



# II Russian Congress on Catalysis "RUSCATALYSIS"

## First Announcement INVITATION

http://conf.nsc.ru/RUSCATALYSIS-2014/

Dear Colleague,

The Organizing Committee cordially invites you to take part in the II Russian Congress on Catalysis "RUSCATALYSIS" to be held in Samara (Russia) on October 2-5, 2014 under the auspices of the Russian Academy of Sciences.

The II Russian Congress on Catalysis "RUSCATALYSIS" is aimed at addressing the state of the art and challenges in all fields of catalysis, determination of priority tasks for fundamental and applied research, and subsequent industrial implementation. It will also focus on problems of training specialists in the field of catalysts and catalytic technologies.

We will be delighted to see you among the participants of the Congress!

## POCKAT

## CONGRESS ORGANIZERS

- Boreskov Institute of Catalysis SB RAS, Novosibirsk
- Samara State Technical University, Samara
- Lomonosov Moscow State University, Moscow
- ☐ Topchiev Institute of Petrochemical Synthesis RAS, Moscow
- Zelinsky Institute of Organic Chemistry RAS, Moscow
- Institute of Hydrocarbons Processing SB RAS, Omsk

## POCKAT

### **CONGRESS SPONSORS:**

- Nonprofit Partnership "National Catalytic Society of Russia"
- Government of Samara region
- JSC "NK Rosneft"



#### POCKAT **CONGRESS COUNCIL**

President:

Prof. V.N. Parmon Scientific Council for Catalysis RAS, Moscow

BIC SB RAS, Novosibirsk

Council members:

Prof. S.M. Aldoshin RAS. Moscow Prof. A.A. Berlin ICP RAS. Moscow

Prof. V.I. Bukhtiyarov SB RAS Presidium, Novosibirsk

Prof. D.E. Bykov SSTU. Samara

M.B. Gryaznov Ministry of Energy of the Russian Federation, Oil and Gas

Refining Department, Moscow

Prof. A.G. Dedov GRSU of Oil and Gas. Moscow

Prof. U.M. Dzhemilev USC RAS, Ufa Prof. M.P. Egorov IOC RAS, Moscow

Dr. V.P. Ivanov Russian Union of Chemists, Moscow

Prof. Z.R. Ismagilov ICMS SB RAS, Kemerovo Prof. S.V. Kalyuzhny SC "Rusnano", Moscow Prof. V.M. Kapustin JSC "VNIPIneft", Moscow

Prof. V.A. Likholobov IHP SB RAS, Omsk Prof. V.V. Lunin MSU, Moscow Prof. A.L. Maksimov TIPS RAS. Moscow

Dr. A.V. Mamaev Gazprom VNIIGAZ LLC, Moscow

N.I. Merkushin Government of Samara region, Samara

V.D. Milovidov JSC "Rosneft", Moscow Prof. I.I. Moiseev IGIC RAS, Moscow Prof. A.S. Noskov BIC SB RAS, Novosibirsk

Prof. V.Ya. Panchenko RFBR, Moscow Prof. A.A. Pimerzin SSTU, Samara

Prof. V.V. Razumov JSC "Sibur Holding", Moscow

V.A. Ryabov Association of Petroleum Processors and Petrochemists of

> Russia, Moscow IOPC RAS, Kazan

Prof. O.G. Sinyashin Prof. A.Yu. Stakheev IOC RAS. Moscow

Prof. P.A. Storozhenko SSC RF GNIIChTEOS, Moscow

Prof. B.A. Trofimov IIC SB RAS, Irkutsk TIPS RAS, Moscow Prof. S. N. Khadzhiev

Prof. V.N. Charushin IOS UB RAS, Ekaterinburg

## **Information support:**

Journal "Kinetics and Catalysis" Journal "Catalysis in Industry"

The Official Congress service operator is Descriptor Ltd., Samara



## PROGRAM COMMITTEE

Co-Chairman: Prof. V.N. Parmon
Co-Chairman: Prof. V.V. Lunin
Co-Chairman: Prof. S.N. Khadzhiev

## Section 1. Physicochemical fundamentals of catalytic processes

Prof. V.I. Bukhtiyarov, BIC SB RAS, Novosibirsk - Coordinator

Prof. I.I. Ivanova, MSU, Moscow

Dr. Ya.V. Zubavichus, IEOC RAS, Moscow Prof. A.Yu. Stakheev, IOC RAS, Moscow Prof. V.N. Korchak, ICP RAS, Moscow

## Section 2. Scientific basis of catalyst production

Prof. V.A. Likholobov, IHP SB RAS, Omsk - Coordinator

Prof. M.V. Tsodikov, IPCS RAS, Moscow

Prof. A.A. Pimerzin, SSTU, Samara

Dr. N.G. Zubritskaya, RSC "Applied Chemistry", St. Petersburg

Prof. A.S. Ivanova, BIC SB RAS, Novosibirsk

## Section 3. Advanced catalytic processes

Prof. A.L. Maksimov, MSU, IPCS RAS – Coordinator

Prof. S.D. Varfolomeev, MSU, IBCP RAS, Moscow

Prof. B.N. Kuznetsov, ICCT SB RAS, Krasnoyarsk

Prof. V.I. Savchenko, IPCP RAS, Chernogolovka

Prof. A.B. Yaroslavtsev, IPCS RAS, Moscow

## Section 4. Industrial catalysts and catalytic processes

Prof. A.S. Noskov, BIC SB RAS, Novosibirsk - Coordinator

Prof. A.S. Belyi, IHP SB RAS, Omsk

Prof. V.M. Kapustin, JSC "VNIPIneft", Moscow

Dr. A. N. Shakun, JSC "NefteKhim", Krasnodar

Prof. R.S. Yarullin, JSC "Tatneftekhiminvest-holding", Kazan



#### **EXECUTIVE COMMITTEE**

Co-Chairman: A.S. Noskov, BIC SB RAS, Novosibirsk

Co-Chairman: D.E. Ovchinnikov, Government of Samara

Co-Chairman: A.A. Pimerzin, SSTU, Samara
Co-Chairman: E.S. Lokteva, MSU, Moscow
Co-Chairman: A.V. Lavrenov, IHP SB RAS, Omsk

Working group: N.Yu. Adonin, A.S. Ivanova, A.N. Zagoruiko, V.V. Kaichev (BIC SB RAS, Novosibirsk);

A.S. Belyi (IHP SB RAS); L.A. Zamaraeva (Zamaraev ICSF); E.V. Suslova (MSU)

Secretariat: L.Ya. Startseva (BIC SB RAS, Novosibirsk);

P.A. Nikul'shin (SSTU, Samara); T.V. Soboleva (TIPS RAS), O.V. Turova (IOC RAS), Moscow

Technical group:

Novosibirsk: N.S. Krylova, M.A. Klyusa, A.A. Bryliakova (BIC SB RAS)

Samara: E.E. Vishnevskaya, D.I. Ishutenko, S.V. Portnova (SSTU)

Moscow: E.V. Golubina (MSU), O.A. Pakhmanova (TIPS RAS)

Omsk: D.A. Shlyapin (IHP SB RAS)





#### SCIENTIFIC PROGRAM

Scientific Program of the Congress will comprise invited plenary lectures (40 min), invited keynote lectures (30 min), invited oral communications (20 min), oral communications (15 and 10 min) and poster presentations.

The Official language of the Congress is Russian.

#### **CONGRESS TOPICS**

The section "Physicochemical fundamentals of catalytic processes" is dedicated to the 75th birth anniversary of an eminent scientist in the field of physical chemistry and catalysis academician Kirill II ich Zamaraev (1939-1996), well-known in the scientific community due to the studies of mechanisms of catalytic reactions at the molecular level.



## Section 1 Physicochemical fundamentals of catalytic processes

- Theoretical and experimental investigation of processes on the catalyst surface, including in situ studies
- Mechanisms of catalytic reactions
- Kinetics of catalytic processes

### Section 2 Scientific basis of catalyst production

- Physicochemical basis of catalyst synthesis
- Scientific basis of technologies and equipment for the production of catalysts and supports
- Methods and equipment for catalyst testing

## Section 3 Advanced catalytic processes

- Oil refining
- Chemistry and petrochemistry
- Environmental protection
- Energy saving and processing of renewable feedstocks

## Section 4 Industrial catalysts and catalytic processes

- Catalyst operation under industrial conditions
- Catalytic reactors: design and application
- Deactivation and regeneration of industrial catalysts
- Catalytic process engineering including software

## Roundtable

## **Education and catalysis**

#### discussion

Roundtable discussion "Education and catalysis" is dedicated to the 100<sup>th</sup> anniversary of Samara State Technical University.

Its program will include invited oral communications concerning the reform of the educational system at the university level and training of qualified specialists in catalysis; new approaches to teaching the fundamental and applied aspects of catalysis with the use of interactive materials; organization of R&D activities of students in the field of catalysis in colleges and academic institutes.



#### Satellite symposia will be arranged within the Congress:

#### Symposium-I "Carbon materials and their composites"

Topics:

- > Development of methods for preparation of nanostructured carbon materials (nanoglobules, nanotubes, fullerenes, graphenes), and investigation of their physical and chemical properties
- Carbon composite materials for energy and catalysis
- Functionalized carbon materials for environmental protection and human health

## Symposium-II "Low-tonnage chemistry: state-of-the-art and outlook" Topics:

- Low-tonnage production of chemical products and materials
- > Processes, equipment and technologies of low-tonnage chemical productions
- Chemical products from wastes of large-tonnage chemical productions
- Problems of recycling of wastes of low-tonnage chemical productions



#### **INVITED PLENARY LECTURES**

#### Ananikov V.P.

Adaptive molecular and cluster catalysis by transition metals in modern organic synthesis Zelinsky Institute of Organic Chemistry RAS, Moscow

#### Bukhtiyarov V.I.

Active sites in heterogeneous catalysts: formation and studies by *in situ* methods *Boreskov Institute of Catalysis SB RAS, Novosibirsk* 

#### Varfolomeev S.D.

Fuels from biomass and organic wastes
Institute of Biochemical Physics RAS, Moscow

#### Gekhman A.E.

Catalytic processes in "green chemistry"

Kurnakov Institute of General and Inorganic Chemistry, Moscow

#### Murzin D.Yu.

Catalytic processes in low-tonnage chemistry *Åbo* Akademi *University, Turku, Finland* 

#### Khadzhiev S.N.

Nanoheterogeneous catalysis for conversion of conventional and non-conventional heavy oil residues Topchiev Institute of Petrochemical Synthesis RAS, Moscow



#### **INVITED KEY LECTURES**

#### Bal'zhinimaev B.S.

Silicate fiberglass catalysts: from science to technologies Boreskov Institute of Catalysis SB RAS, Novosibirsk

#### Barabanov V.G.

Catalysis in the industry of fluoric compounds

Russian Scientific Center "Applied chemistry", St. Petersburg



#### Belyi A.S.

Current state and prospects of development of the process and catalysts for gasoline fractions reforming

Institute of Hydrocarbons Processing SB RAS, Omsk

#### Dzhemilev U.M.

Catalysis – the present and the future of petrochemistry Institute of Petrochemistry and Catalysis RAS, Ufa

#### Ivanov A.V., Trofimov B.A.

Superbase catalysis in acetylene chemistry Institute of Chemistry SB RAS, Irkutsk

#### Ivanova I.I.

Design of micro-mesoporous zeolite catalysts for petrochemical and organic synthesis processes Topchiev Institute of Petrochemical Synthesis RAS, Moscow

#### Ismagilov Z.R.

Catalytic processes in coal chemistry

Institute of Coal Chemistry and Chemical Materials Science SB RAS, Kemerovo

#### Isupova L.A.

Monolithic catalysts in the technology of two-step oxidation of ammonia Boreskov Institute of Catalysis SB RAS, Novosibirsk

#### Kapustin V.M.

Prospects in the development of catalytic processes of oil processing and enhancement of the role of catalysts in such processes

JSC "VNIPIneft", Moscow

#### Karakhanov E.A.

Homogeneous, two-phase and supported catalytic systems on the basis of ionic liquids in petrochemical synthesis

Lomonosov Moscow State University, Moscow

#### Kustov L.M.

Microwave activation in catalysis

Zelinsky Institute of Organic Chemistry RAS, Moscow

#### Levinbuk M.A.

Catalyst modification as an alternative to modernization of catalytic cracking setups Russian State University of Oil and Gas, Moscow

#### Mordkovich V.Z.

New generation of the GTL technology: from laboratory development to industrial application Technological Institute For Superhard And Novel Carbon Materials, Troitsk

#### Siney M.Yu.

Catalytic transformations of light alkanes: whether "the alternative petrochemistry" is real? Institute of Chemical Physics RAS, Moscow

#### Slin'ko M.M.

Fluctuations of rate of heterogeneous catalytic reactions Institute of Chemical Physics RAS, Moscow

#### Pimerzin A.A.

Features of synthesis of highly active sulfide catalysts for the production of motor fuels Samara State Technical University, Samara

#### Shvets V.F.

Technological aspects of processing of renewable feedstocks to large-tonnage chemical products D. *Mendeleyev University of Chemical Technology of Russia, Moscow* 



#### **COMPANY PRESENTATIONS**

The Organizing Committee invites Russian and foreign companies dealing with catalysts and catalytic processes to advertise their products during the Congress.

Participation in the Congress offers a wide advertising of the company, its products and services!



Specialized exhibitions of equipment and instruments are not planned during the Congress. Presentation of booklets, information materials, banners of companies and firms will take place from October 3 to October 4 in the concert hall of Volga Cliff Resort (a table, chairs, information desk and power supply for laptop will be provided).

## PRESENTATION package-I

- section oral communication, 15 min
- participation in the exhibition
- publication of advertisement in the book of abstracts
- placement of advertising materials in delegates bags

Package cost: 100 000 rub.\*

### PRESENTATION package-II

- participation in the exhibition
- publication of advertisement in the book of abstracts
- distribution of advertising materials among the participants during the Congress

Package cost: 50 000 rub.\*

\* The registration fee is not included in the cost of the package

#### **PUBLICATIONS**

Book of Abstracts covering plenary and keynote lectures as well as oral and poster presentations will be issued before the Congress. International standard book number (ISBN) will be assigned to the electronic issue of the Book of Abstracts.

The Organizing Committee invites authors of plenary and keynote lectures and oral presentations (20 and 15 min) to publish their full texts in special issues of journals "Kinetics and Catalysis" (lectures and oral presentations of sections Physicochemical Fundamentals of Catalytic Processes and Scientific Basis of Catalyst Production) and "Catalysis in Industry" (lectures and oral presentations of sections Advanced Catalytic Processes and Industrial Catalysts and Catalytic Processes). Instructions for authors, key dates for paper submission, and necessary documentation are available at the Congress website.

#### **APPLICATION FOR PARTICIPATION AND ABSTRACTS**

The online application is available by 15th April, 2014 on the Congress website http://conf.nsc.ru/RUSCATALYSIS-2014/

The abstracts must not exceed one A5 size page ( $114 \times 170 \text{ mm}$ ), including figures. The body text must be written in Russian, in Times New Roman font, 11 pt. size, 0.6 cm paragraph indent, single line spacing, alignment justified. The authors can specify the section name related to their abstract, and the desired type of presentation.

The abstract template is available to download from the site: http://conf.nsc.ru/RUSCATALYSIS-2014/ru/prepare\_materials.



#### **VENUE**

The Congress will take place in conference halls of Volga Cliff Resort of the Department for Presidential Affairs of the Russian Federation (Volga Cliff village, Shygon district, Samara region). Volga Cliff Resort is located on the shore of the Zhiguli Sea, on the utmost western Zhiguli mountains, in the woodland. This place is called Volga Switzerland for its beauty and fresh air.



#### **ACCOMMODATION**

Accommodation for the Congress participants will be arranged in comfortable single and double rooms of the Resort from 1st to 6th October, 2014. The expected room rates (including Wi-Fi Internet access and full board: breakfast, lunch, dinner) are as follows: single – 5015 rub., twin room – 3625 rub. per person, twin suite category 1 or category 2 – 9465 or 10295 rub. per room and 3935 or 3975 rub. per person, respectively.

#### **MEALS**

Coffee breaks for participants will be arranged at Volga Cliff Resort. The participants will be invited to the Welcome reception on October 2.

#### SOCIAL PROGRAM

Three two-hour excursions will be organized on October 5: (1) sightseeing tour to the Syzran city, (2) the tour to Chuvashskii and Zverinyi hillocks, and (3) the tour to Usolye village. On October 6, participants and guests will also be offered an additional one-day post-tour to the "Samarskaya Luka" reserve (Shiryaevo village). The program and cost of the post-tour will be published in the Second Circular.





#### **REGISTRATION FEE**

Registration fees	Standard registration fee (before 5 <sup>th</sup> September 2014)	Late registration fee (after 5th September 2014)
Academic organizations of Russia/CIS countries	8000 rub.	8900 rub.
Post-graduates and students	5000 rub.	5900 rub.
Industrial/company	11000 rub.	12000 rub.

The fee covers editorial expenditures, delegate bag, auditorium rent, airport-resort-airport transfer, coffee breaks, Welcome Party, and one excursion.

The Correspondence participation fee (1000 rub.) covers publication of one abstract in the Congress Book of Abstracts.

The registration fees for the participants include 18% VAT.

Payments should be free of bank charges. Credit cards are not accepted.

#### **KEY DATES**

April 15, 2014	Submission of registration forms and Abstracts	
June 01, 2014	Notification of acceptance and distribution of the Second Circular	
August 16, 2014	Distribution of preliminary Scientific Program	
October 1, 2014	Arrival	
October 2-5, 2014	Working days	
October 6, 2014	Departure	
October 6, 2014	Post-tour	

## For information please contact to:

#### in Novosibirsk

#### Lyudmila Ya. Startseva

Boreskov Institute of Catalysis 5, Prosp. Akad. Lavrentieva Novosibirsk, 630090, Russia

Phone/fax: (383) 330 62 97, 32 69 606

E-mail: star@catalysis.ru kma@catalysis.ru

#### In Samara

#### Pavel A. Nikul'shin

Samara State Technical University, 244, Molodogvardeyskaya st., Samara, 443100, Russia Phone: (846) 242-3580,

Fax: (846) 278-4482

E-mail: p.a.nikulshin@gmail.com