

**U.D.C. (001.89: Vasylyenko):631.3**



**DERKACH**

**Oleksiy P.,**

Ph.D in Historical sciences, Associate  
Professor in Department of Tractors,  
Automobile and Bioenergetic Systems  
National University of Bioresources and  
Natural Resources of Ukraine

[Oleksiy.derkach@gmail.com](mailto:Oleksiy.derkach@gmail.com)

(Kyiv)

## **SCIENTIFIC HERITAGE OF ACADEMICIAN P.M. VASYLENKO**

**(1900–1999)**

### **Summary**

A characteristic feature of the modern Ukrainian society is the growing interest in the history of science and technology, in particular, in the scientific, educational and organizational activities of prominent Ukrainian scholars who selflessly worked for the development of science and education in Ukraine. In recent years, studies have been published covering the development of science and education, including technical, through the study and reflection of the scientific, educational and social activities of a prominent individual. One of these personalities was Petro Vasylyenko – Academician of the National Academy of Agrarian Sciences, Corresponding Member National Academy of Sciences of Ukraine, and Academician of the Russian Academy of Agricultural Sciences, Doctor of Technical Sciences, and Professor. In the fields of agricultural mechanics, agricultural engineering, mechanization, electrification and automation of agricultural production in Ukraine, he had the achievement of a world-class level that glorified domestic science far beyond the

borders of the country. He was rightly called the leader of the agricultural mechanics of Ukraine. He was rightly called the leader of the agricultural mechanics of Ukraine. The analysis of scientific works by academician P.M. Vasylenko showed that the heritage of the scientist includes more than 200 published scientific works, which are important for the agrarian sector of Ukrainian economics development. A valuable contribution to agricultural mechanics was the fundamental monograph by academician P.M. Vasylenko «The theory of a particle motion over agricultural machinery rough surfaces». A fundamental contribution to agricultural mechanics was the monograph by Academician P.M. Vasylenko «Introduction to Agricultural Mechanics». Academician P.M. Vasylenko was one of the first in the world who has widely used mechanical and mathematical methods in conducting research of the agricultural machinery field. P.M. Vasylenko clearly demonstrated the necessity of using cybernetics in agriculture with an example of arable farming, which was very important for the progress of this industry. A significant contribution was made by Academician P.M. Vasylenko in studying the dynamics of modern agricultural machines and machine aggregates. A significant phenomenon in the automation of the processes of agricultural production in the world was the monograph P.M. Vasylenko and I.I. Vasylenko «Automation of Agricultural Production Processes», which entered the International Fund of the UN. Elements of the theory of the rolling a rigid wheel on a trail, developed by academician P.M. Vasylenko, were used by American scientists in the design of the «LRV» moon-rover. Scientific works by P.M. Vasylenko were issued in France, Czechoslovakia, Bulgaria, Romania, China, quoted in the United States. Academician P.M. Vasylenko started a scientific school of agricultural mechanics in Ukraine.

**Keywords:** *P.M. Vasylenko, coryphaeus, scientific treasure, scientists, agricultural (agricultural) mechanics, mechanization, automation, agriculture.*