

OBITUARY

MIKHAIL MIKHAILOVICH PAVLYUCHENKO (1909-1975)

Professor Mikhail Mikhailovich Pavlyuchenko, a member of the editorial board of the All-Union Journal of Applied Spectroscopy (*Zhurnal Prikladnoi Spektroskopii*), Academician of the Academy of Sciences of the Belorussian SSR, honored scientist of the Belorussian SSR, head of the Laboratory of Solid-Phase Reactions of the Institute of General and Inorganic Chemistry of the Academy of Sciences of the Belorussian SSR, and doctor of chemical sciences, died on March 24, 1975, after a severe and lengthy illness.

M. M. Pavlyuchenko was born March 17, 1909, in the Gomel Region in a peasant family. He began his working activity in 1927 as a village teacher. After graduation from Moscow State University in 1934, M. M. Pavlyuchenko was sent to the Belorussian State University and then to the Leningrad Optical Institute's Laboratory of Photochemistry, headed by Academician A. N. Terenin. Under his guidance, Mikhail Mikhailovich completed a candidate's degree dissertation, which he successfully defended in 1938, after which, until 1966, he headed the Department of Physical and Colloid Chemistry in the Belorussian State University. For a number of years, he was dean of the Chemical Faculty of the Belorussian State University.

From 1959 to 1965, M. M. Pavlyuchenko was director of the Institute of General and Inorganic Chemistry of the Academy of Sciences of the Belorussian SSR, after which he headed the laboratory.

M. M. Pavlyuchenko's scientific activity was many-sided. His main work was in the theory of heterogeneous chemical reactions involving solids. But even at the start of his scientific pathway he was attracted by related fields of science on the interface between physics and chemistry and, in particular, analytical spectroscopy. Here was revealed especially clearly his ability to combine profound theoretical thinking with an ability to carry out fine physicochemical experimentation. He carried out spectral investigations of resin acids and terpenes and successfully used a UV spectral adsorption procedure to determine the composition of the solid part of oleoresin. The investigations in this field made it possible to obtain important experimental data on the kinetics and mechanism of oxidation of crystalline and amorphous resin acids by molecular oxygen.

M. M. Pavlyuchenko studied problems in molecular and atomic spectroscopy systematically. Under his guidance, methods for quantitative determination of trace and major elements in potassium salts of Belorussia were developed. The main result of the investigations was establishment of the relation between the intensity of the impurity element's spectral lines and the phase diagram of binary systems based on metal oxides and salts.

Simultaneously with investigations in the theory of heterogeneous reactions, M. M. Pavlyuchenko successfully carried out applied investigations. He demonstrated the advantageousness of using potassium ores of the Starobinsk deposit for fertilizer production and provided an appropriate technicoeconomic substantiation.

For active scientific, pedagogical, and social activity, M. M. Pavlyuchenko was awarded two "Badges of Honor," medals, and honorary diplomas of the Supreme Soviet of the Belorussian SSR.

Everyone who knew Mikhail Mikhailovich Pavlyuchenko will always retain fond memories of him, an outstanding scientist, communist, talented educator, and cordial person.

Translated from *Zhurnal Prikladnoi Spektroskopii*, Vol. 22, No. 6, p. 1135, June, 1975.

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