



## Danilenko Alexander Anatolyevich

General Director of Engineering Company "Oriental Co. Ltd." LLP



Years of training:  
1970-1975 yy.



Specialty:  
"Enrichment of Minerals"

I entered the Kazakh Polytechnic Institute, nowadays Satbayev University in 1970. My choice of the Institute was determined by three factors:

- Excellent knowledge in Physics, Mathematics, Chemistry, obtained at the school named after A.M. Gorky in Zyryanovsk;
- The desire to acquire a complete knowledge of the technological processes of minerals processing;
- The highest status of the Kazakh Polytechnic Institute in the republic, which would allow realizing my dream.

I studied at the metallurgical faculty in the specialty "Enrichment of minerals". Why did I choose this specialty? My childhood passed in mines and non-ferrous metallurgy plants. My father was the chief mechanic of the Zyryanovsk lead factory - traveled around the production units of the plant on weekends and always took me with him. Already in the fourth grade, I visited the mine, at the quarries, but I liked the enrichment plant the most: a lot of equipment, the roar of working units, the pulp flows were fascinating! The workers once gave me three bearings, and I made a scooter out of them, I could not imagine my life without a factory.



*What I liked the most about the enrichment plant. I couldn't imagine mine without the factory.*



I remember warmly the teachers of the department "Metallurgy of precious metals and enrichment". The teacher, whom I call "My teacher", is Ilya Davidovich Raivich, a teacher on gravitational methods of enrichment, and later on the Head of the Department, the Doctor of Technical Sciences, the most intelligent person, a talented teacher, a scientist with a capital letter. Despite his exactingness, he addressed us, as his colleagues, and not students. This fact raised us in our own opinion, gave us a sense of significance, and it was no coincidence that everyone wanted to justify his trust in the learning process.

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From the 2nd year I have already begun to engage in scientific activities in the laboratory of gravitational enrichment under the guidance of I.D. Rayvich. A jigging machine with an under-tilted arrangement of air chambers was developed to enrich coarse-grained ores. At the 4-5th years, I was engaged in the manufacture of an active model of this machine from plexiglass. It was presented to the examination committee during the defense of the diploma (“Irshinsk deposit titanium ore processing plant”), who rated it as “excellent”. I performed technological calculations, developed a circuit diagram of the apparatus, performed the calculation and selection of equipment, drawings of the factory and an explanatory note. The task is an operating model of a jigging machine with an under-tilted arrangement of air chambers for the enrichment of coarse-grained ores.

By the way, that jigging machine is still a training tool in the alma-mater gravity laboratory (how many years have passed ...).

When I graduated from the institute, I had a specific dream: to conquer the Arctic Circle and bring the Talnakh ore processing plant in heavy suspensions to the design indicators. At that moment, the authorities of the “Mechanobr” Institute had been working on this problem for two years, but there was no improvement in the process of ore separation. Two years later I was appointed the Head of the CTS, I managed to find a fundamentally new solution that allowed us to separate ore and rock at a density of 3.15 t / m<sup>3</sup> in heavy suspensions. The award was the conferment of the title “Best Young Specialist of the Norilsk Mining and Metallurgical Combine” with the presentation of the corresponding badge, diploma and 100 rubles of the prize. At the scientific and technical conference of young specialists of NMMC in 1977. (about 800 reports) I was awarded the title of “Laureate of the first prize” for implementing fundamentally new technical solutions in production.

The knowledge gained at KazPTI became a springboard for my professional self-realization, helped to achieve my goal - to become a highly qualified specialist in the field of mineral processing. And now I am the academician of the MIA, NEA RK, MAIN, the Laureate of the First Prize of the Union of Scientific and Engineering Societies of the USSR.

Since 1993 and to this day, I am the General Director of “Oriental Co. Ltd.”, an engineering company specializing in the development of technologies and projects for processing complexes in the mining and metallurgical industry.



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I consider, first of all, a deep knowledge of the specialty; continuous improvement based on the advanced research and development; perseverance and determination - if you have defined a strategy for creating a new technology or technical and technological solutions, not a single step to the left or right! Only forward, until the complete victory and implementation of the plan. And, of course, high responsibility at all stages of work. All these qualities were forged for many years, but their foundation was laid during the student period in my native Polytechnic.

I want to say to the present students that it is necessary to cultivate the qualities in ourselves right now, in the years of study. Believe me, my friends, it will pay off for a hundredfold Three pillars, three fundamental principles: hard work; good faith; responsibility. Add to them the achievement of high competence on a wide range of issues, including those that go beyond the scope of professional activity; the natural thirst for knowledge and its realization for the benefit of the country and the people, and also, it is important to be a well-educated, cultured person.

There are no easy ways. But there is a constant forward movement. It is necessary to overcome difficulties and win! The future of Satbayev University is to remain a flagship of technical education, a source of highly-qualified workers for the development of science and industry of sovereign Kazakhstan.

Dear students! Keep the honor and glory of the KazNRTU named after K.I. Satbayev - Satbayev University! An unknown world of knowledge is open before you, conquer it in the name of the great goal of the prosperity of our country - the Republic of Kazakhstan!

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