

## QUESTIONNAIRE

### East Kazakhstan State Technical University named after D. Serikbayev

|  | <b>Details about organization</b>  |
|--|--|
| <b>Organization name</b>   | East Kazakhstan State Technical University named after D. Serikbayev   |
| <b>Organization acronym</b>  | EKSTU named after D. Serikbayev  |
| <b>Organization Activity Type</b><br>(RES – Research, HE – University, SME – Small and medium Enterprise, IND – Industry, OTH – Other) | RES, HE  |
| <b>Keywords of main research areas</b>   | Mining , Geology , Ecology Safety, Metallurgy, Architecture, Design and Construction, Technical Physics , Nanotechnology and Material Study, Technological Machines and Equipment , Information Systems , Energy Saving , Biotechnology , Transport and Logistics, Geodesy , Economics |
| <b>Head of Organization (first name, Family name)</b>  | Galimkair Mutanov  |
| <b>Post code</b>   | 070004   |
| <b>Country</b>   | Kazakhstan   |
| <b>City</b>  | Ust-Kamenogorsk  |
| <b>Street , house</b>  | Protozanova, 69  |
| <b>Telephone (+ country &amp; city codes )</b>   | +7 7232 26 74 09   |
| <b>Fax (+ country &amp; city codes )</b>   | +7 7232 26 74 09   |
| <b>E-mail</b>  | <a href="mailto:kanc_ektu@mail.ru">kanc_ektu@mail.ru</a>   |

#### **Description of organization and its research achievements for the last five years ( - 5000 signs)**

East Kazakhstan State Technical University named after D. Serikbayev is one of the leading universities in Kazakhstan. There is first time in Kazakhstan model of innovative higher education institution "University-Technopark" has been realized. The model integrates education, science and manufacturing. The guiding principle of university transformation is innovative education.

The University provides training at 5 departments, 27 sub-departments including 19 engineering ones. Each department is a complete cluster in particular scientific and academic activities. The University provides training in both the state language and Russian for full-time attendance instruction and instruction by correspondence including distance learning technologies specialties of bachelor programs and 32 specialties of master programs. The number of students is more than 10000.

Mobile information-educational environment on the basis of Internet/Intranet tech Educational Portal of East-Kazakhstan State Technical University is created and successfully 1 in the framework of "e-university" project realization. The university has its own virtual representative office in the information-educational en\ of Federal educational portal "Russian Portal of Open Education". On its basis the represent of UNESCO institute on information technologies in education was established.

East department of Kazakhstani National committee (International association on exchange of internships and probations of technical students) was established at the university. Central-Asian center of international faculty training, accredited by IGIP, KazSEE, that represent our country in International Federation of Engineering Education Societies (Washington) was established on the basis of the university for the development of the system of modern education, faculty training and retraining and mastering new technologies.

University faculty is presented by: one academician of National Academy of Science, three academicians of National Engineering Academy of the Republic of Kazakhstan, more than 20 academicians and corresponding members of different branch academies, 39 Doctors of Sc 220 Candidates of Science. Among faculty there is one "Parasat" medal holder, three "Kurmet" holders, prize winners of State Award of the USSR, two honored workers of science and technology the Republic of Kazakhstan. In 2005-2007 20 faculty members became winners of the state scholarship of the state scholarships of the Republic of Kazakhstan "The best member of the faculty". In 2008 the collective body of the university was awarded a prize of the European Bossiness Assembly "European quality" for the ambition to achieve high quality goods and services corresponding European standards.

Scientific research and scientific-industrial activity is carried out using 33 scientific research and academic-scientific research institutes, centers and laboratories. They fulfill more than 300 research works and projects annually. The main fields of research activity of the University are: architecture and design, construction, material science, metallurgy, nanotechnologies, physics of condensed state, geology, mining, environment protection, modern issues of computational mathematics and algebra of logics, geoinformational technologies, etc.

In accordance with the objectives set by the President of the country the University established "IRGETAS" regional university engineering laboratory. It successfully works towards the development of high technologies in the field of developing new materials on the basis of complex use of mining and metallurgy industry resources. It serves as a link within "Altai-Alliance" unitary regional educational-research-innovative industrial complex, where it has the status of open multi-access laboratory.

The basis of the innovative activity is "Altai", the first in Kazakhstan Regional Scientific-Technological Park. Together with the University it makes a modern form of integration of science, education, and industry. "Bastau", a student technological business incubator established at the University, allows to introduce student achievements into specific innovative developments, and start new production on their basis. EKSTU encourages the transformation of knowledge into a commercial product and thus becomes an important link of innovative economy.

Innovative research projects being developed by researchers of EKSTU («Ceramics», «Uranium», «New Construction materials», «Mineral resources», «IT projects» etc.) will allow to create new productions having provided the transition from primary production orientation to the service-process one. The future of the research of the University is seen as common chain: education-research-production.

"IRGETAS" regional university engineering laboratory is a material research multi-access center of development of technologies and nanotechnologies of new material engineering for atomic industry, mechanical engineering, civil engineering and other branches of economy on the basis of complex use of mining and metallurgy industry resources of the Republic of Kazakhstan. The laboratory includes the following units: transmission electronic I microscopy, raster electronic microscopy X-ray diffractometry 9 mass spectrometry X-ray fluorescence analysis and n sample

preparation.

Today one of the leading Kazakhstani centers of nanotechnologies and receiving new materials is east mining-metallurgical region of the Republic of Kazakhstan, where they develop and realize several breakthrough projects. The important step in connection with this is the establishment Kazakhstani-Japanese teaching-scientific-research service center on nanotechnologies and electronic microscopy in D. Serikbaev East-Kazakhstan State Technical University. The Center is called to train and re-train the skilled professionals, to carry out the scientific research, and rendering service for the organizations of Kazakhstan, Central Asia and Western Siberia.

To develop the Center the leading Japanese firms in the field of electronic microscopy and nanotechnologies are ready to discuss and promote the training of highly skilled personnel for the work with the Japanese equipment, conducting workshops and master-class with the participating of the Japanese specialists in the Republic of Kazakhstan and probation period of Kazakhstani specialists in Japan. On the basis of the Center it was for the first time in the history of Sovereign Kazakhstan that we hosted an International Kazakhstani-Russian-Japanese Scientific Conference "Advanced Technologies, Equipment and Analytical Systems for Material Science and Nanomaterials" and the International Exhibition "Nanoindustry: Technology Equipment-Production".

"Altay" regional scientific and technological park was established in April, 2004 on the basis of D. Serikbaev EKSTU Innovation and New Technologies Center according to the decree of East Kazakhstan Akimat. The establishers are D.Serikbaev EKSTU and the Oblast Akimat. The infrastructure of Altay technopark: total area is approximately 6,000 sq.m.; 24 laboratories and innovative firms; patent-information subdivision; business center; Internet center; exhibition halls; specialized audio and video halls; conference halls; modern telecommunication systems; working areas. Research-production enterprises:

- on the basis of "Instrument-Making" Laboratory "Power Line Communication company" Ltd;
- on the basis of "Power Saving Technologies" Laboratory "Artificial Climate Center" Ltd, "Alternative Power Engineering Center" Ltd, "SANDI" Ltd;
- on the basis of "Actual Problems of Material Science" Laboratory "Kazvibrotech" Ltd, "KROOSH" Ltd;
- on the basis of educational scientific project center "LBStroy" Ltd;
- on basis of "GPS technologies" Laboratory "Vostokgeodeziya" Ltd, "Shygyskadastr" Ltd. Involving Novosibirsk Geodesic Academy.

Technopark running projects: "Ceramic Ware Production Technologies Development out of Beryllium Oxide using Ultrasound Cast Method", "Low-powered and Medium-powered Heat Pump Assembling Line Construction", "Technological Equipment and Building Structures Fixation Technology with the help of Expansion Dowel Pins", "Designing and Creation of X-ray Fluorescence Analysis Spectrometer for Assaying Precious Metals in Ores and their Refinement Products", "Modernization of Outdated Computers Stock", "Cellular Concrete Plant Construction", "Highway Certification on the basis of GIS and GPS Technologies", "Experimental-Industrial Center Construction". More than 10 projects on IT-technologies are integrated into the University.

|  | <b>Contact information</b>  |
|--|---|
| <b>Contact person (first name, family name )</b> | <b>Aizhan Smailova</b>  |
| <b>Department /laboratory</b>                    | <b>Center for International Scientific and Educational Programs</b> |

|  |   |
|--|---|
| <b>Position</b>  | <b>Director</b>   |
| <b>Qualification and research experience</b>             | <b>Candidate of philological sciences</b>                       |
| <b>Post address (house, street, city, code, country)</b> | <b>69 Protozanova street, Ust-Kamengorsk, 070004 Kazakhstan</b> |
| <b>Telephone (+ country &amp; city codes )</b>           | <b>+7 7232 26 25 33</b>   |
| <b>Fax (+ country &amp; city codes )</b>                 | <b>+7 7232 26 74 09</b>   |
| <b>E-mail</b>  | <b><a href="mailto:aismail@list.ru">aismail@list.ru</a></b>     |
|  |   |