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**THE CONTRIBUTIONS OF DNIPROPETROVSK SCIENTISTS  
IN THE THEORY OF OSCILLATIONS IN LIQUID ROCKET ENGINES  
IN THE TWENTIETH CENTURY**

**Summary**

In this paper the author conducted a comprehensive description of the contribution of scientists Dnepropetrovsk in solving complex problems for extinguishing the low- and high-frequency oscillations in propulsion in liquid rocket engines.

The problem of damping the oscillations in liquid propellant rocket engines, scientists are faced when they began to develop high-power propulsion. First there is a problem of high-frequency oscillations rocket engine during the development and testing of missiles P-1, P-2, P-5 and P-5M.

In the process of working liquid rocket engines revealed that when their work appear dangerous low- and high-frequency oscillations, which often led to the destruction of the combustion chamber. Historical and technical literature describes many facts testing engines, which were then taken into operation.

The soviet scientists worked on the development and improvement of liquid rocket engines. These scientists were Hero of Socialist Labor, laureate of Lenin and named after M. K. Yangelya premiums Ivan I. Ivanov, laureate of the Lenin Prize, Honored Scientist of Ukraine Alexander V. Klimov, Honored Worker of Industry Vladimir H. Shnyakin. Significant contribution to the development of propulsion

systems with liquid rocket engines introduced Hero of Socialist Labor, laureate of Lenin and State prizes, General Designer Valentin P. Glushko.

In this article, the author gave the results and analyzed the works of scientists the Dnepropetrovsk region to study of low- and high-frequency oscillations in the propulsion in liquid rocket engines. Describes the ways in which scientists conducted research. Given memories of employees work Design Office «Yuzhnoye» on the improvement of liquid rocket engines.