



National Research  
**Tomsk State University**



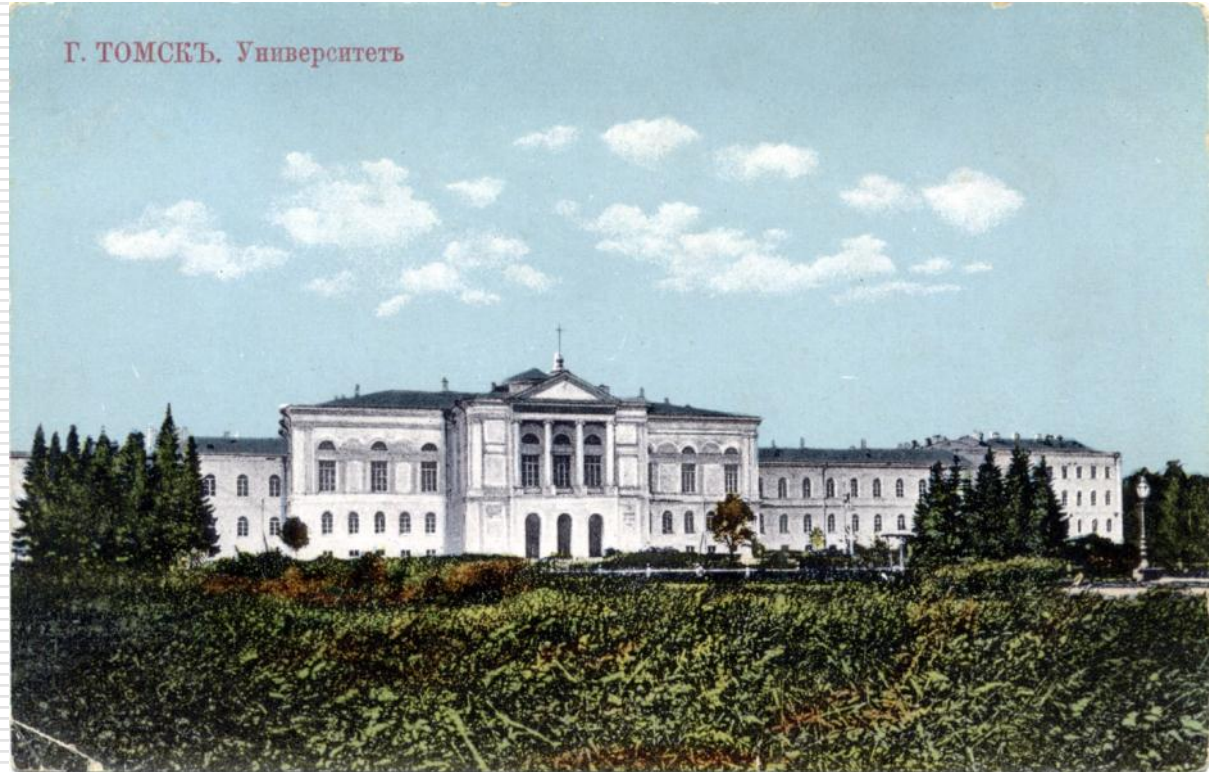
## **The First in Siberia**

*TSU is the largest classical university in the Asian part of Russia, a renowned center of science, education, and innovation*

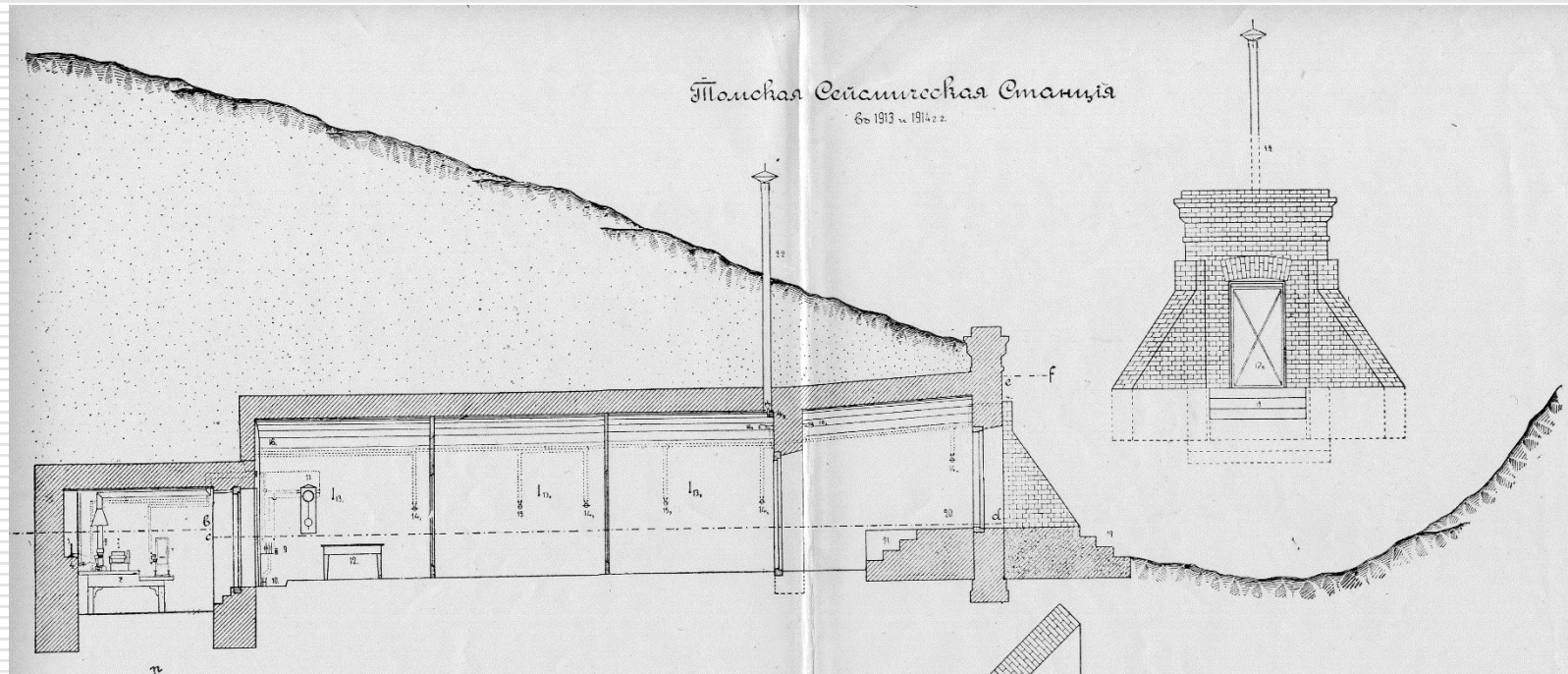




# National Research Tomsk State University



**Tomsk State University, founded May 28, 1878 by a decree of Emperor Alexander II as an Imperial university in Tomsk, became the first, and for a long time remained the only, institution of higher education in the vast territory from the Urals to the Pacific.**



**In 1911-1912 a seismograph station for the measurement of the earth's deformation influenced by gravitation of the moon and the earth was constructed in Tomsk as the center of the Euro-Asian continent. The station was built in the Botanical Gardens of Imperial Tomsk University.**





# National Research Tomsk State University

## **Fact**

***TSU professor Gordey Iosifov developed the method of mummy production which was used when Lenin's body was embalmed.***

## **Fact**

***In 1912-1914 TSU professor Boris Vainberg created the first in the world operating unit of an electrical railroad on a magnetic pad.***



*Boris Vainberg*

## **Fact**

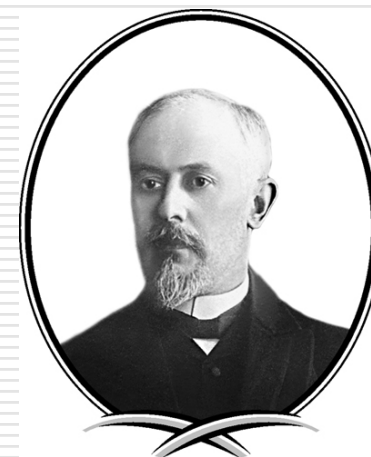
***In 1925 TSU graduate and university professor Aleksandr Sapozhnikov (1899-1980) organized the first tests of wire broadcasting through the Tomsk telephone network.***



*Aleksandr  
Sapozhnikov*

## **Fact**

***In 1902 TSU Physiology Department professor Aleksey Kulyabko was the first in the world to "reanimate" a child's heart after 20 hours of death from inflammation of lungs.***



*Aleksey Kulyabko*



**Tomsk State University has become one of the TOP 15 Russian leading universities that receive the state's support for entering the world TOP 100 university rankings.**



**In 2014, according to the federal Internet edition of "Country's Capital", TSU entered the TOP 10 theoretical and practical rating of universities' effectiveness (the 9th place).**



**TSU took 47th place in the world university rating of BRICS countries held by QS (the 6th place among Russian institutions of higher education).**



**TSU is in 10th place among Russian institutions of higher education in the Webometrics university rankings.**



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# Tomsk State University today

TSU today



**23** departments and  
institutes,  
150 subdepartments

**38** centres of pre-university training  
and career counseling in Siberia  
and Kazakhstan

**135** specialties and  
subject areas

**165** Master's  
degree  
programmes

**17,000**  
students

**650** postgraduate and  
postdoctoral  
students





**The Nobel prizewinners Terry Callaghan (*front row, second left*) and Zhores Alferov are members of International Academic council.**



Nobel Prize Winner,  
TSU Honorary Doctor  
Zhores I. Alferov



Harry V. Minkh,  
Plenipotentiary of the  
President of the Russian  
Federation at the State  
Duma of the Federal  
Assembly of the Russian  
Federation, is the Chairman  
of the Supervisory Board.



## National Research Tomsk State University

### Fact

***The TSU International Research Station "Aktru" has been working for more than 50 years. In 2011 the station, the only university-based one in Russia, entered INTERACT, the international network of field stations studying terrestrial ecosystems. In 2014 Minister Dmitry Livanov visited Aktru with an expedition. The expedition was dedicated to the date of the centenary of the first climb to the highest point of Altay – the mountain Belukha. This climb was done on July 26, 1914, by prospective professors, TSU scientists Michael Tronov and Boris Tronov.***

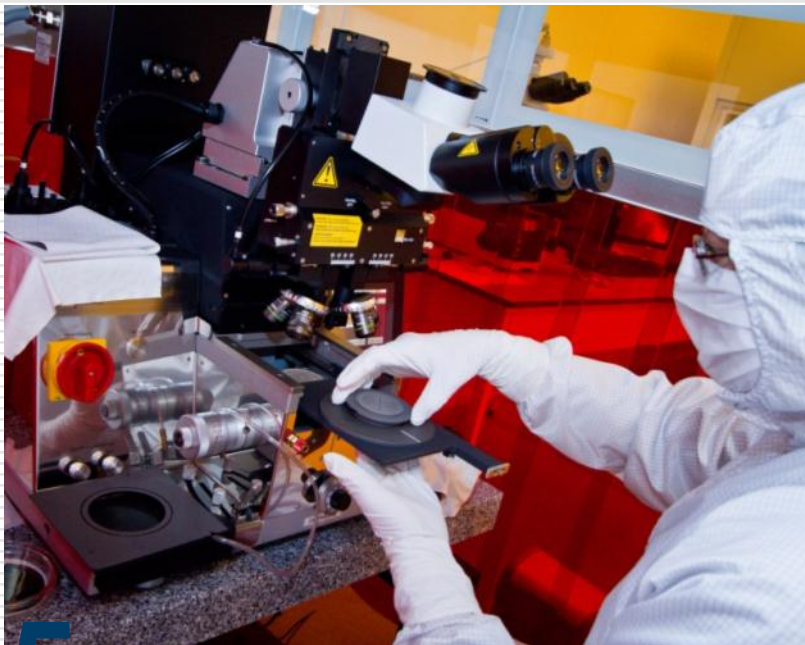
Minister  
Dmitry Livanov,  
Rector of the TSU  
Eduard  
Galazhinsky







# National Research Tomsk State University

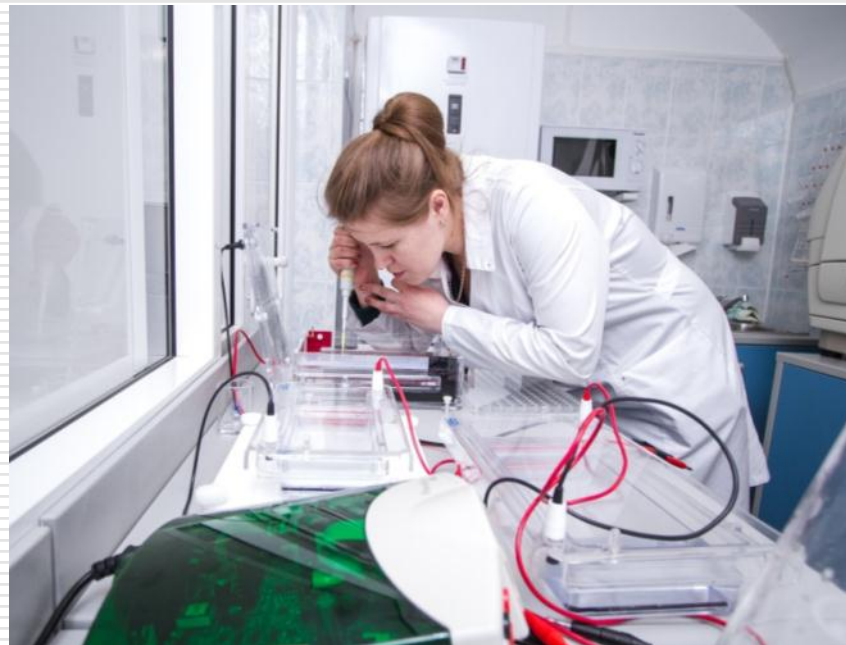


**5**

centres of  
excellence

**12**

centres for  
collective use of  
unique equipment



**48**

scientific and  
educational  
centres

**43**

leading  
research  
schools

**3**

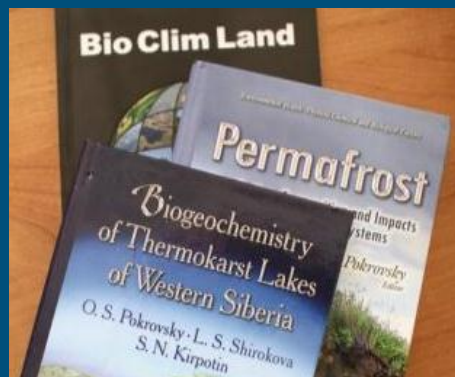
scientific research  
institutes

**35**

small innovative  
enterprises

**64**

world-class laboratories,  
where more than 100  
foreign scientists work



**In 2013 TSU staff members published 453 articles in journals included in the Scopus or Web of Science databases and 43 monographs abroad.**

**Fact**

***TSU physicists are the only scientific team which represents Russia in the EU international space project ExoMet EU.***



The staff of the Research and Education Centre "Fundamental and Mathematical Physics" is known as the most quoted in the world scientific press among all groups of Research and Educational Centres within the Federal Specific Programme "Specialists", with 93 scientific works in the Scopus or Web of Science databases, 2010-2012.





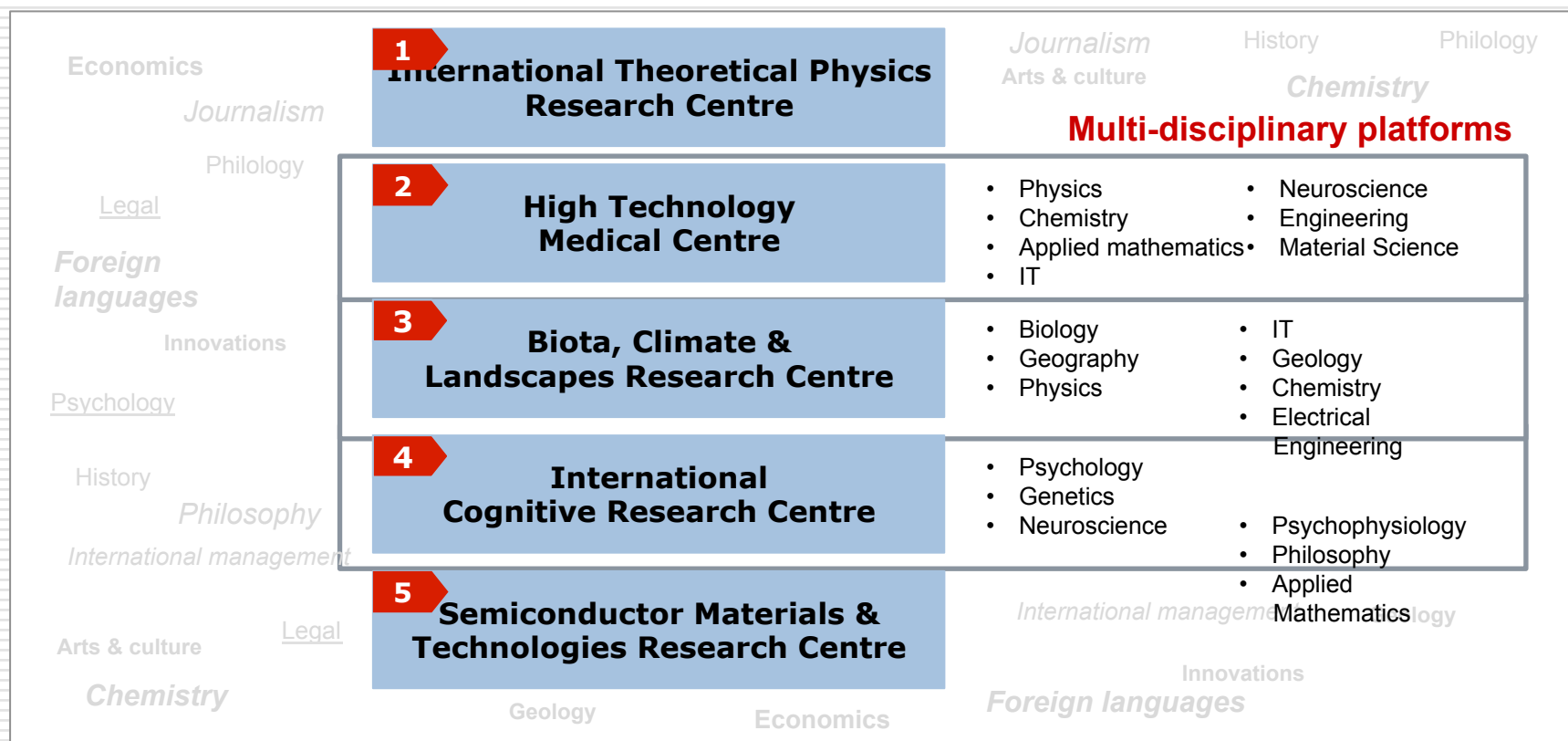
# Priority areas of development



- **Nano-technologies and materials**
- **Information and telecommunication and supercomputer technologies**
- **Environmental management and biological systems**
- **Design of advanced space, missile, and artillery systems**
- **Social and humanities-based knowledge and technologies in the modernization of the economy and the social sphere**



## To sustain competitiveness TSU focuses on five breakthrough research areas







**Fact**

### **33 Scientific and Educational Centers founded in partnership with industrial enterprises and academic institutes**

- «Physics and electronics of compound semiconductor» (Scientific Research Institute of Semiconductors)
- «Sea information technology» (Concern «Morinformсистема-Agat», since 2014)
- «Identification: navigation, diagnostics, mechatronics » (Scientific Institute of Semiconductors, Moscow Institute of Heating Engineering, «Informational Satellite System Named for academic M.F. Reshetnev»)

*In 1936 the ionospheric observation station was built under the direction of Vladimir Kessenikh. It was the first station in the USSR and the fifth in the world. It is still operating but was completely renovated.*



# National Research Tomsk State University



- Siberian Institute of Physics and Technology
- Scientific and Research Institute of Applied Mathematics and Mechanics
- Scientific and Research Institute of Biology and Biophysics
- Research Library
- Siberian Botanical Garden

**Tomsk regional  
teleport**

**SKIF Cyberia  
Supercomputer**

**Innovation-based  
technological  
business-incubator**

**Fact**

***In 1963 the  
first Tomsk  
laser was  
developed  
at the  
Siberian  
Institute of  
Physics and  
Technology***





# National Research Tomsk State University



The TSU Research Library was founded in 1880 and originally consisted of numerous private collections donated to the university. It was opened to the public in 1888. It is now the largest university research library in Western Siberia and one of the largest nationally recognized libraries in Russia.

## Facts

***A tower of the Library's 3.8 million volumes would reach the official boundary of space – 100 kilometers***

***The unique private library of poet Vasiliy Andreevich Zhukovskiy is in Tomsk owing to the initiative of Irkutsk businessman A.M. Sibiryakov, who bought it at the poet's successor in 1879 especially for the first Siberian university.***





**Fact**

***The biotechnology laboratory of TSU Botanical Gardens performs the cloning of tropical plants, in particular the most expensive and subtle flowers - orchids.***

The Siberian Botanical Gardens at TSU was founded in the summer of 1880. Then it occupied an area of 1.2 hectares. Currently its premises occupy 128 hectares and house a greenhouse complex (6500 square meters) and an experimental farm (114 hectares). A live plants exposition consists of more than 6,000 species.





**International scientific and educational projects have developed, including cooperation agreements for the Double Master's Diploma with foreign universities**

- ✓ Brussels Free University (Brussels)
- ✓ Feng Chia University (Taiwan)
- ✓ Science and Technology University Lille 1 (France)
- ✓ Shenyang Polytechnic University (People's Republic of China)
- ✓ Geneva Institute of Economic Science (Switzerland)
- ✓ Maastricht University (Netherlands)





## The University has established strong relationships with leading Russian and world centers and universities



Contracts and agreements are signed:

- «Gazprom Space System»,
- «Informational Satellite System, Named for Academic M.F. Reshetnev»
- «Russian Electronics»

Among TSU partners are:

- «Sberbank», Siberian branch
- «Russian Federal Nuclear Center» – All-Russian Scientific Research Institute of Experimental Physics (**Sarov**),
- «Norilsk Nickel»





**Over the past year delegations of universities from abroad, embassies, international funds, and and organizations have visited TSU, including:**

- the Head of European Union's delegation in Russia, Ambassador Vygaudas Ušackas
- Ambassador of India in Russia Ajai Malhotra
- Ambassador of Poland in Moscow Wojciech Zajackowski
- Honorary Consul of Russia in Switzerland Frederik Paulsen
- Ex-prime minister of Slovakia Jan Charnogursky
- Member of the House of Commons of the British Parliament from the Conservative Party James Gray
- the Head of international advisory council QS MAPLE Cavin Dauning
- World-famous British traveler David Hempleman-Adams



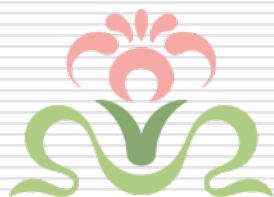
The Head of  
European Union's  
delegation in  
Russia, Ambassador

**Vygaudas  
Ušackas**





**The University is a coordinator of the Tempus programme uniting 13 Russian and foreign universities and organizations, 4 of which are based in the EU. Now TSU is working on 3 Tempus projects.**



**Days of Asia  
in TSU**

TSU is regularly the site chosen for significant international gatherings. In September 2014:

- DAYS OF ASIA AT TSU as part of 13th Plenary Meeting of Asian Cities
- XII International Conference "THE TRIPLE HELIX AND INNOVATION-BASED ECONOMIC GROWTH: NEW FRONTIERS AND SOLUTIONS"





## TSU Sports Achievements

Members of national Olympic team among TSU students and staff are:

- Anton Golotsutskov (artistic gymnastics)
- Konstantin Plugnikov (artistic gymnastics)
- Catherine Stolyarova (mogul)

prize-winners of international and Russian competitions who set more than 30 world and European records. TSU sportsmen compete in 20 sports disciplines. In the past three years they won over 130 medals.

TSU's diving club "SKAT", which in 2014 celebrated its 55th anniversary, rose to international fame. There are 20 World Champions and 15 European Champions among club trainees.





**Today TSU has one of the best theatre and concert complexes in the city, which hosts various performances and is the home to TSU arts groups.**

- Academic Choir (founded in 1959) is a musical insignia of TSU and Tomsk and is winner of various national and international musical contests.
- Ensemble of Violinists (founded in 1979) is also a winner of national and international musical contests. The Ensemble gave rise to an instrumental trio and an instrumental duet .
- Drama and Comedy Theatre “In University Grove” and the Arts and Literature Theatre
- Big band (Jazz-band) “TSU-62”





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**Thank you for  
your attention!**