MARIA AFANAS'EVNA LEVITSKAYA

In Memoriam

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THE 85th anniversary of the birth of one of the first women physicists in Russia, Maria Afanas'evna Levitskaya, occurred in April 1968.

Levitskaya was graduated from the Physics and Mathematics Department of the Bestuzhev Higher Courses for Women, and spent the last two semesters (1905–1906) at the University of Berlin, specializing under Planck and Drude. She continued her education in the Philosophy Department of the Goettingen University (1911–1914) and subsequently lived in Holland, receiving a stipend from the Science Council of the Academy of Sciences at the recommendation of Professor O. D. Khvol'son.

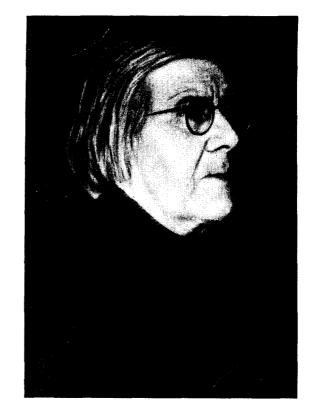
Her first scientific paper, published in 1909, was devoted to the study of a linear resonator at short wavelengths. Later (1915-1917), serving as an instructor at the Peterburg Polytechnic Institute, Levitskaya investigated the spectrum of palladium, and during her stay at the Central-Asia University in Tashkent she completed a series of first-class investigations in the field of generation of ultrashort electromagnetic waves.

In 1924 through 1934 she performed, together with A. F. Ioffe, important solid-state research at the Leningrad Physico-technical X-ray Institute.

In 1935 Levitskaya was granted, the degree of Doctor of Physico-mathematical Sciences without defending a dissertation. In the same year she was appointed a professor at the Voronezh State University, where she started research on x-ray structure analysis and performed several investigations of radiant-energy receiver and the spin-effect.

In the postwar period (1943-1952), Levitskaya investigated the structures of atomic nuclei, continued work on the study of infrared waves, and also performed research on diffusion in solids, x-ray spectra of alloys and intermetallic compounds, and optic spectra of thin metallic layers.

In the last years of her life she organized a labora-



tory for infrared spectroscopey, where the "quenching" action of submillimeter waves was investigated under her direction.

Levitskaya published more than 50 papers devoted to several problems, a book "Infrared Rays," and many abstract articles.

She died in March, 1963.

Translated by J. G. Adashko