

# TPU and its graduates

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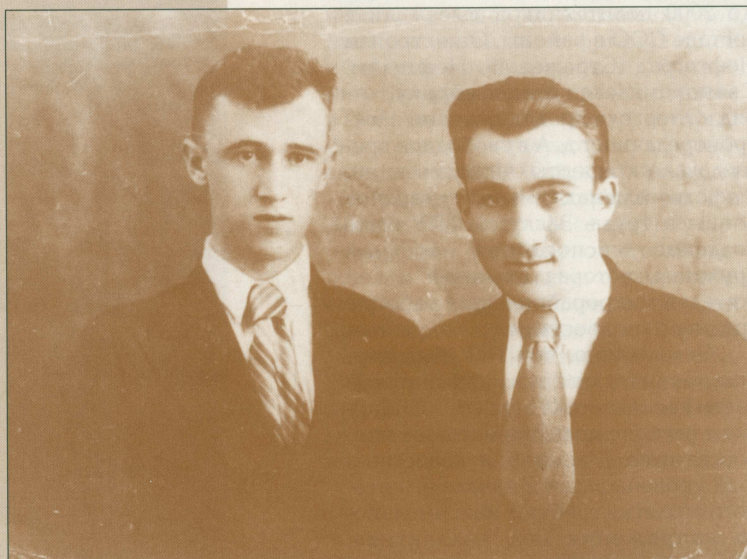
*in socio-economic and political development of Siberia*

As early as first outputs of students provide prominent scientists for our country: geologist M.A. Usov, mechanical engineer I.N. Butakov, mining engineer D.A. Strelnikov, distinguished scientists V.A. Vanukov, M.K. Korovin, P.M. Silin. The research activities performed by our scientists and officers were always closely connected with the industry of Siberia. The research focused on geological construction, coal, ore and other mineral and water resources. The alumni, our first graduates formed the backbone of engineering personnel for transsiberian main line, industrial enterprises, building projects of Siberia and the Ural. Works of our scientists and project works of graduates called into being vast industrial plants, scilicet: Kuzbass metallurgical, chemical and coal output complex, Kansk-Achinsk energy-fuel complex, Norilsk mining combine, etc. First five-year periods were more efficient in the development of Siberia and reclamation of its new regions.

Professor M. Korovin conducted research in coal and oil deposits. Professor Y. Kuznetsov investigated the Yenisei ridge, built up prospects for tungsten, gold, beryllium and other deposits exploration. Professor A. Kuzmin headed prospecting of iron ores for Kuznetsk metallurgical plant. He also discovered deposits of Kondom group.

The body of the Mining Faculty actively participated in the building of Bolshoy Kuzbass. The wide range of research conducted in the field of mining resulted in the foundation of such organizations as 'Telbesbureau', 'Shakhtstroy' which designed Kuznetsk metallurgical combine and a number of large mines in Kuzbass. Professors N. Penn, N. Gutovsky, M. Usov, D. Strelnikov, L. Shevyakov, A. Balashov, G. Bakanov, and K. Shmargunov took part in the design. Undergraduates of TPU worked together with that people. They designed first coal-mines in Aralichevo and Osynniky, iron pit mine 'Telbess'. Sometimes students assisted in building Kuzbass mines. In 1937 thirty-eight students engaged in degree theses were sent to 'Kuzbassugol' Combine to carry out engineering works. Among them were I. Stanchenko, V. Myluchkov, N. Marevich. Graduation essays they defended later. Most of those students composed in the future the body of top specialists who designed 'Kuzbassgyproshakht'. Prof. K. Shmargunov, a 1930-year graduate, was the director (1939-1944) of the Research Institute and the only inventor in Russia of a pickhammer firmly introduced later in coal industry. This invention has made a revolution in coal industry blocking the production of a pneumatic hammer and at the same

Студенты горного факультета ТИИ (ТПУ)  
Опланчук В.Я. и Куцупаленко  
В.Ф., 1940 г.  
Опланчук В.Я. (1917-1991).  
Выпускник ТПУ 1941 г.  
Свыше 30 лет был  
директором Ленинабадского  
горно-химического  
комбината в Таджикистане.  
Герой Социалистического  
Труда.  
Students of TPU Mining  
department Oplanchuk V.Y.  
and Kutsepalenko V.F., 1940.  
Oplanchuk V.Y. (1917-1991).  
TPU graduate in 1941. He had  
been the Head of Leninabad  
mining-chemical complex in  
Tadjikistan for more than 30  
years. A Hero of Socialist  
Labor.





## TPU and TPU graduates in development of Siberia



Листов — министр хим. промышленности в ТПИ  
Министр химической промышленности СССР  
**В.В.Листов** (выпускник ФТФ 1955 г.) посетил ТПИ в 1985 г.  
Minister of chemical industry of the USSR Listov V.V. had visited TPU in 1985.

time lowering energy costs scores times as less. That year Tomsk Electromechanical Plant started the mass production of 'KHШ' pickhammers.

TPU has become the forge of mining engineers. Many of them became leaders of coal enterprises of Russia. Among them Heroes of Socialist Labor — A. Fyodorov ('Stalinugol'), V. Vorobiev ('Kuzbassugol'), T. Gorbachev (chief engineer of 'Kuzbassugol'), V. Kozhevnikov ('Kemerugol'), P. Kovachevich (chief engineer of 'Kemerugol'), P. Kokorin ('Stalinugol').

The scientists of Faculty of Energetics, Professors I. Butakov, V. Sherbakov, A. Vorobiev and others made a valuable contribution to the development of energetics in Siberia. Their research focused on general thermotechnics, high-tension lines of electric systems, high voltage engineering, simplification and improvement of generator relaying. Students graduated in thermal power engineering and electrical power engineering became first-rate specialists of our country. Among them F. Ivanov (1932, director of Tom-Ussinsk power plant), F. Pachkov (1939, director of Novosibirsk power plant), V. Volgin (1939, director of Novosibirsk central heat-and-power plant), A. Starovoitov (1943, director of Tomsk power plant) and many others. The output of students of the 50s included V. Maslov, Chief designer of

'Sibenergomash' Corporation; V. Tomilov, Director General of 'Novosibirskenergo' Corporation; V. Nakoryakov, winner of the State Prize and the Council of Ministers, Director of the Institute for Thermal Physics, Academician of the Russian Academy of Sciences; G. Mesyatz, Vice President of the Russian Academy of Sciences, one of the founders of Tomsk Branch of the Siberian Division of the Russian Academy of Sciences; Professor A. Dulzon, a prominent scientist, First Vice Rector of TPU. In the 60-70s engineering diplomas were conferred on B. Kovalchuk, Academician, Director of the Research Institute for High-Current Electronics; V. Ushakov, Academician, Vice Rector for Research at TPU; N. Vyatkin, Director General of 'Tomskenergo' Corporation; M. Yavorsky, Chief engineer of 'Tomskenergo' Corporation.

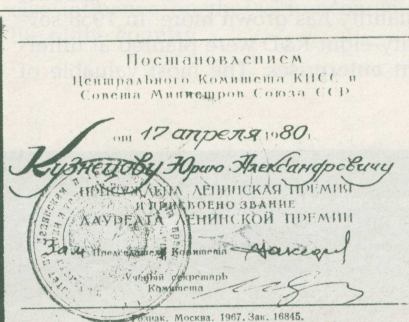
Serious research problems connected with production were solved by the scientists of the Chemistry and Chemical Engineering Faculty. M. Chizhevsky developed steel production methods and started works on coking Kuznetsk coals. His follower Prof. I. Gebler continued coking works with his colleague S. Smolianinov, who significantly widened the scope of research in fuel composition of oil and peat fields in Tomsk region. The Department of Nutritive Engineering, headed by Prof. S. Lebedev, solved problems of foundation and develop-

**Жеребин Б.Н.** Metallurg. Герой Социалистического Труда, лауреат Госпремии. Доктор технических наук, Заслуженный деятель науки и техники РСФСР. Выпускник горного факультета СТИ (ТПУ) 1930 г. Почетный член ТПУ. Участник строительства и директор КМК (1957-1965 гг.).

**Zherebin B.N.** A metallurgist. A Hero of the Socialist Labor, State Laureate. Doctor of technical sciences, a famous personality in science and technology of RF. TPU Mining department graduate in 1930. An honorary member of TPU. A participant of constructing and a head of Kuzbass Metallurgical Complex (1957-1965)



**Кузнецов Ю.А.**  
Выпускник РТФ 1958 г.  
Лауреат Ленинской премии, генеральный конструктор (Москва). Обладатель красивого тенора, исполнитель многих оперных партий в студенческие годы.  
**Kuznetsov Y.A.**  
RTD graduate in 1958, Lenin Laureate, chief constructor (Moscow). He has a wonderful tenor and is a performer of many opera parts in his student years.







Телегин Л.П., бывший зам. министра микробиологии СССР (выпускник ХТФ 1953 г.) на встрече с политехниками в Москве.  
*Telegin L.P., ex-vice minister of microbiology of the USSR (CTD graduate in 1953) at the meeting with polytechnicians in Moscow.*



В.Г.Язиков, выпускник ГРФ 1972 г., президент Национальной акционерной компании по атомной энергетике и промышленности республики Казахстан со своим учителем профессором Коробейниковым А.Ф.  
*Yazikov V.G., Geological Exploration department graduate in 1972, president of National joint stock company of nuclear energy and industry of Kazakhstan and his tutor professor Korobeinikov A.F.*

ment of sugar-beet industry in Siberia and the organization of continuing alcohol fermentation. The first Siberian sugar plant was introduced in Altai Krai, the project of which was developed by our scientists. Next was the sugar plant in Byisk. The group of scientists lead-

ed by Prof. I. Ponomarev was engaged in the field of silicate industry. They projected refractory material plants to produce glass, faience, china, and designed installations for those plants. Till 1930 the Chemistry and Chemical Engineering Faculty was the sole place in Siberia where the most important arbitration and other analyses of ore and non-ore resources were performed. Today following old scientific traditions, the University conducts researches in the field of new cementing materials, bio-ceramics, and investigates the possibilities of using known natural resources.

At the Mechanical Engineering Faculty Professors A. Dobrovidov and A. Rosenberg with the team work intensively in the field of cutting metals. They gave plenty of expert advices and consultations. Thus, in 1960-1963 by the order of 'Sibtyazhmash' plant in Krasnoyarsk the search for the most productive make of hard alloy and its working was carried out; optimal geometry of cutting tools and effective lubricants for sharpening, planing, drilling, and milling was developed.

Our scientists were pioneers of the developing in Siberia the most important branch — nuclear physics. Under the leadership of Prof. A. A. Vorobiev in 1948 the first betatron was developed which marked the beginning of a series of TPU betatrons applied later by research institutes, medical institutions, and manufacturing outfits of Siberia and the country as a whole. Over a period of 50-60s the product quantity has grown more. In 1958 seventy-eight R&D were planted at different enterprises. The most valuable of

them was the betatron, TV-centres in Tomsk and Altai, the expander of coal-starting furnaces (ПУП-1), the core barrel ДТ-89 (designers O. Akimov and A. Grebenuk). Economic contracts were concluded with the Tomsk Executive Committee to build the second water station on the basis of underground waters and with Krasnoyarsk Economy Board 'The hydrolysis production of lignite used as chemical resources'. As usual the Institute was solving a number of problems of Kuzbass mines and Siberian enterprises. The laboratory for synthesis of medicinal organic stuffs enlarged its basic research under the leadership of Prof. L. Kuliov. The non-destructive testing techniques applied for the quality control were in great demand. Pilot flaw detection installations and mobile laboratories for the automatic radiation control were devised. They have become the effective aids for industrial enterprises of Siberia and the Ural. The teachers and scientists of the Department of Industrial and Medical Electronics headed by Prof. L. Ananiev assisted much in health services of Russia. The original electron and medical therapeutic and diagnostic appliances were invented there.

With the development of nuclear science and technology powerful atom enterprises were building in the country. In Tomsk region there was built the Siberian Chemical Combine. Polytechnicians were geared to solve certain tasks of the Combine at which about 500 our graduates worked. Most of them actively participated in research and industrial service tests.

TPU was constantly cooperating with industrial institutions of Tomsk



Тихомиров В.В. Зам. министра РФ по налогам и сборам. Выпускник ФТФ 1968 г.

Tihomirov V.V., vice-minister of taxes and dues of RF. PTD graduate in 1968.



## TPU and TPU graduates in development of Siberia



**Ковалев Ю.Я.**

Выпускник МСФ 1959 г. Был гендиректором Сибэлектромотора. С 1989 г. гендиректор АО "Интерсервис". Почетный гражданин г. Томска, вице-президент Попечительского совета ТПУ. Зам председателя Госдумы Томской области.

**Kovalev Y.Y.**

The Machine-Constructing faculty graduate in 1959. He was chief director of Sibelectromotor. Since 1989 he is chief director of Interservice. A honorary citizen of Tomsk city, vice-president of TPU Trustee Board. Vice-chairman of Tomsk District Duma.

and Siberia, concluded contracts of acquiring student practical experience which allowed them to acquaint more closely with the manufacturing process. Later many of our graduates commenced work at those enterprises and some of them have become directors — A. Pushnykh, Director of Manometer Plant; E. Ganulin, Director of Electromechanical Plant; Y. Kovalev, Director of 'Sibelectromotor'; Y. Galvas, Director of «Roltom» Corporation; V. Gupalov, Director General of 'Kras mash' Combination, Fellow of Engineering Academy, Hero of Socialist Labor, winner of the State Prize in Krasnoyarsk.

Among our alumni there were many leaders of the public scale — G. Voronov, Chairman of the Council of Ministers; M. Shadov, Minister of the coal industry of Russia; V. Listov, Minister of chemical industry; K. Bilyak, Minister of farm engineering; L. Telegin, Deputy Minister of microbiology; V. Zeidenwarg, First Vice President of 'Rosugol' Company; V. Maluchkov, CMEA advisor for coal industry; Y. Vishnevsky, Chairman of the State Supervision Office of Russia; Y. Ugorelov, A. Safronov, B. Shubin, and other executors of different Ministries and authorities.

Polytechnicians have played the definite part in the socio-political life of Siberia. Among them many Part officials - G. Bogomyakov, First Secretary of Tumen Regional Committee; G. Podgaev, First Secretary of Khabarovsk Regional Committee; Y. Litvintzev, First Secretary of Tula Regional Committee; M. Gusev, First Secretary of Kemerovo Regional Committee; P. Slezko, M. Kozzyrev, A. Pomorov, Secretaries of Tomsk Regional Committee.

Under conditions of the extreme ideologizing of the social life of our country which was understood through the prism of the communist ideas, the teachers of social departments conducted the propaganda work among

people. Students worked as canvasses at constituencies during the election of the Supreme Council and local Councils. The Komsomol of the Institute was the organizer of student groups, which helped at Siberian buildings. About 2 thousand students participated in such buildings. They built Neftegrad (Strezhevoy), Neftekhim, the piggery and the integrated poultry farm. The group 'Energy' laid power lines. During the spare time students gave concerts and lectures and voluntary assistance to war- and labor veterans. TPU created the efficient volunteer public order squad for the work with difficult teenagers.

TPU was the first technical university in Asian Russia and has become the first polytechnic university in Siberia. Its scope and quality of education require maximal exertions of the academic and administrative staff of the University. Glorious one hundred traditions will help to settle these questions and exercise influence on the socio-economic life of the country.



Сигедин В.Н., директор Горно-металлургического комбината (Алматы, Узбекистан) с ректором ТПУ Ю.П. Похолоковым на территории комбината. Сигедин В.Н., член Совета попечителей ТПУ, Почетный выпускник ТПУ. Выпускник ТПИ 1959 г. Сигедин В.Н., the Head of Mining Metallurgical industrial complex (Almalyk, Uzbekistan) and TPU rector Pohlkov Y.P. on the territory of the industrial complex. Sigidin V.N., a member of Trustee Board of TPU, the honorary graduate of TPU. TPU graduates of y. 1959.



Грошев В.П. Профессор, доктор. Выпускник ФТФ 1963 г., был редактором журнала «Студенческий меридиан», вице-президент Российского союза промышленников и предпринимателей. Зав. кафедрой маркетинга Московской академии бизнеса. Groshev V.P. Professor, doctor. PTD graduate in 1963. He was the editor of «Student Meridian» magazine, vice-president of Russian industrialists and businessmen Union. Head of Marketing chair in Moscow Business Academy.

**Бикбавов Р.А.** Генеральный директор АО «Магистральные нефтепроводы Центральной Сибири». Выпускник ФТФ 1970 г.

**Bikbavov R.A.**, chief director of JSC «Main pipe lines of Central Siberia». PTD graduate in 1970.

