



Svetlogorsk,  
Kaliningrad region, Russia  
October 2-6, 2016

# X International Conference Mechanisms of Catalytic Reactions

Boreskov Institute of Catalysis 5, Prosp. Akad. Lavrentieva Novosibirsk, 630090, Russia <http://conf.nsc.ru/MCR-X/en>

Dear Colleagues,

We are pleased to invite you to participate in the X International Conference "Mechanisms of Catalytic Reactions" (MCR-X) which is to be held in Svetlogorsk (Kaliningrad region, Russia) on 2-6 October, 2016. The Conference is organized under the auspices of the European Federation of Catalysis Societies and the National Catalytic Society of Russia.

The Conference is the 10th event in the series of International MCR-Conferences started in 1974 in Moscow. Traditionally, the International Conferences on the Mechanisms of Catalytic Reactions, focus on advances in understanding mechanisms of chemical reactions occurring in the presence of catalysts, ranging from homogeneous molecular catalysts (inorganic, organic, metal complex based) to various, including nano-sized, heterogeneous catalysts.

We look forward to welcoming you in Svetlogorsk!

Organizing Committee

## Conference Organizers

- ✦ Federal Agency for Scientific Organizations, Moscow, Russia
- ✦ The Ministry of Education and Science of the Russian Federation, Moscow, Russia
- ✦ Boreskov Institute of Catalysis, Novosibirsk, Russia
- ✦ Immanuel Kant Baltic Federal University, Kaliningrad, Russia
- ✦ Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia
- ✦ Lomonosov Moscow State University, Moscow, Russia
- ✦ Scientific Council on Catalysis RAS, Moscow, Russia

## Scientific Committee

Valentin P. Ananikov, Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

Miguel A. Bañares, ICP-CSIC, Madrid, Spain

Alexis T. Bell, University of California, Berkeley, USA

Konstantin P. Bryliakov, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Valerii I. Bukhtiyarov, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Irina I. Ivanova, Topchiev Institute of Petrochemical Synthesis RAS, Moscow, Russia

Vasily V. Kaichev, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Axel Knop-Gericke, Fritz-Haber Institute of the Max-Planck Society, Berlin, Germany

Ekaterina A. Kozlova, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Valery V. Lunin, Lomonosov Moscow State University, Moscow, Russia

Ilya I. Moiseev, Kurnakov Institute of General and Inorganic Chemistry RAS, Moscow, Russia

Dmitry Yu. Murzin, Åbo Akademi University, Turku, Finland

Konstantin M. Neyman, ICREA & University of Barcelona, Barcelona, Spain

Emrah Ozensoy, Bilkent University, Ankara, Turkey

Valentin N. Parmon, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Günther Rupprechter, Vienna University of Technology, Vienna, Austria

Philippe Sautet, University of Lyon, Lyon, France

Mikhail Yu. Sinev, Semenov Institute of Chemical Physics RAS, Moscow, Russia

Malgorzata Witko, Institute of Catalysis and Surface Chemistry, Krakow, Poland

## Organizing Committee

Chairman: **V.I. Bukhtiyarov**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

Vice chairman: **A.V. Yurov**, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

### Members:

**K.P. Bryliakov**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

**A.A. Gribankova**, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

**V.V. Kaichev**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

**E.A. Kozlova**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

**V.N. Leitsin**, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

**E.S. Lokteva**, Lomonosov Moscow State University, Moscow, Russia

**A.A. Saraev**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

**V.V. Savin**, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

**A.Yu. Stakheev**, Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

**L.Ya. Startseva**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

**O.V. Turova**, Zelinsky Institute of Organic Chemistry RAS, Moscow, Russia

### Secretariat:

**A.A. Eremenko**, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

**M.A. Klyusa**, Boreskov Institute of Catalysis SB RAS, Novosibirsk, Russia

**D.A. Omelyanovich**, Immanuel Kant Baltic Federal University, Kaliningrad, Russia

## Scientific Program

The scientific program of MCR X will include 4 plenary lectures (40 min) and 4 keynote lectures (30 min). Oral presentations (20 min) will be scheduled in 2 parallel sessions. The Conference Program will also include poster presentations. The main topics are:

- ✦ First-principles approach, theory and simulation in catalysis
- ✦ Advanced methods for studies of mechanisms of catalyzed reactions
- ✦ In-situ and operando studies of model and real catalytic sites
- ✦ Kinetics and reaction intermediates of catalyzed processes
- ✦ From mechanistic studies to design of advanced catalyst systems

In parallel with the mainframe Conference work program, the School-Seminar "Powder materials in catalytic processes: applications, methods of extraction, structure and properties" and School-Symposium "Quantum-mechanical modeling of catalytic processes" will take place in the Volna hotel\*\*\*.

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

**Leading scientists will give plenary and keynote lectures:**

#### *Plenary lecturers*

- Dr. Stig Helveg, Haldor Topsøe, Denmark
- Prof. Dr. Javier Pérez-Ramírez, ETH Zurich, Switzerland
- Prof. Dr. Alexander Yu. Stakheev, Zelinsky Institute of Organic Chemistry RAS, Russia
- Prof. Dionisios G. Vlachos, University of Delaware, USA

#### *Confirmed Keynote speakers*

- Prof. Dr. Igor V. Koptuyug, International Tomography Center SB RAS, Russia
- Prof. Reko Leino, Åbo Akademi University, Finland
- Prof. Yuriy Roman-Leshkov, Massachusetts Institute of Technology, Cambridge, USA
- Prof. Dr. Svetlana Schauer mann, University of Kiel & Fritz-Haber Institute, Germany
- Dr. Ilya V. Yudanov, Boreskov Institute of Catalysis SB RAS, Russia

## Sponsorship & Publicity

The organizers invite companies and enterprises to take part in MCR-X and support it as Conference Partners. For organizations, companies and enterprises, Conference Exhibition of compact installations and devices, as well as advertising materials, to be held throughout the Conference. Please contact the Organizing Committee if your organization is interested in sponsoring this event.

*Special offers for companies who would like to become the General and Official Sponsors will be available.*

## Abstract Submission

**The final Scientific Program brochure and Book of Abstracts of lectures, oral and poster presentations on a USB key will be available at the registration desk.**

Authors of all contributions are invited to submit one-page abstracts (A4) in English via the MCR-X official website <http://conf.nsc.ru/MCR-X/en> before **February 15, 2015**. The text should be typed 1 line spaced with 2.5 cm margins. Please use Times New Roman 12 pt font. You can submit as many contributions as you wish under the same personal account. During the abstract submission you can choose the topic which your paper fits in with, as well as your preferred format of presentation: poster, oral (20 min). The abstract template will be available for download on the Conference website.

All submitted abstracts will be peer reviewed following a standard procedure.

## Venue



The Conference will take place in the business center of the Volna hotel\*\*\* (Kalinigradskiy prospect, 68 B) in Svetlogorsk. The city-resort Svetlogorsk is situated on the picturesque Baltic seashore. The city has been a well-known first-class place for calm rest since 19th century.

Svetlogorsk is located 40 km away from Kaliningrad, a big industrial capital of Russia's westernmost Kaliningrad region. Kaliningrad region borders upon EU countries Lithuania and Poland. The region is accessible by air, train, bus, car.



### Transportation

The most convenient way to get to Kaliningrad region is air transport.

International airport Khravrovo is located about 16 km from the Kaliningrad. A representative of the Organizing Committee will meet all participants at the Airport and provide transportation to the Volna hotel (Svetlogorsk). Khravrovo airport serves both domestic and international flights. Its airlines and destinations include: Aeroflot (Moscow-Sheremetyevo, St. Petersburg), Air Berlin (Berlin-Tegel), Belavia (Minsk), Rossiya Airlines (St. Petersburg), Ural Airlines (Moscow-Domodovo).

### Accommodation and Meals

The Volna hotel\*\*\* offers comfortable rooms: standard single (3200 Rub); standard double (4000 Rub), twin suite category (5500-6500 Rub). The price (per room per night, 2015) includes breakfast and VAT 18% (1 Euro is about 65 Rubles). There are several convenient hotels 3\*-4\* close by the Volna hotel\*\*\*. Lunches and coffee breaks will be provided at the restaurant of the hotel.

## Entry Visa

In order to obtain entry visa to Russia, foreign participants should have official "Invitation to Russia". Immanuel Kant Baltic Federal University will provide the participants with the invitations.

## Social Program



The participants will be invited to the Welcome reception on October 2.

The Conference banquet will be held on October 4.

The sightseeing excursion to Kaliningrad will be organized for the participants on October 4. Kaliningrad (formerly Königsberg) is the fine amber land, where amber has been mined since the times of Teutonic Knights.



A special sightseeing program for accompanying persons will be also available.

## Post-Tour "Curonian Spit" (October 6)



The Curonian Spit is a 98 km long, thin, curved sand-dune spit that separates the Curonian Lagoon from the Baltic Sea. It is a UNESCO World Heritage Site. In the Curonian Spit there are the highest drifting dunes in Europe, moved by harsh winds. The excursion participants will visit the dune "Efa", the world's first ornithological station, and the enigmatic Dancing Forest.



## Registration Fee

Conference fees (including 18% VAT)	Standard (before August 15, 2016)
<i>Academic/Industrial participants</i>	350 €
<i>Academic participant from Russia*</i>	12 000 Rub
<i>Student, PhD student</i>	150 €
<i>Student, PhD student from Russia*</i>	8000 Rub
<i>Accompanying persons</i>	150 €

\*) Financial support from the Russian Foundation for Basic Research

The fee covers registration with the Conference, editorial expenditures, delegate bag, auditorium rent, coffee-breaks, 3 lunches, Welcome Party, transfer airport-hotel and sightseeing excursion to Kaliningrad. Transfer hotel-airport will be available for extra fee.

## Key dates

February 15, 2016	Submission of preliminary registration forms and Abstracts
April 30, 2016	Notification of acceptance
June 1, 2016	Distribution of preliminary Scientific Program
June 15 – August 15, 2016	Payment of fee
October 2, 2016	Arrival of participants
October 2-5, 2016	Working days
October 6, 2016	Post-tour

## For information please contact:

### In Novosibirsk:

Liudmila Startseva  
Boreskov Institute of Catalysis  
E-mail: [star@catalysis.ru](mailto:star@catalysis.ru)  
tel./fax: +7(383)330-62-97

### In Kaliningrad:

Anastasiya Eremenko  
Immanuel Kant Baltic Federal University  
E-mail: [AAEremenko@kantiana.ru](mailto:AAEremenko@kantiana.ru)  
tel.:+7 (4012) 595 595 (ext. 7865)