

# Catalyzer



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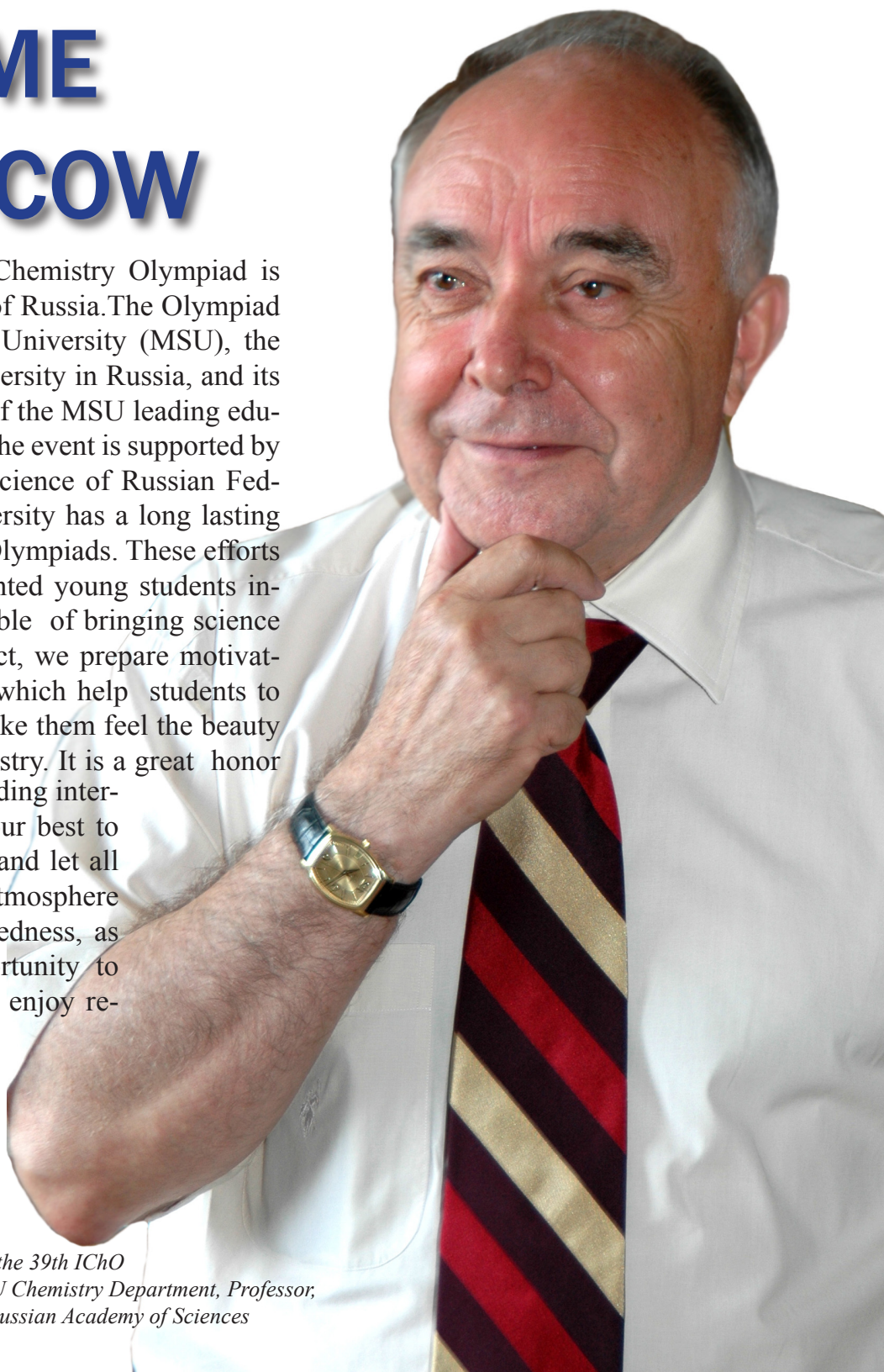
## WELCOME TO MOSCOW

This July the International Chemistry Olympiad is held in Moscow, the capital of Russia. The Olympiad is hosted by Moscow State University (MSU), the oldest and most famous University in Russia, and its Chemistry Department, one of the MSU leading education and research centers. The event is supported by Ministry of Education and Science of Russian Federation. Moscow State University has a long lasting tradition of holding science Olympiads. These efforts enable us to distinguish talented young students interested in research and capable of bringing science to a new level. In this respect, we prepare motivating problems for the IChO, which help students to reveal their creativity and make them feel the beauty and variety of ideas of chemistry. It is a great honor for us to host such an outstanding international event. We will do our best to provide for fair competition and let all our guests experience the atmosphere of warmth and open-heartedness, as well as to give them an opportunity to make many new friends and enjoy remarkable sights of Moscow.

**Welcome to Moscow,  
welcome to MSU  
Chemistry Department!**

***V. Lunin***

*President of the 39th IChO  
Dean of MSU Chemistry Department, Professor,  
Member of Russian Academy of Sciences*





# MOSCOW



## HISTORY

Moscow is the capital of Russia and the country's economic, financial, educational, and transportation centre. The most populous city in Europe, Moscow has a population of 12.6 million, which constitutes about 7% of the total Russian population. The city is named after the Moskva-River. The origin of the name is unknown, although several theories exist. This word could come from different languages and means "dark" and "turbid", "cow-river" or "bear-river".

The first Russian reference to Moscow dates from 1147 when Yuri Dolgoruki called upon the prince of the Novgorod Republic to "come to me, brother, to Moscow." Nine years later, in 1156, he ordered the construc-



tion of a wooden wall, which had to be rebuilt multiple times, to surround the emerging city.

In 1240 began Tatar control that brought death, war and union of Russian people. Only in 1480, Ivan III had finally broken the Russians free

from Tatar control and relocated the Russian capital to Moscow (previous capitals were Kiev and Vladimir).

The city ceased to be Russia's capital in 1712, after the founding of St. Petersburg by Peter the Great on the Baltic coast in 1703. But all people of the world continued to name Moscow "the heart of Russia". That's why Napoleon, who invaded Russia in 1812, wanted to get the key of



Moscow. But the Muscovites burned the city and evacuated. Napoleon's army, plagued by hunger, cold, and poor supply lines, was forced to retreat and was almost destroyed by Russian military forces.

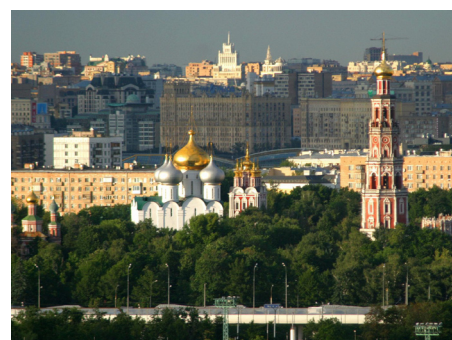
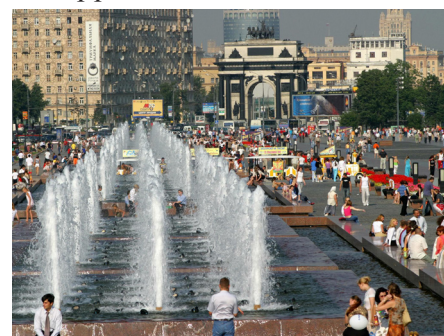
In November 1941 during the Great Patriotic War German Army Group Centre made plan "Typhoon" which main goal was to occupy Moscow. But German Army was stopped at the outskirts of the city and then driven off in the course of the Battle of Moscow that continued several months.

The collections of the world-famous Moscow's museums and galleries are some of the largest and most important in the world. One of the most notable art museums in Moscow is the Tretyakov Gallery, which was founded by Pavel Tretyakov, a wealthy patron of the arts who donated a large private collection to the city. There are the works of painter Ilya Repin and iconographer

Andrei Rublev. Another art museum is the Pushkin Museum of Fine Arts. Its halls are a cross-section of world civilizations, with many plaster casts of ancient sculptures. However, it also hosts famous paintings from every major Western era of art; works by Claude Monet, Paul Cezanne, and Pablo Picasso are all sampled there. Moscow is also the heart of Russian performing arts, including ballet and film. Among its many theatres and ballet studios are the Bolshoi Theatre and the Malyi Theatre, Vakhtangov Theatre and Moscow Art Theatre.

There are 1696 high schools in Moscow, as well as 91 colleges. Besides these, there are 222 institutions offering higher education in Moscow, including 60 state universities and the Lomonosov Moscow State University, which was founded in 1755. It has over 30,000 undergraduate and 7,000 postgraduate students, who have a choice of twenty-nine faculties and 350 departments for study.

Moscow is known as one of the most important science centres in Russia. The headquarters of the Russian Academy of Sciences are located in Moscow as well as numerous research and applied science institutions.





# MOSCOW STATE UNIVERSITY NAMED BY M. V. LOMONOSOV CHEMISTRY DEPARTMENT

Moscow University is the oldest Russian institution of higher education. It was established in 1755. On 25 January, St. Tatiana's Day according to the Russian Orthodox Church calendar, Empress Elizaveta Petrovna signed the degree that a university should be founded in Moscow.



The opening ceremony took place on 26 April, when Elizaveta Petrovna's coronation day was celebrated. Since 1755 25 January and 26 April are marked by special events and festivities at Moscow University; the annual conference where students present the results of their research work is traditionally held in April.

In the 18th century, the university had three faculties: the Faculty of Philosophy, The Faculty of Medicine, and the Law Faculty. Now it comprises 29 faculties and over 350 departments, 15 research institutes, 4 museums, the Science Park, the Bo-

tanical Garden, The Library, the University Publishing House and printing shop, a recreational centre and a boarding school for talented children.

The founder of Moscow University, Mikhail Lomonosov, was one of the best chemists in his time. In 1755 he established the Laboratory of Chemistry which later evolved into the Department of Chemistry. The Chemistry Department of Moscow State University is a world-known center for Chemistry education. It includes 17 chairs, 83 laboratories. 1048 students and 283 postgraduates study at the Department. 11 full members of Russian Academy of Sciences, 4 corresponding members and 202 professors



holding PhD and Doctoral Degrees in Chemistry are now preparing students to become high class specialists in modern chemistry. The Department of Chemistry is a world-known center for scientific research. Researches of the Faculty create new semiconductors and high temperature superconductors, synthesize new complex organic and organoelement compounds, develop catalysts for oil refining and nanochemistry, synthesize new medicines, new polymers with liquid crystal properties, develop new biotechnological processes.





## CHEMISTRY DEPARTMENT MEETS FRIENDS



### Tomorrow program Monday July 16th

8.00-8.30 Breakfast, Olympiets  
8.40 Buses depart to the Opening Ceremony, MSU  
11.00-13.00 Opening Ceremony, MSU  
13.00-15.00 Welcome Reception, MSU  
15.00-18.00 Moscow City tour  
18.00-19.00 Transfer to Olympiets  
19.00-21.00 Dinner, Olympiets  
21.00-23.55 Disco

**Police - 02**

**Fire station and ambulance - 911**

**39th IChO office (for urgent calls only):**

Alexander Gladilin +7 (916) 555 - 70 - 27

Vadim Eremin +7 (916) 611 - 88 - 90

Elena Eremina +7 (916) 133 - 00 - 55

**Mentor Support:**

Alexander Veresov +7 (910) 452 - 41 - 23

**Student support:**

Ekaterina Yakubovich +7 (916) 676 - 91 - 00

**Guest support:**

Alexandra (Shura) Prokhorova +7 (916) 587 - 60-26

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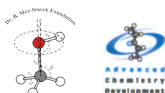
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