

## ALEXANDER YAKOVLEVICH ORLOV (Odessa period – 1912-1934)

V.G. Karetnikov

Astronomical observatory, Odessa National University, Odessa, Ukraine  
vgkar@alpha-serv.net

A.Ya. Orlov came to Odessa in the fall of 1912. Just before he defended his master thesis (1912) and visited several countries. In Odessa he occupied position of the chair of Astronomy Department and head of Astronomical Observatory of the Emperor Novorossia University. Being young and active man he brought to Astronomical Observatory and Astronomy Department new topics of the scientific studies. At the same time he did not destroy traditional directions that were developed by his predecessors. Here, in Odessa he headed Odessa branch of the Russian Society of “world knowledge” amateurs. It should be noted that G.A. Gamow and V.P. Glushko started their way in technics and science in this society.



Александр Яковлевич ОРЛОВ  
(6 апреля 1880 – 28 января 1954)

Orlov A.Ya. (06.04.1880–28.01.1954) is a famous specialist in astronomy and geophysics, ScD, professor, honored worker of science and technics of Ukraine, academician of the Ukrainian Academy of Sciences (1918–1922), corresponding member of Soviet Union Academy of Sciences (since 1927), academician of Academy of Sciences of Ukraine (since 1938). He graduated St.–Petersburg University in 1902, then worked in Novorossia University in 1912–1920, the director of Odessa Astronomical Observatory in 1920–1934, the director of Poltava Gravimetry Observatory in 1926–1951, the director of the Main Astronomical Observatory of Academy of Sciences of Ukraine in 1944–1948 and in 1950–1952.

To the time of arrival of A.Ya. Orlov in Odessa, the Astronomy Department and Astronomical Observatory were already well known in the world due to his predecessors – L.F. Berkevich and A.K. Kononovich.

Leopold Fomich Berkevich (1828–1897) was a specialist in the field of celestial mechanics of the Solar

system small bodies, he had the level of ScD and professor, graduated from St.–Petersburg University in 1849. He founded education and scientific researches in Odessa. In 1865–1880 he headed the Department of Astronomy and Geodesy and Astronomical Observatory.

Alexander Konstantinovich Kononovich (1850–1910) in fact was the first astrophysicist at the southern part of the Russia Empire. He graduated from the Novorossia University in 1871, then he headed Department of Astronomy and Geodesy, and also Astronomical Observatory in Odessa (1881–1890). He was ScD and professor (and honored professor of Novorossia University).



During the first years of the work of A.Ya. Orlov in Odessa he performed studies that were of the highest priority in science. He organized preparations of astronomers and geodesists, equipped laboratories with modern instruments. Then he started investigation of the sea inflows in Odessa region, made geodetic shooting of the sea coast line in the north–west part of the Black Sea and in the region of the Odessa estuaries, created the network of stations and gravimetric maps of the European part of the Soviet Union, as well as part of Siberia and Altai regions. With this he connected gravimetric network with fundamental reference point in Potsdam.

During his Odessa period A.Ya. Orlov defended his ScD thesis (1915), became a professor (1916), was elected as academician of the Ukrainian Academy of Sciences (1918), the corresponding member of Soviet Union Academy of Sciences (1927). After the liquidation of Novorossia University in 1920 he became the director of

Odessa State Astronomical Observatory (1920–1933). During the part of this period observatory worked as the Main Astronomical Observatory of Ukraine. At the same time in Kiev A.Ya. Orlov made an attempt to create new structure – the Central Astronomical Observatory, but several members of Ukrainian Academy of Sciences acted with counteraction. After this Orlov decided to leave the ranks of this academy (1922).

In his Odessa period A.Ya. Orlov also realized himself as author and publisher. In 1914–1915 he published “Transactions of the Astronomical Observatory”, in 1915 “News of the Astronomical Observatory”, and also brochure “Lectures on spherical astronomy”. In 1919–1923 “Odessa Astronomical Calendar” was published. In 1921 Orlov published the textbook “Course of the theoretical astronomy”, and after request of the Sea Department of Ukraine he started to publish “Marine Annual Book” (1921–1924), as well as “Circular of the Astronomical Observatory” (1921–1927). One should note that Orlov created the necessary conditions for his co-workers to publish their articles.

Working in Odessa A.Ya.Orlov began (1924) and completed construction of the Poltava Gravimetric Observatory. He was the director of that observatory in 1926–1934. He equipped observatory with instruments and with a staff prepared in Odessa. In 1934 A.Ya.Orlov left Odessa for the Geophysical Department of the Moscow Astronomical Observatory (in Kuchino), and after this he never came back to Odessa for a work. Later he went to Poltava Gravimetric Observatory where he occupied the position of director, then he was the director of Carpathian observatory, and finally he realized his main aim – the Main Astronomical Observatory to Kiev where he worked as a director in 1944–1948 and 1950–1952.

During his period of life in Odessa A.Ya. Orlov was working with some known astronomers that either were prepared in Odessa, or were invited for a work. Among many of his pupils and colleagues we would like to mention the following: Z.N.Aksentyeva, V.A.Albitsky, I.N.Androsov, Y.Y.Vitkovsky, I.A.Dyukov, V.S.Zhardetsky, N.M.Lyapin, N.M.Mihalsky, B.V.Novopashenny, D.V.Pyaskovsky, N.M.Stoiko, N.V.Zimmerman. Short presentation of these astronomers is given below.



Gravimetric Observatory (1951–1969).

Zinaida Nikolaevna Aksentyeva (1900–1969) was the outstanding and well-known specialist in the gravimetry area. She graduated from Novorossia University in 1924, then she was working in Odessa Astronomical Observatory (1919–1926). She was ScD, corresponding member of Academy of Sciences of Ukraine, honored worker of science and technics, the director of Poltava

Vladimir Alexandrovich Albitsky (1891–1952) was the well-known specialist in the astrophysics area. He graduated from Moscow University in 1913, then he was working in Odessa Astronomical Observatory (1915–1922), and after that in Simeiz Observatory (the head of this observatory since 1934).



Innokenty Dmitrievich Androsov (1888–1948) was the outstanding and well-known specialist in the field of geodesy and astrometry. He graduated from the Moscow Institute in 1910, and then he was working in Odessa Astronomical Observatory in 1926–1939. He founded the Department of Geodesy and Cartography in Odessa University. Since 1944 he was fulfilling the duties of the director of the Construction Institute (at present it is Academy of Construction and Architecture).



Yosif Yosifovich Vitkovsky (1892–1976) was the well-known and outstanding Polish astronomer, ScD, professor, academician of the Polish Academy of Sciences. He graduated from Novorossia University in 1914, then he was working in Odessa Astronomical Observatory (1914–1919). After 1919 he went back to Poland.



Ivan Alexandrovich Dyukov (1888–1961). Dyukov was outstanding and well-known specialist in astrometry area. He graduated Derpt University. In 1919 he came to Odessa where he started first observations using the Odessa meridional circle (125 near-to-pole stars). Since 1921 he was working in Engelgard Observatory and in Kazan University. He was chair of the Department Geodesy and Gravimetry. In 1971–1951 he headed Astronomy Department, and at the same time he was the deputy rector (1937–1938 and 1941–1952). In 1941–1958 he was the director of Kazan City Astronomical Observatory.



Vyacheslav Sigizmundovich Zhardetsky (1896–1962), the well-known and outstanding specialist in astronomy, geophysics and mechanics, ScD, professor. He graduated from Novorossia University in 1917, then he was working in Astronomical Observatory in Odessa (1917–1920). After this period he emigrated to Serbia (professor of the Belgrad University), from 1945 he was professor of Columbia University (USA).





Nikolai Mihailovich Lyapin (1884–1963), the outstanding and well-known specialist in the astrometry field and celestial mechanics, professor. He first attended Moscow University, then, in 1910 passed exams in Yuriev (Derpt) University (without attending lectures). In 1913–1922 he was working as a staff member of the Astronomy Department and Astronomical Observatory of the Novorossia University (1913–1920). At this time he was deputy director of Odessa State Astronomical Observatory. In 1922–1924 he was professor of the Astronomy Department of the Crimean University, and in 1924–1953 – chair of the Astronomy Department of the Rostov University.



Nikolai Marianovich Mihalsky (1882–1942), the outstanding and well-known specialist in the area of celestial mechanics of the comets and meteor swarms, professor. He graduated from Kiev University in 1911. Since 1923 he was working in Astronomy Department and Astronomical Observatory in Odessa. In 1941–1942 he was the chair of Astronomy Department in evacuation.



Boris Vladimirovich Novopashenny (1891–1975), the outstanding and well-known specialist in astrometry. He graduated from Petrograd University in 1915, then he was working in Astronomical Observatory in Odessa (1929–1975), PhD, associated professor. He was fulfilling the duties of the observatory director in 1934 and 1944.

Dmitri Vladimirovich Pyaskovsky (1891–1971), well-known and outstanding specialist in the gravimetry, professor. He graduated from Novorossia University in 1916. During three years he was passing the foreign training. In period from 1919 to 1931 he was working in Odessa Astronomical Observatory as senior astronomer and deputy director.



Nikolai Mihailovich Stoiko (1884–1976), the well-known and outstanding specialist in geophysics and theory of the time. He graduated from the Novorossia University in 1916. In period from 1916 to 1920 he was working in Odessa observatory. He was corresponding member of the Polish Academy of Sciences and the director of International bureau

of time, latitude and longitude in Paris.

Nikolai Vladimirovich Zimmerman (1890–1942). He was the well-known and outstanding specialist in astrometry, ScD, professor. He graduated from the Novorossia University in 1912. First time he was working in Astronomical Observatory in Odessa (1912–1915), then in Pulkovo observatory. He was the head of Astrometrical Commission of Soviet Union Academy of Sciences.



This photo was made on portal in Odessa Astronomical Observatory approximately in 1915. From the left to right: Albitsky, Rybakov, Pyaskovsky, Lyapin, Orlov, Vitkovsky, Zhardetsky, Donich, Stoiko.

N.N. Donich and A.M. Rybakov was pupils of A.K. Kononovich.