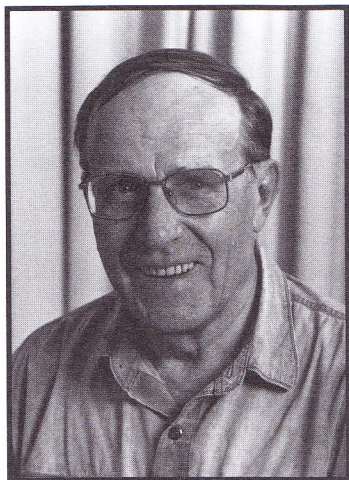


Professor Anatoly Nikolaevich Dremín 1930 – 2008



Professor Anatoly Nikolaevich Dremín, Doctor of physical-mathematical sciences, one of the founders of the Institute of Chemical Physics (ICP), Russian Academy of Sciences (RAS) in Chernogolovka, a charismatic personality of outstanding merits in the research of detonics bringing Russian science to worldwide recognition, died on January 12th, 2008 after a serious and long illness at the age of 77 years.

Anatoly Nikolaevich started his scientific career at the ICP after graduating from Moscow Physicotechnical Institute (School of the Chemical Physics) in 1954. He was one of those young scientists whom Academician

Nikolai N. Semenov entrusted with highly important tasks connected with strengthening of defensiveness of the country. After 1958 he organized in ICP a group of young and talented co-workers and in 1960 founded a laboratory of physicochemical properties and investigation of explosives. This laboratory became a basis for formation of Department of High Dynamic Pressures at the subsidiary of ICP RAS USSR in Chernogolovka: Anatoly Nikolaevich was the Head of this Department from 1989. The research conducted in the Department was highly appreciated both in Russia and abroad. Great contributions were made by him and his colleagues to the development of theory and experimental tools of detonation and physics of shock waves in condensed media. Only few examples are the development to the theory of critical diameter of liquid explosives, investigating their initiation characteristics, the phenomena of instability of detonation front including dark waves and their experimental realization, creating a new tool to determine the particle velocities by the electromagnetic method (for big charges), shock synthesis of new materials. For the latter he was awarded in 1980 as Laureate of the State Prize. Beside his many publications he summarized the results in two monographs [1, 2].

Anatoly Nikolaevich offered more basic understanding versus “straight forward” interpretations and stimulated new research also in the West. As an outstanding scientist he did thoroughly know the western work, and introduced his western colleagues in the long tradition of Russian related work in detonics. Quite

naturally beside his teaching activities he organized meetings, and symposia, was in related Committees and the editorial boards of Combustion and Explosion Physics, and for point of time also Propellants, Explosives, Pyrotechnics. No wonder that his contributions and discussions had been highlights of such meetings. As a university teacher he prepared many specialists in the area of physics of explosion; his results and activities markedly influenced teaching of Physics of Explosion at the Faculty of Chemical Technology in Pardubice.

Prof. Anatoly Nikolaevich Dremin was a highly understanding man in his relation towards other people, kind-hearted and magnanimous. However, in science he was highly demanding and uncompromising. If he expressed his opinion, one could be sure that it was supported by extensive study in every context. He had a number of very good friends in the Czech Republic, who highly appreciated his excellently logical way of thinking, his ability to connect theory with experimental results, and his original approach to dealing with fundamental problems of detonation. They also appreciated his extensive and complex knowledge in the area of world painting. The important point is that Anatoly Nikolaevich was not only an important researcher, he was a Wonderful Human Being. All those who had the fortunate opportunity to get more deeply acquainted with him will miss him and will often cast their minds back to meeting him.

- 1) Dremin A.N., Savrov S.D., Trofimov V.S., Shvedov K.K., *Detonation Waves in Condensed Media*, NAUKA, Moscow **1970**, Edited Translation Sechovicz J., Translation Division, Foreign Technology Division, WP-AFB, Ohio FTD-HT-23-1889-71, **1972**.
- 2) Dremin A.N., *Toward Detonation Theory, (High Pressure Shock Compression of Condensed Matter)*, Springer, New York **1999**.

*Dr. Carl-Otto Leiber, Prof. Pavel Vávra, Prof. Svatopluk Zeman,
Dr. Woodward Waesche*