Polytechnic University, Tomsk, Russia

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1 – Peoples' Friendship University of Russia (RUDN University), Faculty of Science, Physical and Colloidal Chemistry Department, Moscow, Russian Federation
2 – Saint-Petersburg State University, Saint-Petersburg, Russia

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2 – Novosibirsk State University, Novosibirsk, Russia

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1 – Institute of Solid State Chemistry of UrB RAS, Ekaterinburg, Russia
2 – I.Ya. Postovskii Institute of Organic Synthesis of UrB RAS, Ekaterinburg, Russia

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2 – Southern Federal University, Rostov-on-Don, Russia

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2 – Novosibirsk State University, Novosibirsk, Russia

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Technical University of Lodz Faculty of Chemistry,
Institute of General and Ecological Chemistry, Lodz, Poland

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Peoples' Friendship University of Russia (RUDN University), Moscow, Russia

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Tver State Technical University, Tver, Russia

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The Inhibition of Hydrogen and Oxygen Recombination by Halogen Atoms and its Effect on Over-All Water Splitting over Pt-TiO_2

Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, China

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2 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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2 – Center of New Chemical Technologies BIC, Omsk, Russia

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2 – Lomonosov Moscow State University, Chemical Department, Moscow, Russia

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Highly Dispersed Catalysts Mo_2C – WC for the Dry Reforming of Methane

D. Mendeleev University of Chemical Technology, Moscow, Russia

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Effect of Anodization and Annealing Regimes on the Photocatalytic Properties of Nanostructured Tungsten Oxide Layers

National Research University of Electronic Technology, Zelenograd, Moscow, Russia

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Nishchakova A.D.[1,2], Asanov I.P.[1,2], Bulushev D.A.[3], Bulusheva L.G.[1,2]

Porous Nitrogen-Doped Carbon Materials as Supports for Catalytically Active Ni Nanoparticles for Hydrogen Production from Gas-Phase Formic Acid

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2 – Novosibirsk State University, Novosibirsk, Russia
3 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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1 – Boreskov Institute of Catalysis, Novosibirsk, Russia

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Effect of Cs Content in Co_3O_4 Deposited on the Ceramic Foam Support Catalyst for N_2O Decomposition

Institute of Environmental Technology, VŠB – Technical University of Ostrava, Ostrava, Czech Republic

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Simakova I.L.[1,2], Demidova Yu.S.[1,2], Devi N.[3], Dhepe P.[3], Bokade V.[3]

Hydrogenation of Ethyl Levulinate to γ-Valerolactone over Ir Catalysts

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia
3 – CSIR-National Chemical Laboratory, Pune, India

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Low Percent Size-Selected Pd and Pt Catalysts Prepared by Laser Electrodispersion in the CO Oxidation

1 – Lomonosov Moscow State University, Moscow, Russia
2 – Ioffe Physico-Technical Institute of RAS, St. Petersburg, Russia

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Chernykh M.V., Mikheeva N.N., Mamontov G.V.

Reduction of Nitrocompounds over Ag-CeO_2 Catalysts

Tomsk State University, Tomsk, Russia

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1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

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Styrene Photocatalytic Oxidation over Me (Au, Pt, Pd)/TiO_2-NTs Supported Catalysts

1 – National Research University of Electronic Technology, Moscow, Russia
2 – Lodz University of Technology, Lodz, Poland

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Shefer K.I.[1,2], Kovtunova L.M.[1,2], Rogozhnikov V.N.[1], Chetyrin I.A.[1], Suprun E.A.[1], Stonkus O.A.[1,2], Larina T.V.[1]

Pt and Rh Catalysts Supported on Alumina and Structured Supports for the Reaction of Partial Oxidation of Hydrocarbons

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

PP-IV-50

Shesterkina A.A., Strekalova A.A., Kirichenko O.A., Redina E.A., Kustov L.M.

Novel Fe-Containing Catalysts for the Selective Hydrogenation of Aldehydes and Nitro-Compounds

Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Moscow, Russian Federation

PP-IV-51

Shikina N.V.[1], Gavrilova A.A.[1], Yashnik S.A.[1], Litvak G.S.[1], Khairulin S.R.[1], Ismagilov Z.R.[1,2]

Formation Mechanism of Active Phases Based on Mn, Mn-La, Mn-Ce Oxides under Solution Combustion Synthesis

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Institute of Coal Chemistry and Chemical Materials Science, Federal Research Center of Coal and Coal Chemistry SB RAS, Kemerovo, Russia

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Sinitsin S.A.[1], Polovinkin M.A.[1], Gavrilov Y.A.[1], Danilov E.A.[2], Kostiuchenko V.V.[3], Vodoleev V.V.[3]

Energy-Effective Fe-Mo Catalyst for the Process of Oxidative Dehydrogenation of Methanol to Formaldehyde

1 –Mendeleev University of Chemical Technology of Russia, Moscow, Russia
2 – JSC "Scientific Research Institute of Graphite-Based Structural Materials "NIIgrafit", Moscow, Russia
3 – JSC "Tehmetall-2002", Kirovgrad, Russia

PP-IV-55

Smirnova E.M., Shukralieva A.S., Zasypalov G.O., Glotov A.P., Vinokurov V.A.

Benzene Hydrogenation over Ruthenium Catalysts Supported on Aluminosilicate Nanotubes

Gubkin Russian State University of Oil and Gas, Moscow, Russia

PP-IV-56

Konishcheva M.V.[1,2], Potemkin D.I.[1,2], Snytnikov P.V.[1,2], Sobyanin V.A.[1,2]

From Mechanistic Studies of the Preferential CO Methanation in the Presence of CO_2 to Design of Structured Nickel-Ceria Catalysts

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State University, Novosibirsk, Russia

PP-IV-57

Solomonik I.G., Gorshkov A.S., Gryaznov K.O., Zhukova E.A., Ivanov L.A., Perezhogin I.A., Mordkovich V.Z.

Effect of Long-Term Pilot Run on the Properties of Highly Productive Fischer–Tropsch Synthesis Catalyst

Technological Institute for Superhard and Novel Carbon Materials, Moscow, Russia

PP-IV-58

Stolyarova E.A., Klimov O.V., Saiko A.V., Gerasimov E.Y., Chetyrin I.A., Noskov A.S.

Influence of the Silica Sol Addition to the Catalytic Activity of CoMoP Hydrotreating Catalysts

Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-IV-59

Matus E.V.[1,2], Shlyakhtina A.S.[2], Sukhova O.B.[1], Ismagilov I.Z.[1], Kerzhentsev M.A.[1], Ismagilov Z.R.[1,3]

Effect of Composition of $Ce_{1-x}Ni_xO_y$ Catalyst on Their Activity and Stability in Steam/CO_2 Reforming of Methane

1 – Boreskov Institute of Catalysis, Novosibirsk, Russia
2 – Novosibirsk State Technical University, Novosibirsk, Russia
3 – Institute of Coal Chemistry and Material Science FRC CCC SB RAS, Kemerovo, Russia

PP-IV-61

Sychev V.V.[1], Baryshnikov S.V.[1], Beregovtsova N.G.[1], Volochaev M.N., Taran O.P.[1,2]

Levulinic Acid Hydrogenation into γ-Valerolactone over Ru/C Catalysts

1 – Institute of Chemistry and Chemical Technology SB RAS, FRC KSC SB RAS, Krasnoyarsk, Russia
2 – Kirensky Institute of Physics, SB RAS, FRC KSC SB RAS, Krasnoyarsk, Russia
3 – Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-IV-62

Todorova S.[1], Naydenov A.[2], Velinova R.[2], Karakirova Y.[1], Kolev H.[1]

Catalytic Combustion of Methane over Pd-MeOx-CeO_2/Al_2O_3 (Me= Co or Ni) Catalysts

1 – Institute of Catalysis, Bulgarian Acad. of Sciences, Sofia, Bulgaria
2 – Institute of General and Inorganic Chemistry, Bulgarian Acad. of Sciences, Sofia, Bulgaria

PP-IV-65

Yanilkin V.V.[1], Nastapova N.V.[1], Nasretdinova G.R.[1], Osin Y.N.[2], Gubaidullin A.T.[1], Ziganshina A.Yu.[1]

The Role of Stabilizer in Catalytic Activity in Water Solutions of Ultrasmall Rh, Pd and (Rh + Pd) Nanoparticles Obtained by Mediated Electrosynthesis

1 – Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center of RAS, Kazan, Russia
2 – Kazan Federal University, Interdisciplinary Center "Analytical Microscopy", Kazan, Russia

PP-IV-66

Yashnik S.A., Taran O.P., Boltenkov V., Parmon V.N.

Methane Oxidation by H_2O_2 over Different Cu-Species of Cu-ZSM-5 Catalysts

Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-IV-67

Yushchenko D.Yu., Simonov P.A., Khlebnikova T.B., Pai Z.P., Bukhtiyarov V.I.

Oxidative Dealkylation of Aminophosphoric Acids in the Presence of Nanostructured Au/C Catalysts

Boreskov Institute of Catalysis, Novosibirsk, Russia

PP-IV-68

Zhou X., Vovk E.I., Liu Z., Yang Y.

Active Sites on Nanorod La_2O_3 in Oxidative Coupling of Methane. *In Situ* Online MS and XPS Study

Shanghai Tech University, Shanghai, China

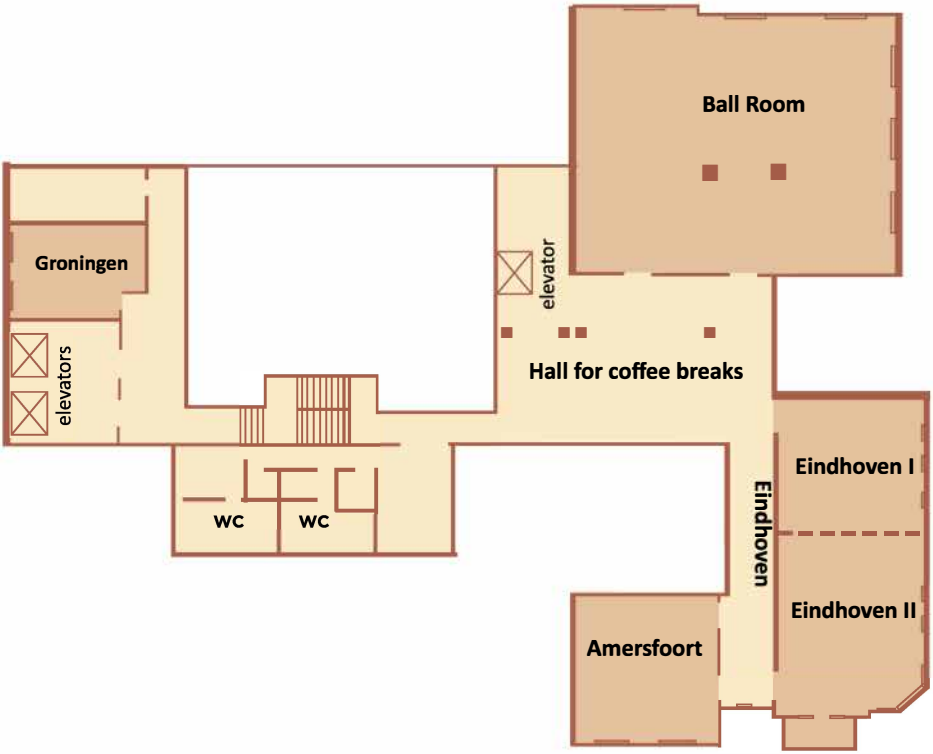
PP-IV-69

Ziyadullaev O.E.[1], Otamukhamedova G.Q.[2], Samatov S.B.[1], Abdurakhmanova S.S.[1], Turabdjanov S.M.[3]

Enantioselective Alkynylation of Cyclic Ketones with Phenylacetylene Catalyzed by Lithium Banaphtolate

1 – Chirchik State Pedagogical Institute, Tashkent region, Uzbekistan
2 – National University of Uzbekistan, Tashkent, Uzbekistan
3 – Tashkent State Technical University, Tashkent, Uzbekistan

MCR EXHIBITION
1,5 level of the Hotel Golden Tulip



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