

Institute of Geology and Petroleum Technologies at Kazan Federal University

#35 in the world
QS Subject Rankings in Petroleum Engineering





KAZAN UNIVERSITY: DEVELOPMENT MILESTONES





Lobachevsky

1917



Tolstov



Claus



Lenin



Butlerov



Vishnevsk





Zavoisky



Ruthenium discovered by Karl Claus



1844

1804

Executive Order signed by Emperor Alexander I on establishment of Kazan Imperial University



Yevgeny Zavoisky discovered electron paramagnetic resonance (EPR)

1930

Restructuring of Kazan State University 1944



1981

1979

priority2030^ leaders are made, not born 5100

2019 2013

Federal University Kazan implementing large-scale

Kazan Institute of Chemical Kazan Medical Institute

Alexander Tupolev Kazan Aviation

Institutes of the Kazan Research Center of the USSR Academy of was established and started development programs

> Kama Academy of Engineering and Economics Yelabuga State Pedagogical University

Tatar State University of Humanities and

Secondary schools, lyceums

2010

Medical facilities complex



KAZAN FEDERAL UNIVERSITY. FACTS AND FIGURES



1804

2nd oldest university In Russia



real estate items 125 landplots (253 ha)



Students total



11 600
International students
104 countries



17 institutes/faculties, 1 higher school, 4 branches, 2 lyceums, secondary school, kindergarten



415

research laboratories, University clinic



10 000 employees 4 000 academic staff average age – 43



Foreign partners 53 countries





Astronomical Observatory Complex of KFU is inscribed into the **UNESCO World Heritage List** (September 2023, Saudi Arabia, 45th session of the UNESCO World Heritage Committee)





KFU Naberezhnye Chelny Institute **CYBER AUTO TECH** Advanced Engineering School organized jointly with Joint Stock Company KAMAZ



Corporate 24-hour UNIVER TV-

channel (full-HD broadcasting) is included in TV packages of all major Russian providers

Broadcasting since **2011**

5 mln audience



Kazan Federal University - Studies and structure

Natural Sciences

Medicine and biology Environmental science Geology and petroleum technologies Chemistry

Territorial campuses

Yelabuga, Russia Naberezhnye Chelny, Russia Jizzakh, Uzbekistan Cairo, Egypt

Physics, Mathematics, IT

Physics
Astronomy
Mathematics and mechanics
Computer science
Engineering (heat, electrical, automotive, civil, mechanical, biotechnical, cryogenics, materials science)

School and Pre-school Education

IT Lyceum Lobachevsky Lyceum University School of Yelabuga We are Together Kindergarten

Social Sciences and Humanities

International relations

Law

Philology and linguistics — over 20 languages

Psychology

Philosophy and theology

Sociology

Political science

Design and environmental arts

Economics and finance

Management and public service

Teacher education









<u>Priority 2030 – Strategic projects</u>

Priority 2030 is a Russian strategic academic leadership program launched in 2021. There are two tracks in the project – the Territorial / Industrial Leadership track and the Research Leadership track. KFU is part the Territorial / Industrial leadership group. Our University listed five strategic projects for the program:

- SP1 Genomic and Post-Genomic Technology
- SP2 Russian Energy Transition: Balancing Natural Potential and Global Trends
- **SP3 Digital Studies of Materials**
- SP4 Meta-Platform Solutions for IT, AI and Cyber-Physical Systems
- **SP5 Evidence-Based Platform Solutions for Human Potential**





5 in Russia



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Cultural, social and sports infrastructure





Over 14,000 students are hosted at various KFU dorms, including the Universiade Village – one of the largest dorm campuses in Russia









11 sports venues

12 museums (humanities, technology, and natural sciences)

1 mln depository items

10 large-scale exhibition projects per year

35 thousand visitors per year



Geology and Petroleum Technologies at Kazan Federal University – three pillars

Institute of Geology and Petroleum Technologies (education and research)
World-Class Research Center for Liquid Hydrocarbons

(research)

Center for Advanced Training, Quality Management and Marketing (advanced professional training)











Institute of Geology and Petroleum Technologies **OUR INSTITUTE**

World # 35
QS World University Rankings by
Subject 2025: Engineering Petroleum

World-class laboratories

Students actively partake in our research



Over 1,700 students

Cooperation with local and overseas universities

Employment opportunities in industryleading companies











Institute of Geology and Petroleum Technologies

OUR EDUCATIONAL PROGRAMS

Bachelor's programs (4 years)

- Geology and development of mineral deposits
- Geophysics
- General geology
- Engineering geology and hydrogeology
- Petroleum engineering
- Geography
- Cartography and GIS
- Teacher education (geography and ecology) 5 years

PhD programs (4 years)

- Oil chemistry
- Paleontology and stratigraphy
- Mineralogy and crystallography; geochemistry and geochemical methods of mineral exploration
- Lithology

Master's programs (2 years)

- Contemporary geophysical technologies of hydrocarbon prospecting and exploration
- Engineering geology and hydrogeology of urban territories
- Geology of mineral deposits
- Geology and geochemistry of oil and gas
- Digital technology and modeling methods in oil and gas geology
- Stratigraphy of oil and gas basins
- Complex data analysis in geosciences (English program)
- Petroleum engineering (English program)
- Development of hard-to-recover and unconventional hydrocarbon fields
- Integrated modeling of deposits
- Technology of oil, gas and natural bitumen
- Economic geography and spatial development of territories
- GIS and space technology in economics and management
- Teacher education (geography and ecology)

PhD programs (4 years)

- Hydrogeology
- Geophysics
- Geology, exploration, prospecting and development of oil and gas deposits
- Development of oil and gas deposits
- Petroleum engineering (English program)



Institute of Geology and Petroleum Technologies SOME OF OUR LABORATORIES



Laboratory of Geochemistry, Isotope and Element Analysis

Laboratory of Enhanced Oil Recovery









Laboratory of X-ray Tomography

In-Situ Combustion Laboratory





401 in the world 5 in Russia











Institute of Geology and Petroleum Technologies

SOME OF OUR LABORATORIES



Laboratory of Hydrate Technologies for the Utilization and Storage of Greenhouse Gases

Electron Microscopy Laboratory











3D GEO Center

Laboratory of Petrophysical Methods of Geological Material Research





401 in the world 5 in Russia



















COOPERATION

Russian companies



International companies













World-Class Research Center for Liquid Hydrocarbons (2020-2024)

The Center was established in 2020 to advance research in hydrocarbon deposit exploration, comprehensive deposit monitoring, eco-friendly and efficient methods of production on heavy and complex reservoirs

Among the Center's priorities were:

Fundamental research

New production paradigms

Exploration of new reserves

Sharing of best practices











World-Class Research Center for Liquid Hydrocarbons (2020-2024)

RESEARCH PRIORITIES

Satellite imaging Heat flows Carbon isotope record Sedimentation basins Evaluation of reserves Geothermochronology Air, water, and ground prospecting and exploration Drone surveillance

Big data and Al in geological modeling "Pseudo"-core samples Microfluid research Exploration on depleted reservoirs Eco-friendly and costeffective drilling technologies

Utilization of associated petroleum gas for enhanced oil recovery
Oil displacement mechanisms
Enhanced oil recovery
(ionized water, surfactants, polymers, gels)
Catalysts for viscous oils
Express analysis of composition of oil and oil products











Center for Advanced Training, Quality Management and Marketing

CdoGEO implements professional retraining programs, advanced training courses, conducts webinars and individual internships

Courses are implemented in any of the requested formats:

- ✓ Full-time
- ✓ Part-time
- ✓ In the field, at enterprises, in laboratories















Center for Advanced Training, Quality Management and Marketing

Individual internships at our best laboratories

Professional training in:

- Geology and geophysics
- Field development

- Geodesy and prospecting
- Geomechanics
- Drilling
- Modeling
- Metrology
- Management in the petroleum industry



Uniting our capabilites for everyone's success!

CdoGEO

















Representatives of **Cuba** (CUPET), **Iraq** (South Oil Company), **China** (UPC), **Vietnam** (Vietsovpetro), **Belarus** (Rechitsaneft, Belorusneft), **Uzbekistan** (IGIRNIGM, Uzbekgeofizika), **Kazakhstan** (Maten Petroleum) have completed their training at CdoGEO.

We have also trained our students as part of a departmental target program for the training of engineering personnel in **China, France, Germany,** and **Switzerland.** Our Center has implemented programs with the participation of international partners from the USA, Canada, and the UAE.

















Center for Advanced Training, Quality Management and Marketing

We integrate everybody's possibilities for each one's success!



cdogeo.kpfu.ru/centre

- 16+ professional retraining programs
- 110+ professional development programs
- 100+ distance learning courses
- 1,000+ students per year
- 170+ teachers and experts

Our partners and customers

PJSC NK Rosneft PAO Tatneft

PJSC Gazprom

PJSC Gazpromneft
PJSC LUKOIL

JSC "Ritek"

OJSC "Surgutneftegas"

LLC "TNG-Group"

JSC "Bashneftegeofizika"

PJSC "Geotech holding"

MH Industry (Kazakhstan)

Burgylau LLP (Kazakhstan)

Unión Cuba-Petróleo (Cuba)

Southern Oil Company (Republic of Iraq)

Roxar Services AS

All-Russian Research Institute of Flow

Measurement Schlumberger SPE Paker LLC

Mirrico Group of Companies

CMG (Canada) Trimble (US) IFP (France)

HONG KONG UNITE CREATION

INTERNATIONAL CO. LIMITED (China)

Conferences 2026











имические методы

PETROPHYSICS XXI

19-21 March 2026, Kazan Abdullina Elina **%** +7 (952) 036-99-98 pp21.conf@yandex.ru @pp21 conf

Tatarstan UpExPro

13-14 April 2026, Kazan Semenova Aliya **&** +7 (986) 712-94-93 @tatarstanupexpro

Development of gas condensate fields

28-29 May 2026, Kazan Saptarova Zalina **\(\sigma +7 (987) 291-37-23**

Chemical Enhanced Oil Recovery Methods

26-27 May 2026, Kazan □ cheorconference@yandex.ru

Practice GeoChemistry

Practice GeoChemistry

Semenova Aliya

@pgc conf

25-26 June 2026, Kazan

& +7 (986) 712-94-93

□ pqc.conf@qmail.com

Website

ЦИФРОВИЗАЦИИ НЕЙРОСЕТЕВЫХ



Current trends in digitalization and development of neural network technologies in the oil and gas industry

4-5 August 2026, Kazan Sudakov Vladislav & +79600441495



Karbon

12-14 August 2026, Kazan Abdullina Elina & +7 (952) 036-99-98 karbon.conf@gmail.com @karb0n ru

Foundation Ecology-Geology-Oil of the Institute of Geology and Petroleum Technologies of Kazan Federal University





EDUCATIONAL PROJECTS

- Study abroad grants for students
- Participation in conferences and seminars
- Support of research relevant to the oil and gas and applied industries
- Procurement of equipment and materials



SUPPORT FOR TALENTED STUDENTS

- Support for the creative and sports life of the Institute
- Procurement
- Scholarships for academic excellence
- Funding of field events



CONFERENCES AND SEMINARS

- Organizing of unique and regular scientific forums
- Roundtables and discussions of the oil and gas industry and pertinent solutions



CLASSROOM FURBISHMENT

- Procurement of new equipment and furniture
- Renovations

Contacts

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