PERSONALIA

In memory of Viktor Yakovlevich Frenkel'

February 7, 1997 was the last day in the life of Viktor Yakovlevich Frenkel', Doctor of Physics and Mathematics, a senior researcher at the Russian Academy of Sciences' Ioffe Institute of Engineering Physics, and a professor of the St. Petersburg State Technical University. In his last thirty years, Professor Frenkel' was mainly concerned with the history of twentieth-century physics. His studies and discoveries in this field were known internationally and won him general recognition.

Viktor Yakovlevich Frenkel' was born in Leningrad (now St. Petersburg) on February 23, 1930 into the family of Yakov Il'yich Frenkel', a prominent theoretical physicist and one of the founders of present-day physics. Even as a child, Viktor Yakovlevich grew in his father's world of physics. He heard a good deal about physics and its problems, and often met or even talked to famous physicists. Undoubtedly, this had a strong bearing on his choice of physics as his profession.

In 1948, Viktor Yakovlevich entered the Faculty of Physics and Mechanics at the Leningrad Polytechnic Institute (now St. Petersburg Technical University), from which he graduated in 1953. He then worked for six years at the design office of the Svetlana Works where his job was to design and construct electrovacuum devices. The experience he gained in this job served as the basis of his dissertation for which he received a candidate of science's degree.

In 1959, Viktor Yakovlevich was offered a job at the theoretical department of the Ioffe Institute of Engineering Physics. Since then, all of his creative activity was inseparably linked with this institute. During his first years at the Ioffe Institute, Viktor Yakovlevich was involved with applied, theoretical and mathematical physics and tackled problems relating to electronics, semiconductor physics, and plasma physics.

In the mid-1960s, Viktor Yakovlevich chose the history of physics as his calling. The atmosphere at the Ioffe Institute (usually called "Phystech" in Russian), his own experience in various areas of physics, his broad scientific and cultural outlook, and his gift as a writer helped him to rise as a historian of science and to achieve high standards in penmanship. In the years he worked as a historian of science, Viktor Yakovlevich turned out more than two hundred publications, including twelve monographs in Russian and English. These works encompass between them the history of quantum mechanics, relativity theory, nuclear physics, astrophysics, solid-state and semiconductor physics to which all of presentday physics owes what it is today.

In his writings, Viktor Yakovlevich placed special emphasis on the life stories of scientists, among them



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A Einstein, K Roentgen, P Ehrenfest, A A Friedman, A F Ioffe, Ya I Frenkel', I E Tamm, G A Gamov, P I Lukirskiĭ, and V K Frederiks. In fact, it was Viktor Yakovlevich who wrote the first scientific biographies of many outstanding scientists. Of special importance were his works on the scientific heritage of Yakov II'yich Frenkel'. He dedicated his first book on the history of physics to his father published in 1966 and his last book published late in 1996, which is a radically revised and updated English edition of Ya I Frenkel's scientific biography.

Quite a number of Viktor Yakovlevich's writings deal with the history of the Ioffe Institute. He analyzed the activity of many schools, areas and the Institute's laboratories and wrote the "Phystech" pages from the lives of many outstanding scientists, such as I V Kurchatov, Ya B Zel'dovich, A P Aleksandrov, and M P Bronshtein.

In his last years, Viktor Yakovlevich took a keen interest in the history of research of nuclear weapons in the Soviet Union, the United States, and Germany. Drawing upon the archives now made accessible and on the stories of participants in the nuclear projects, he unraveled many unknown episodes from this extremely intriguing and instructive story.

Viktor Yakovlevich did mammoth work as an editor and assisted in the publication of many works. The dozens of books and collected volumes he edited and prepared for publication (including the periodic Ioffe Memorial lectures) would hardly have seen the light of day without his initiative, enthusiasm, and effort.

Viktor Yakovlevich combined his scientific work with his activities in literature and popularization of science. He was a member of the Writers' Union and sat on the editorial board of journal *Zvezda* and collaborated in several popular

Uspekhi Fizicheskikh Nauk **167** (8) 893–894 (1997) Translated by B V Kuznetsov

periodicals (the magazines Zvezda and Neva, Priroda the journal Vestnik RAN, etc.), making science interesting not only to professionals but to the lay public as well.

Viktor Yakovlevich Frenkel' often appeared with lectures and reports at conferences and seminars. The geography of his professional trips covered many of the country's cities and scientific centers. In his last years, it was expanded to include research centers in the United States and Western Europe. He was a brilliant lecturer and had a talent of human communication, and this attracted many to him. On almost every trip he made new friends and convinced people to share his scientific views. In this way, he built around himself an informal scientific school actively and fruitfully working on the history of physics science.

Viktor Yakovlevich passed away at the peak of his creative life. He left behind many unfinished projects, new interesting ideas, and plans. He was a bright and broadly educated person of many gifts, an intellectual in the highest sense of the word. At the same time, he was exceptionally modest, well-wishing, and responsive. The memory of Viktor Yakovlevich Frenkel' will remain in the hearts of his friends, colleagues and people who knew him for ever.

Zh I Alferov, V E Golant, V I Gol'danskiĭ, B B D'yakov, S N Zhurkov, B P Zakharchenya, V I Perel', R A Suris, V M Tuchkevich, I L Fabelinskiĭ, S Ya Frenkel'