



DEAR ENTRANTS!

Being the oldest in the country, Al-Farabi Kazakh National University was founded back in 1934, and to this day remains the flagship of higher education and science not only in the Republic of Kazakhstan, but throughout Central Asia. Among the first faculties was the Physics and Mathematics, whose striking traditions are inherited by the Faculty of Physics and Technology – now the Center of the Physics and Technology Cluster, which includes three research institutes that conduct world-class researches in different areas of physics and technology.

Under the guidance of a highly qualified teaching staff, talented students receive fundamental education in three languages: Kazakh, Russian and English; from their early years they are actively involved in research on topical issues of modern physics and technology within the framework of established scientific schools.

The Faculty of Physics and Technology is the leader in the higher education area in the republic. Tutors and students regularly publish articles in leading peer-reviewed journals and, as a result, the number of inventions, patents and copyright certificates increases year by year. All these fantastic achievements have become possible thanks to the talent, enthusiasm and creativity of several generations of researchers who worked and continue their work within at the faculty. As a result, graduates of the Faculty of Physics and Technology are highly regarded in the labor market of the country, since they have fundamental knowledge and practical skills that allow them to actively master any new branches of science and technology, thereby finding their place in life.

We know that the future development of our faculty wholly depends on you – gifted, motivated, active and ambitious young people, aimed at getting the best education in the country, open to new knowledge and equal dialogue with us. The future of Kazakhstan is in your hands! We are always ready to make your dreams come true together with you and your success is our primary goal! We are convinced that the Faculty of Physics and Technology of Al-Farabi Kazakh National University will forever remain in your hearts and you will proudly bear the title of its graduate just as we do!



Dean of the Faculty of
Physics and
Technology, Professor
A.E. Davletov



FACULTY GRADUATES CAN WORK ...

Definitely, people who graduate from Faculty of Physics and Technology will develop an analytical mind and an irresistible love for natural sciences. As a rule, choosing our faculty is a deliberate step forward, which inevitably will turn your expectations into reality.

THE GRADUATES OF THE FACULTY OF PHYSICS AND TECHNOLOGY CAN WORK AS

Employee of research institutes;
Lecturer in educational institutions;
Laboratory assistant in educational institutions;
Laboratory employee in R&D companies;
Engineer in manufacturing companies;
Processing engineer;
Bank manager;
Scientific programs consultant;
Chief energy executive;
Technician in medical centers;
Specialist of the Ministry of Education and Science;
Specialist of the Ministry of Energy;
Specialist of the Ministry of Development, Innovation and Aerospace industry.



OUR PRIDE – SUCESSFUL GRADUATES!



Kozhamkulov Tolegen Abdisagievich
Doctor of Physical and Mathematical Sciences, Professor, Academician of the National Academy of Sciences of the Republic of Kazakhstan, Honored Scientist of the Republic of Kazakhstan, Laureate of the State Prize of the Republic of Kazakhstan named after al-Farabi in the area of science and technology, awarded the Order "Parasat" and "Barys" II degree.



Ramazanov Tlekkabul Sabitovich
Doctor of Physical and Mathematical Sciences, Professor, Academician of the National Academy of Sciences of the Republic of Kazakhstan, Honored Scientist of the Republic of Kazakhstan, laureate of the State Prize of the Republic of Kazakhstan named after al-Farabi in the area of science and technology, awarded the Order "Parasat".



Askarova Aliya Sandybaevna
Doctor of Physical and Mathematical Sciences, Professor, awarded the Order "Qurmet" and the gold medal "Al-Farabi".



Isataev Sovet Isataevich
Candidate of Physical and Mathematical Sciences, Professor, Honorable Head of the Department Thermal Physics and Technical Physics, Excellence award in Higher Education of the USSR, participant of the labor front of the Great Patriotic War, awarded with medals "60 years of the Great Patriotic War", "Eren enbegi ushin"



Zhagabaev Zeinulla Zhagabayuly
Doctor of Physical and Mathematical Sciences, Professor, awarded with the silver medal "al-Farabi".



EDUCATIONAL PROGRAMS OF THE FACULTY

The faculty has 4 departments:

- 1 Department of Theoretical and Nuclear Physics
- 2 Department of Thermal Physics and Technical Physics
- 3 Department of Solid State Physics and Nonlinear Physics
- 4 Department of Plasma Physics, Nanotechnology and Computer Physics

BACHELOR PROGRAMS

B054 Physics

Cyber Physics (eng.)
Technical Physics
Physics
Physics (double degree)
Physics and Astronomy
Physics and Nanotechnology
Nuclear Physics
Nuclear Physics (double degree)
Nuclear Medicine
Computer Physics

B061 Materials Science and Technology

Materials Sciences and Technology of New Materials

B062 Electrical and Power Engineering

Heat Power Engineering
Electric Power Engineering

B063 Electrical and Automation

Industrial Electronics and Control Systems

B076 Standardization, Certification and Metrology (by industry)

Standardization and Certification (by industry)

B059 Communication and Communication technology

Radio Engineering, Electronics and Telecommunications



MASTER PROGRAMS

M090 Physics

Physics
Physics (double degree)
Nuclear Physics
Nuclear Physics (double degree)
Nuclear Medicine
Technical Physics
Technical Physics (double degree)
Physics and Astronomy

M096 Communications and Communication Technology

Radio Engineering, Electronics and Telecommunications

M098 Thermal Power Engineering

Heat Power Engineering
Heat Power Engineering (double degree)
Alternative Energy

M099 Energy and Electrical Engineering

Electric Power Engineering
Management in Electric Power Engineering

M101 Materials Sciences and Technology of New Materials

Materials Sciences and Technology of New Materials
Materials Sciences and Technology of New Materials (double degree)

M108 Nanomaterials and Nanotechnology

Nanomaterials and Nanotechnology

M011 Training of Physics Teachers

Physics

M130 Standardization, Certification and Metrology (by Industry)

Standardization and Certification (by industry)
Standardization and Certification (by industry) (double degree)
Technical Regulation and Quality Management
Metrology



PhD DOCTORATE

D090 Physics

Physics

Physics (double degree)

Nuclear Physics

Nuclear Medicine

Technical Physics

Technical Physics (double degree)

Physics and Astronomy

Relativistic Astrophysics

Gravity and Cosmology

D096 Communications and communication technology

Radio Engineering, Electronics and Telecommunications

D101 Materials Sciences and Technology of New Materials

Materials Sciences and Technology of New Materials

D098 Heat power engineering

Heat Power Engineering

Alternative Energy

D099 Energy and Electrical Engineering

Electric Power Engineering

D108 Nanomaterials and Nanotechnology

Nanomaterials and Nanotechnology

D130 Standardization, Certification and Metrology (by Industry)

Standardization and Certification (by industry)

Metrology



STUDENT LIFE

The faculty has student self-government bodies such as the "Student Council", "Student Maslikhat" and the trade union organization of students "Sunkar". Students from other cities are provided with places at dormitories.



Congratulations to entrepreneurs



Winners of Students Olympiad



Nauryz Holiday



Students at the Republican Students Olympiad in Karaganda



Students Olympiad



REVIEWS ABOUT OUR FACULTY



Undoubtedly, surrounding plays an important role in the development of each individual. On the Faculty of Physics and Technology, we have gained knowledge, learned a lot, improved our skill and, definitely, will become leaders. I consider my faculty to be the best, since tutors transfer their knowledge and skills with great enthusiasm to energetic, motivated students who always strive for the best results.

*Kokeshov Zhan, 3rd year student,
student dean*



Al-Farabi Kazakh National University is one of the leading universities in Kazakhstan. Qualified, experienced specialists work at the Faculty of Physics and Technology; here, state-of-the-art laboratories and equipment enhance the quality of education and student engagement. I am proud that I have chosen this profession and I can say with confidence that in the future, having become a specialist, I can make a feasible contribution to the development of our faculty.

*Serkan Yuksel, 3rd year student,
RET, English group student*



FOREIGN PRACTICE



Students take an internship at the EPhIB at
MEPHI



Our students in Korea



University of Split, Croatia



Students in St. Petersburg



Italy



France, Erasmus + Academic Mobility



Educational and laboratory facilities:

- Laboratory of Cryophysics and Cryotechnology
- Laboratories of General Physics: Mechanics
- Laboratories of General Physics: Molecular Physics
- Metrology Laboratories
- Laboratory of Heat and Mass Transfer in Multicomponent Gas Environments
- Laboratory of Hydro- and Aerodynamics
- Laboratory for Modeling Heat and Mass Transfer Processes
- Laboratory of Heat and Mass Transfer
- Laboratory of General Physics: Electricity and Magnetism
- Laboratory of General Physics: Atomic Physics
- Laboratory for the Basics of Electrical Engineering
- Laboratory of Gas Discharge Physics and Vacuum Technology
- Laboratory of Gas Discharge and Plasma Diagnostics
- Laboratory of Nonlinear and Correlation Phenomena in Plasmas
- Plasma Accelerator Laboratory
- Laboratory for Mathematical Modeling of Plasma Processes
- Laboratory of Dust Plasma and Plasma Technologies
- Laboratory of Problems of Thermal Physics, Turbulence and Combustion Processes
- Laboratory of Condensed Matter Physics and Materials Science Problems
- Nanotechnology
- Interaction of Nuclear, Electromagnetic Radiation and Accelerated Particles with Matter
- Theoretical and Experimental Nuclear Physics
- Physics of Cosmic Rays
- Radio Physics and Electronics; Nonlinear physics
- Actual Problems of Relativity, Gravity and Quantum Chromodynamics
- Heat Power Engineering: Nuclear, Thermonuclear Power Engineering
- Renewable Energy Sources
- Information and Telecommunication technologies
- Laboratory of General Physics: Nuclear Physics
- Laboratory for Radiation Interaction with Matter
- Laboratory for Nuclear Electronics
- Laboratory of Radio Energy and Radiation Safety
- Laboratory on Applied Nuclear Physics



Employers:

Institute of Nuclear Physics
Joint Institute for Nuclear Research (JINR)
Joint Stock Company/National Atomic Company "Kazatomprom"
"Kazakhstan Institute of Standardization and Certification"
"Kazakhstan Institute of Metrology"
Joint Stock Company "NTO PLASMOTECHNIKA R @ D"
Almaty Thermal Power Station 2
Joint Stock Company "AIES"
Research Institute for Experimental and Theoretical Physics (RIETP)
National Nanotechnology Laboratory of Open Type (NNLOT)
KEGOC
Joint Stock Company "Physics and Technology Institute"
Joint Stock Company "Center for Earth Sciences, Metallurgy and Ore Beneficiation"
"Institute of Combustion Problems"
Ulba Metallurgical Plant
Joint Stock Company "Kazakhmys"





INTERNATIONAL COOPERATION

