

XI Scientific and Practical Conference "Supercritical Fluids: Fundamentals, Technologies, Innovations"

June 21 - 25, 2021 Novosibirsk, Russia

Dear colleagues,

We are glad to announce the XI Scientific and Practical Conference "Supercritical Fluids: Fundamentals, Technologies, Innovations" to be held in Novosibirsk on June 21–25, 2021.

In 2021, the conference will be dedicated to the memory of Valery Vasilievich Lunin, an Academician of the Russian Academy of Sciences, an outstanding Russian chemist, educator, and promoter of science who was a Head of the Faculty of Chemistry at Moscow State University for over twenty-five years and later became its first President. Valery Lunin achieved wide recognition by his fundamental research in the field of heterogeneous catalysis and physical chemistry of surface. For a long time he supervised a lot of researches in the field of implementation of supercritical fluids for creating new technologies and materials, was the initiator and inspirational leader of this conference that becomes a well-established scientific discussion platform for like-minded professional scientists.



All technologies based on supercritical fluids are becoming more and more demanded for the sustainable development of society as a tool that can potentially solve one of the highest priority challenges in the modern world making industrial processes environmentally clean, safe, efficient, and fully compliant with the green chemistry principles and standards. SCF technologies are used in pharmaceutics and power engineering, food and chemical industries, help waste recovery,

environmental protection, and preservation of comfortable conditions of human life.

The main goal of the conference is to provide a discussion platform for exchanging knowledge between representatives of various research, educational, and industrial organizations, identifying the challenges, and finding possible solutions. Such cooperation will help make the most of the great scientific and engineering potential of SCF technologies in Russia and in the world.

We are looking forward to seeing you in Novosibirsk!

Organizing committee

Organizers:



Russian Academy of Sciences, Moscow



Boreskov Institute of Catalysis, Novosibirsk



Institute of General and Inorganic Chemistry of the Russian Academy of Sciences, Moscow



Moscow State University, Moscow



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Institute of Solution Chemistry of the Russian Academy of Sciences,
Ivanovo



Federal Scientific Research Center "Crystallography and Photonics" of the Russian Academy of Sciences, Troitsk, Moscow



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Editorial board of the Supercritical Fluids: Theory and Practice journal, Moscow

Media partners



Supercritical Fluids: Theory and Practice (SCF-TP) journal ISSN 1992-8130

The scope of the journal includes a broad range of topics - from fundamental research of physicochemical properties of substances or their mixtures under supercritical conditions, specific features of SCF-based chemical processes and laboratory experiment techniques to practical applications of SCF technologies: in medicine, pharmaceutics, chemical and food industries, and cosmetics production.



Supercritical Fluids information portal <u>www.scftec.ru</u>

The Supercritical Fluids information portal is an open system aimed to build an SCF community in the Russian Federation, to simplify and accelerate the exchange of information inside this community and thus facilitate the development of SCF-technologies themselves through cooperation of various teams of Russian scientists.

Chairpersons of the conference



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Scientific Program

The scientific program of the conference will include plenary (45 min.) and keynote (30 min.) lectures, oral (15 min.) and poster presentations on the following subjects:

- 1. Fundamentals of supercritical state of the substance; theory and modelling
- 2. Physical research methods; analysis and diagnostics; methodological aspects
- 3. Catalysts synthesis and production, catalysis, organic and inorganic synthesis
- 4. Green chemistry, environmental protection, and waste recovery
- 5. Recovery of CO₂ and natural raw materials (mineral, hydrocarbon, and renewable types); power industry problems
- 6. Technological processes for SCF application:
 - synthesis and modification of functional materials;
 - pharmacology, cosmetology, medicine;
 - food production processes and foodstuffs

SATELLITE EVENTS

XII All-Russian School-Conference of Young Scientists "Supercritical Fluid Technologies in Solving Environmental Problems", June 23, 2021

Seminar "Advanced Methods of Spectroscopic Imaging and Vibrational Spectroscopy for Catalysis and SCF-Technologies", June 24-25, 2021

Working languages of the conference are Russian and English.

Venue

Novosibirsk is the capital city of the Siberian Federal District, center of Novosibirsk agglomeration. It is the largest trading, business, cultural, transport, educational, and research center of Siberia. Novosibirsk is often informally named "The Capital of Siberia".

Novosibirsk is the largest transport hub of Siberia: the Trans-Siberian Railway runs through it connecting Siberia, the Far East, and Central Asia with the European regions of Russia.



Novosibirsk has an international airport - Tolmachevo - the biggest number of passengers of the Asian part of Russia are coming here. The airport is located at the intersection of a lot of airways from South-East Asia to Europe and from North America to India and Asia.



Novosibirsk gained its world-wide fame thanks to the **Akademgorodok (Novosibirsk Scientific Center)** that is home to more than 35 research institutes, Novosibirsk State University - one of the 5 best universities in Russia - and Novosibirsk Academpark that can boast the highest efficiency (according to the National rating of Russian technoparks). In December 2014, Novosibirsk Akademgorodok was registered as a regional heritage site.

Boreskov Institute of Catalysis, Siberian Branch, Russian Academy of Sciences

Boreskov Institute of Catalysis of the Siberian Branch of the Russian Academy of Sciences is now one of the world's largest research centers specializing in catalysis and catalytic technologies. The scope of the Institute research covers fundamentals of catalysis, synthesis of advanced catalysts, developments of catalytic technologies, and catalyst pilot production.

The main research topics of the Institute include:

- Heterogeneous catalysis
- Physico-chemical research methods
- Materials science and functional materials
- Technologies of catalytic processes
- Non-traditional catalytic processes
- Fine organic synthesis
- Synthesis and renewable sources of energy





The Institute laboratories are equipped with modern, often unique, research instruments and devices that enable the scientists to make comprehensive studies of the structures, textures, morphologies, and properties of catalysts, analyze the mechanisms of catalytic reactions, and create new efficient catalysts for chemical industry.

In the last 5 years, the Institute workers have published over 1900 papers in high-profile peer-reviewed journals, over half of which are in the Q1 category (WoS, Scopus). Over this time, the Institute papers have been cited more than 35,000 times, according to WoS.

Registration of participants

The conference participants shall register on the official website of the conference http://scftec.isc-ras.ru/en. To submit an application for participation in the conference, click "Registration" on the top toolbar, fill in the registration form and press the "Registration" key. After that, an e-mail with further instructions will be sent to the e-mail address specified by you. If you have any questions concerning registration on the website, please contact Victoria Ryabova (www.www.uc.en. (www.uc.en. (w

Venue

The conference will be hosted by Rassvet - a 4* resort located in a picturesque place on the shore of Novosibirsk reservoir (also known as the Ob sea). The participants will be offered a comfortable and well-equipped conference-hall. The resort will also provide rooms for participants' accommodation. For the accommodation fees see the table:



Room category	Price per 1 person, RUB/day.		
	Single room	Double/twin room*	
Standard	4 400	3 600	
Superior	5 200	4 400	
Junior suite	5 400	4 600	
Suite	5 600	5 000	

^{*}If 2 persons are staying in the room

The price includes three Buffet meals a day.

Registration fee

The registration fee covers all the information materials of the conference, a participant's package, coffee breaks, opening reception, and a sightseeing tour around Akademgorodok.

	Registration fee (including VAT (20%)	
Categories of participants	Early payment March 1 – April 30, 2021	Standard fee May 1 – June 1, 2021
Participants from commercial organizations	18,000 RUB / 200 EUR	24,000 RUB / 280 EUR
Participants from research organizations and universities	12,000 RUB / 150 EUR	16,000 RUB / 180 EUR
Students and post-graduate students	6,000 RUB / 70 EUR	8,000 RUB / 90 EUR
Accompanying persons*	6,000 RU	B / 70 EUR

^{*}The registration fee for the accompanying persons covers their participation in the welcome reception, lunches, the sightseeing tour around Akademgorodok, and the excursion to Boreskov Institute of Catalysis.

Cancellation policy:

- -Request for cancellation up to May 1, 2021 inclusive: refund 60% of paid amount
- -Fees are not refundable after May 2, 2021

Refund payment will be settled after the Conference (during 90 days).

Key dates		
Up to December 1, 2020	Registration of participants	
Up to January 31, 2021	Abstract submission	
March 1, 2021	Notification of acceptance	
March 5, 2021	Distribution of the preliminary Scientific Program	
Up to April 30, 2021	Deadline for early registration fee payment	
Up to June 1, 2021	Deadline for standard registration fee payment	
June 1, 2021	Distribution of the final Scientific Program	
June 21 - 25, 2021	Working days	

Contacts

In Moscow

Questions about registration & abstract submission

Other organizational questions

in Novosibirsk

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Questions about the

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