

IN MEMORY OF YURII DMITRIEVICH YANISHEVSKII

The senior Soviet actinometrist, Candidate of Physical and Mathematical Sciences, Yurii Dmitrievich Yanishevskii died at the age of 82 on March 14, 1990 after a long and difficult illness. His name is inextricably connected with the development of one of the main lines of investigation in modern actinometry — actinometric instrument building, to which he made outstanding contributions. His works are well known in our country and abroad, and they will certainly take a well-deserved place in the history of actinometry.

After graduating in 1929 from the Physico-technical Department of Saratov University, Yurii Dmitrievich began actinometric research at the then Institute of Droughts (now the Scientific-Production Union Éлита Povolzh'ya of the V.L. Lenin All-Union Institute of Agricultural Sciences in Saratov) under the direction of R.A. David, Academician at the Academy of Agricultural Sciences. He was able quickly to establish contacts with leading specialists S.I. Savinov, V.G. Kastrov, V.I.A. Berezkin, and others. People became interested in his work. In 1932 Yurii Dmitrievich Yanishevskii accepted an invitation to work at the Institute of Actinometry and Atmospheric Optics, created in 1930 by N.N. Kalitin. Here, under the direction of N.N. Kalitin, his abilities as an experimenter and creator of modern actinometric apparatus flowered. For the rest of his life he was associated with the main geophysical observatory, of which the Institute at that time was a part.

Yurii Dmitrievich did not make "general" instruments, but rather he created instruments that met the vital demands of the time. His enormous scientific erudition, his talent as an inventor and his engineering experience enabled him to develop an entire series of instruments for measuring all components of the radiation balance. The instruments which he developed in the 1930s are still being used. Examples are the M-3 actinometer, the M-115 pyranometer, the M-10 radiation balance gage, and the albedometer, all of which are well-known main stream instruments even today. He also developed the M-59 pyrliometer for precision measurements of the direct solar radiation; this instrument is part of the main group of pyrliometers used at the Main Geophysical Observatory. He also developed the pyrgeometer, used for measuring the long-wavelength radiation fluxes, the ribbon pyranometer for performing measurements in plant masses, a pyranometer for underwater measurements, and a series of other instruments.

Yurii Dmitrievich constantly improved his instruments, striving to bring to fruition his basic principles — simplicity of design and use of the device, low cost, maximum reliability under difficult operating conditions, and delivery of predetermined accuracy and reliability of the results. The eleven Inventor's Certificates that were awarded to him testify to the fruitfulness of his technical work.

Yurii Dmitrievich always devoted a great deal of attention to the methodological questions concerning measurements of radiation fluxes. Back in 1947 he prepared and published the manual "Actinometric Observations at Stations." His book "Actinometric Instruments and Methods of Observation" was published in 1957 and is still used by actinometrists as a handbook. He wrote instructions for performing phytoactinometric observations, radiation measurements for ecological works, etc.

Of his theoretical works we call attention to the book "Transmission and Color of Sea Water," of which Yurii Dmitrievich Yanishevskii was one of the authors. He also contributed a series of sections in books on meteorological instruments and works on the theory and improvement of instruments. He published more than 90 works. Yurii Dmitrievich Yanishevskii prepared nine Candidates of Sciences and a number of his students have become Doctors of Sciences.

Yurii Dmitrievich was an exceeding socially conscious person; he devoted a great deal of attention to public work. For many years he was a member of the methodological commission of the Main Geophysical Observatory and he was one of the founders and permanent members of the Commission on Radiation of the Interdepartmental Geophysical Committee of the Academy of Sciences of the USSR. He made enormous contributions as a lecturer, including the preparation of actinometrists for retraining of specialists.

A participant of the Second World War, Yurii Dmitrievich Yanishevskii was awarded two orders and eight medals. He was also awarded the silver medal of the Exhibition of Soviet Economic Achievements.

Yurii Dmitrievich has always adhered to high scientific principles, he was dedicated to his work, and he had an enormous capacity for work. He was also modest and generous and had a strongly developed sense of fairness, always ready to help and encourage his colleagues.

We shall remember Yurii Dmitrievich Yanishevskii as an outstanding scientist and designer. He will remain in the hearts of all who knew him.

Commission on Radiation of the Interdepartmental Geophysical Committee in the Presidium of the Academy of Sciences of the USSR.