OBITUARY

LEV BORISOVICH BERNSHTEIN



Russian hydraulic engineering has suffered a severe loss. Lev Borisovich Bernshtein, 84, honorary academician of the Academy of Water-Management Sciences, full member of the International Energy Academy, doctor of technical sciences, and chief engineer of tidal power station projects of the State Planning, Surveying, and Research Institute (Gidroproekt), died on August 17, 1996.

Having started his career in the 1920s, Lev Borisovich covered the path from electrician and foreman of tunnelers on the construction of the Moscow subway to prominent scientist-hydraulic engineer.

- L. B. Bernshtein founded the Russian school of tidal power engineering and headed a number of international studies in this field. Precisely he created a working model and proposed a new design of the powerhouse of a tidal power station realized by the floating method. And undoubtedly an accomplishment of Lev Borisovich is that he embodied this idea in the design and then, being the chief engineer of the construction of the Kislaya Guba tidal power station, provided the successful realization of this original structure. In so doing the team of specialists of various institutes and construction organizations under the direction of L. B. Bernshtein solved many important problems for hydropower construction: creation of a lightweight, thin-walled construction of the powerhouse of a low-head hydrostation, the use of bulb-type units on river hydrostations, the creation of concrete with an especially high frost resistance, effective heat insulation and waterproofing, methods of constructing underwater foundations, etc. Under the direction of Lev Borisovich, the Tugur, Mezen', Penzhina, and other tidal power stations were designed and floating members of water passageways for flood control of St. Petersburg and 330-kV transmission lines across the Kakhovka reservoir on floating supports were realized.
- L. B. Bernshtein defended his candidate dissertation, and then dissertation for doctor of technical sciences. His engineering and scientific activities gained wide recognition in our country and abroad. Lev Borisovich was awarded the Order of Friendship of Nations and was awarded the Prize of the USSR Council of Ministers.
- L. B. Bernshtein is the author of more than 100 scientific works, including monographs on horizontal turbine—generator units and tidal power stations. Between 1961 and 1994 his book "Tidal Power Stations" was republished three times, and at present work on publishing this fundamental work in English and Chinese is being completed. Between 1949 and 1994 two of his unique works German-Russian and Russian hydraulic engineering dictionaries were published. For many years Lev Borisovich was an active author of the journal *Gidrotekhnicheskoe Stroitel'stvo* and published a number of problem-solving articles.

From the first days of the Great Fatherland War [Second World War] to its end, Lev Borisovich Bernshtein was at the front and served in the North Fleet. He was awarded the Order of the Fatherland War, the Order of the Red Star, and many medals. Lev Borisovich held sacred the memory of comrades killed in the war and persistently sought to immortalize their names.

Lev Borisovich was a brilliant, distinctive person filled with optimism and inspiration. He gained the gratitude and respect of colleagues, commending his kindness, responsiveness, attention to people, and desire to help in difficult times. It was very interesting to work with him. A person with exceptional humor, he gathered young people around him and dreamed about the future.

An unusually purposeful person, who gave all his untiring energy, all his talents, all his efforts to realization of an idea conceived while still in his student years, namely, the use of the tidal energy of the World Ocean for the good of people, has passed from life.

The bright memory of Lev Borisovich will remain in our hearts, and his life will be a bright example of selfless service to hydraulic engineering for the young generation.

On December 21, 1996, Lev Borisovich Bernshtein would have been 85 years old. This memorable date will certainly be marked by co-workers of Gidroproekt, where he selflessly worked for many years, by the hydraulic engineering community, his many students, successors of his works and ideas, relatives, and friends. On that day all will pay tribute to Lev Borisovich Bernshtein, a remarkable person, soldier of the Great Fatherland War, great worker, outstanding engineer, scientist, and patriot of the country.