



**Ural Federal
University**

named after the first President
of Russia B.N.Yeltsin

**Institute
of Chemical Engineering**



UrFU Admission Campaign-2022

**Institute of Chemical
Engineering**

<http://hti.urfu.ru>

https://vk.com/hti_2021

+7 (343) 375-44-20

+7 (912) 297-65-99

+7 (964) 489-88-75



Rank	University
91	Lomonosov Moscow State University Moscow, Russia
201-250	Novosibirsk State University Novosibirsk, Russia
201-250	Saint Petersburg State University Saint Petersburg, Russia
251-300	National Research Tomsk Polytechnic University Russia
351-400	ITMO University St. Petersburg, Russia
351-400	Moscow Institute of Physics and Technology (MIPT... Dolgoprudny, Russia
351-400	Tomsk State University Tomsk, Russia
401-450	Kazan (Volga region) Federal University Kazan, Russia 4 QS Stars
401-450	The National University of Science and Technology... Moscow, Russia
401-450	Ural Federal University - UrFU Ekaterinburg, Russia

Top 10 Russian Universities

World University Rankings by Subject 2021

QS by Subject – **Chemistry: 401-450**

7th-8th place among Russian universities

(1st entry into ranking was in 2019), ascended from 600th place

QS by Subject – **Materials Science: 301-350**

(1st entry into ranking was in 2019), ascended from 600th place

QS by Subject – **Natural Science: 386**

U.S. News Best Global Universities –

Materials Science: 367



Institute of Chemical Engineering today: **FACTS AND FIGURES**

1008 Students
Bachelor students
–786
Master students -
232

**73 FOREIGN
STUDENTS**

98 PhD

12 Postdoc

3 Academicians, RAS
1 Corr. Mem., RAS
32 Dr. Sci.
121 Cand. Sci.
12 PhD

**25 Russian and
foreign academic
partners**

**20 Major
industrial
partners**



BIOCAD
Biotechnology Company

KATHOLIEKE UNIVERSITEIT
LEUVEN



MACQUARIE
University



РУСАЛ



Universiteit
Antwerpen



 **ЛУКОЙЛ**
НЕФТЯНАЯ КОМПАНИЯ

 **Pharmstandard**



РОСАТОМ

RAS: Russian Academy of Sciences
Corr. Mem.: Corresponding Member

Institute of Chemical Engineering today: **Who are our Graduates**

- **Technological chemists** fit for the enterprises of chemical and pharmaceutical industries, mechanical engineering and metallurgy
- **Researchers** in chemistry, materials science, biotechnology
- **Specialists in analytical laboratories**, product quality control laboratories and laboratory that test corrosion-resistant materials
- **Designers** expertise in calculating and designing the chemical machines and apparatuses using electronic design automation tools
- **Experts** in the field of organization and control over the implementation of the technological process in accordance with the regulations
- **Microbiologists and biotechnologists** in the experimental analysis and assessment of vital processes of biological objects; modification of the genotypes of biological objects with economically valuable traits; industrial microbiological control, and examining the raw materials and final products



Institute today: Our **Units**

Departments

- Analytical chemistry
- Immunochemistry
- Machinery and Apparatus for Chemical Production
- Organic & Biomolecular Chemistry
- Technology for Organic Synthesis
- Electrochemical Production Technologies
- Physical and Colloidal Chemistry
- Chemical Technology of Fuel and Industrial Ecology

Scientific laboratories

- Fiber Technology and Photonics
- Petrochemistry
- Medical chemistry and promising materials
- Physiologically Active compounds

Innovation Center for Chemical and Pharmaceutical Technologies



Education Program: Bachelor

Direction	Scientific Program	State-funded places
18.03.01 Chemical Technology	Chemical technology of inorganic, organic materials, natural energy and medicines	135 (Full-time) 15 (Extramural)
18.03.02 Energy and resource saving processes in chemical technology, petrochemistry and biotechnology	Energy and resource saving processes in chemical technology, petrochemistry and biotechnology	40 (Full-time)
19.03.01 Biotechnology	Biotechnology	35 (Full-time) 15 (Extramural)



361 State-funded places

Bachelor — 240

Master — 121

- All areas of research belong to the order of priority set by the development of science and technology;
- Education is carried out in a full-time and part-time mode of study;
- Student classes are provided in the form of lectures, laboratory, and practical courses

Education Program: Bachelor

Direction	Scientific Program	Program paths
<p>18.03.01 Chemical Technology</p>	<p>Chemical technology of inorganic, organic materials, natural energy and medicines</p>	<p>Chemical technology of organic substances</p> <p>Chemical technology of synthetic biologically active substances, chemical pharmaceuticals and cosmetics</p> <p>Chemical technology of inorganic substances</p> <p>Technology of electrochemical production</p> <p>Physicochemical technologies of materials for electronic engineering and energy</p> <p>Chemical technology of natural energy carriers and carbon materials</p> <p>Instrumental methods of analysis of natural and technical objects</p>
<p>18.03.02 Energy and resource saving processes in chemical technology, petrochemistry and biotechnology</p>	<p>Energy and resource saving processes in chemical technology, petrochemistry and biotechnology</p>	<p>Machines and devices for chemical production</p> <p>Environmental protection and rational use natural resources. Industrial ecology</p>
<p>19.03.01 Biotechnology</p>	<p>Biotechnology</p>	<p>Biotechnology Food Biotechnology</p>

Education Program: Master

Direction	Scientific Program	State-funded places
04.04.01 Chemistry 18.04.01 Chemical Technology 19.04.01 Biotechnology	Leave system. Advanced chemical-pharmaceutical and biotechnology: research and development	40
18.04.01 Chemical Technology	Chemical Engineering of Electronics Materials, Sensory Analytics and Inorganic Substances	12
	Chemical Engineering of Natural Energy Carriers, Petrochemical Products and Polymers	14
	Electrochemical synthesis of materials and corrosion protection	13
18.04.02 Energy and resource saving processes in chemical technology, petrochemistry and biotechnology	Machinery and Apparatus of Chemical and Nuclear Productions	12
19.04.01 Biotechnology	Molecular Biotechnology and Bioengineering	12
	Food Biotechnology (In russian / in english –contract only)	8/0
	Cell and gene technologies in cosmetology, pharmaceuticals and medicine of the future (Full-time, Extramural)	10



361 State-funded places

Bachelor — 240

Master — 121

Education: **CONTRACT BASIS**

- Prior to the payment of tuition fees (Per academic year)— **4 % discount** is given
- Discounts are eligible for Russian citizens and neighbouring countries based on the results of admission tests:
- For the scores from **155 points and above - a discount is given for the entire period of study** ("Chemical Technology" – scoring 179 and above)
- The high scores (based on their order) are given- **20% discount for the first academic year** (it can be extended upon passing the examinations with grades "good" and "excellent")
- More information about the tuition fees/sending requests are available on the following website:

<http://skidki.urfu.ru>



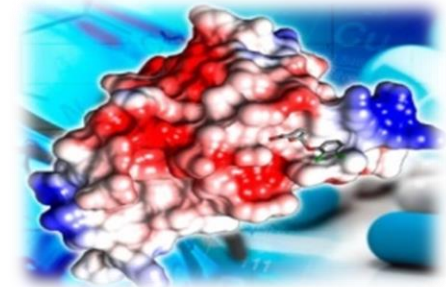
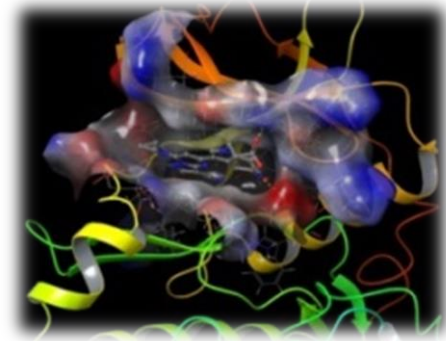
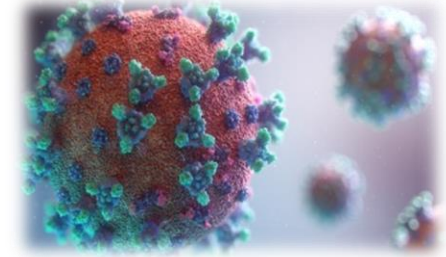
**Institute of Chemical
Engineering**
WE ARE URAL FEDERAL!

Majority scientific and innovative projects – drivers of scientific and technological development of the institute



Direction

**Promising
organic materials,
chemical-pharmaceutical
and biotechnology**



- Medical chemistry in the creation of new generation drugs for the treatment of socially significant diseases (headed by O.N. Chupakhin, V.L. Rusinov).
- Green methods and biotransformation technologies for the creation of promising materials for theranostics of socially significant diseases and new (bio) pharmaceutical products (headed by G.V. Zyryanov, E.G. Kovaleva)
- Target-oriented design and screening of promising drug candidates for a number of azoloazines against SARS-CoV-2 and other viral infections (supervisor V.N. Charushin).
- New synthetic inhibitors of RNA-dependent RNA polymerase and RNA helicase NSP13 as promising drug candidates for the treatment of COVID-19 (supervisor V.N. Charushin)



ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ УЧРЕЖДЕНИЕ
«ЦЕНТР СТРАТЕГИЧЕСКОГО ПЛАНИРОВАНИЯ И УПРАВЛЕНИЯ
МЕДИКО-БИОЛОГИЧЕСКИМИ РИСКАМИ ЗДОРОВЬЮ»
ФЕДЕРАЛЬНОГО МЕДИКО – БИОЛОГИЧЕСКОГО АГЕНТСТВА



ФМБА РОССИИ



РОССИЙСКАЯ АКАДЕМИЯ НАУК
УРАЛЬСКОЕ ОТДЕЛЕНИЕ

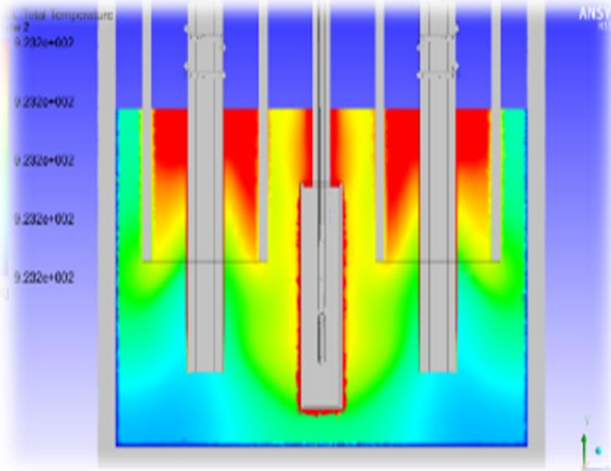


ФАРМАЦЕВТИЧЕСКИЙ ЗАВОД
МЕДСИНТЕЗ



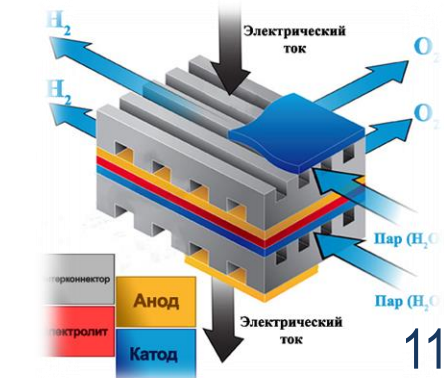
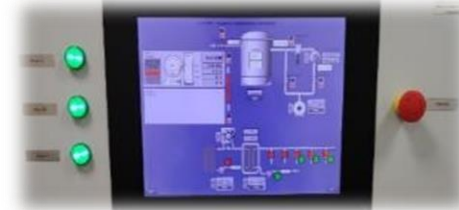
Universiteit
Antwerpen

Majority scientific and innovative projects – drivers of scientific and technological development of the institute



Direction

Electrochemical design of materials for clean energy and space technologies



- Development of pyrochemical technology and equipment for the reprocessing of spent nuclear fuel from fast reactors - Project "Breakthrough" (headed by Y.P. Zaikov).
- Fundamentals and applied aspects of electrochemical synthesis of new materials for electrochemical devices for energy conversion and storage (supervisor A.V. Suzdaltsev)
- Development of new materials and innovative technologies for the creation of a new generation of solid oxide electrolytic cells for hydrogen production (based on the results of the preliminary design) (Y.P. Zaikov).



ПРОРЫВ
РОСАТОМ



НАУКА
И ИННОВАЦИИ
РОСАТОМ



РОССИЙСКАЯ АКАДЕМИЯ НАУК
УРАЛЬСКОЕ ОТДЕЛЕНИЕ



Academic Partners *and* International Affairs



Opportunities: EMPLOYMENT

BIOSCAD
Biotechnology Company

ЛУКОЙЛ
НЕФТЯНАЯ КОМПАНИЯ

РУСАЛ

Generium
Pharmaceutical

УРАЛХИМПЛАСТ
ГАЗПРОМ

**ПРОИЗВОДСТВЕННОЕ
ОБЪЕДИНЕНИЕ
МАЯК**

**ФАРМАЦЕВТИЧЕСКИЙ ЗАВОД
МЕДСИНТЕЗ**

ИВТЭ
Институт
высокотемпературной
электрохимии
Уральского отделения
Российской Академии Наук

НИКА
PetroTech

ПРЕДПРИЯТИЕ ГОСКОРПОРАЦИИ «РОСАТОМ»

Открытое акционерное общество
СВЕРДНИИХИММАШ

ИНФОТЭК/АТ

УралБиофарм

ИРМ

ОТС Pharm
ОТИСИФАРМ

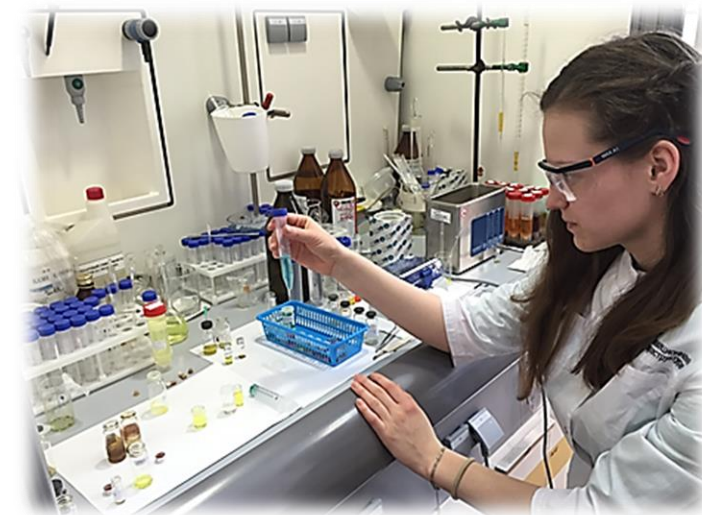


РОСКОСМОС

**ИНСТИТУТ ХИМИИ
ТВЕРДОГО
ТЕЛА
УРО
РАН**



УРАЛЬСКИЙ
ЭЛЕКТРОМЕХАНИЧЕСКИЙ
ЗАВОД



Opportunities: **FELLOWSHIPS**

**UrFU spends 200 000 000 rubles
in talent investment**

23 NAMED FELLOWSHIPS

- President of the Russian Federation
- Government of the Russian Federation
- First President of the Russian Federation
- Governor of the Sverdlovsk Region named after V.I. Vernadsky
- V. Potanin
- R-Pharm



Opportunities: **STUDENT LIFE**



From the first year, the institute organizes **tournaments, amateur art shows, Olympiads and contests;**



It also publishes **XUM'ERA newspaper;**

Charity work;

Active scientific activity

Opportunities: Extracurricular activities



The Institute organizes sporting activities, cultural events and contests



Opportunities: Extracurricular activities

The Institute organizes meetings and excursions for both graduates and high-school students



Personal account of the applicant



- **Registration is the initial step in electronic submission process**
- Catalogue of academic programs
- Examination calculator
- Training courses
- Events for applicants

Registration: <https://urfu.ru/en/international/>



**Ural Federal
University**

named after the first President
of Russia B.N.Yeltsin

**Institute
of Chemical Engineering**

Institute contacts



Institute of Chemical Engineering

620002, 28 Mira street, Ekaterinburg,
Russia, office X-327

<http://hti.urfu.ru>

https://vk.com/hti_urfu

hti@urfu.ru

Directorate: Tel. 375-44-20

+7 (912) 297-65-99

+7 (964) 489-88-75

Central Admission Committee:

+7 (343) 375-44-74