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PERSONAGE IN SCIENCE



Professor A.N. Golubentsev

(On the occasion of his 95th Birthday)

Ya.M. Grigorenko, V.B. Larin and A.A. Martynyuk*

S.P. Timoshenko Institute of Mechanics National Academy of Science of Ukraine, Nesterov Str. 3, Kiev, 03057, Ukraine

March 29, 2011 marked the 95th Birthday of the well-known scientist in the area of general mechanics, Professor A.N. Golubentsev who was born to the family of a railway worker in Raskatikha railway station of Tomsk railway (Russia).

^{*} Corresponding author: mailto:center@inmech.kiev.ua

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PROFESSOR A.N. GOLUBENTSEV

He started working at a very early age. He became a mechanic's assistant at a locomotive depot in the Topki railway station of Tomsk railway when he was just 13. After finishing a factory-and-workshop training course he entered the Kemerov Mining Secondary School. Later on, he graduated with distinction from Tomsk Industrial Institute.

In 1941 Golubentsev married Valentina Grigorievna Pozhidayeva and lived with her until his death in 1971. The Golubentsev had two children — daughter Eleonora (1942 – 2008) and son Aleksander (1945 – 2008), granddaughter Helen and three grand grand-children.

From 1933 to 1953, Golubentsev was employed at several enterprises of coil mining industry in the former USSR. He was a master mechanic and a chief mechanic of coal mining enterprises in Kuzbass (Russia) and Donbass (Ukraine).

In 1953 he defended his candidate thesis (Ph.D.) on the problems of electric drive of a winder and in 1956 he received his doctoral degree (Habilitation Degree) defending his thesis "Dynamics of machines with elastic constraints". From 1955 to 1958 Golubentsev was the Head of the Department at Gostekhnika of USSR (Moscow) and then he became a deputy chairman of the State Scientific and Technical Committee of the Council of Ministers of Ukrainian SSR.

Starting from 1959, A.N. Golubentsev sank into scientific and scientific-organizational activities at the Institute of Building Mechanics of the Academy of Sciences of UkrSSR (now the S.P.Timoshenko Institute of Mechanics of the National Academy of Sciences of Ukraine). When he was a deputy director of the Institute, he proposed a program reorganizing areas of research conducted at the Institute. As a result, the Institute of Structural Mechanics of AN of UkrSSR was renamed the "Institute of Mechanics of AN of UkrSSR" and the research fellows of the Institute became involved in modern analysis of continuum mechanics, mechanics of composite materials and general mechanics with the applications to rocket science and other applied areas. In view of the significance of new investigations and due to Golubentsev's efforts the research team of the Institute was granted a BESM-2M computer which was the first one in the Ukrainian SSR. This fact was of great importance for the fulfillment of current tasks of national economy and the defense industry. In 1959 - 1965, Golubentsev chaired the Department of Motion Dynamics and Stability of the Institute. He upheld the development of new perspective areas, but he was not always supported by a number of scholars who adhered to the traditional directions of investigations. In 1965, the Department of Motion Dynamics and Stability was integrated into the Institute of Hydrodynamics of AN of UkrSSR at which the problem of motion stability of ekranoplans, i.e. ram wing surface effect vehicles serving for the military, was tackled at that time. Later on, Golubentsev, together with the corresponding member of the Academy of Sciences of UkrSSR S.N. Kozhevnikov founded the Sector of Mechanics of Machines at the Institute of Geotechnical Mechanics of AN UkrSSR.

Golubentsev's intense scientific research gave rise to the development of the theory of transitional processes in machines with elastic links and yielded new significant results on optimization of processes in the parameter space of the machines. These results have been presented in a series of his monographs [1 - 4].

Golubentsev's keen sense of responsibility for all the matters he dealt with, including his analysis of the model of the socialist system at that time, motivated him to make an attempt to improve the economy in the former USSR on a strictly mathematical basis. It is clear that such an unveiled intention was fruitless, since many advocates of a more conservative model of socialism did not share his enthusiasm. Nevertheless, these attempts resulted in development of a new direction in mathematical economics — the econo-thermodynamics. The prime postulate of this theory is the well-known statement of Karl Marx that the economic epochs do not differ by what is produced but by how (i.e. with what means) it is produced. The theory of econo-thermodynamics developed by Golubentsev is laid out in his monograph [5].

Alongside his research activity, Golubentsev spent much time nurturing his postgraduate students. He produced a total of 18 people with Ph.D. and 2 people with Habilitation degrees in the areas of mechanics of machines and theoretical mechanics.

Golubentsev's merits were recognized with seven prestigious Government awards.

Golubentsev suddenly died on October 11, 1971 due to a heart failure.

He always upheld new ideas of important problems in mechanics and encouraged young researchers striving to develop appropriate methods of their solutions. His talks presented at seminars and conferences were always well-spoken, while sometimes irrespective of ranks and positions of the people he referred to. In these cases he was guided by only his scientific conscious and wisdom.

Golubentsev was a good-hearted and benevolent person. He was a true patriot of his country being totally dedicated to its service. He made a significant contribution to the development of his country. His scientific discoveries will always belong to the treasures of world science and remain in demand by young researches in mechanics and mathematical economics.

The list of principle publications by A.N. Golubentsev:

1. A.N. Golubentsev. *Start of Asynchronous Engine of a Winder*. Kiev, GITTL UkrSSR, 1959.

2. A.N. Golubentsev. Dynamics of Transient Processes in Machines with Many Masses. Moscow, GNTI, 1959.

3. A.N. Golubentsev. Integral Methods in Dynamics. Kiev, Tekhnika, 1967.

4. A.N. Golubentsev. Generalized Input in Dynamics. Kiev, Tekhnika, 1971.

5. A.N. Golubentsev. Thermodynamics of Production Process. Kiev, Tekhnika, 1969.