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Institute of Fundamental Technological Research

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## **N. I. Muskhelishvili 1891—1976**

The Academician, N. I. MUSKHELISHVILI, a great Soviet scholar and one of the founders of the contemporary mathematical theory of elasticity, died at the age of 85 in Tbilisi on July 16, 1976. Since 1960 he had been a member of the Editorial Committee of our periodical.

N. I. MUSKHELISHVILI was born in Tbilisi on February 16, 1891. He graduated from the University of Petersburg in 1914 where he studied at the Faculty of Mathematics and Physics and, later, in 1917 began research work as assistant at the Department of Mechanics.

In 1920 N. I. MUSKHELISHVILI returns to Tbilisi where he starts working at the university and at the Polytechnical Institute, first, as assistant professor and then, from 1922, as professor. He combines research work with didactic, scientific and organization activities while holding different posts. Up till 1936 he is the dean of the Faculty of Physics and Mathematics and in the years 1928–1930, he is the prorector of the Polytechnical Institute. From 1933 on, he occupies executive posts in the Georgian Section of the Academy of Sciences of the USSR, and from 1941, after the Georgian Academy of Sciences is founded, he becomes Full Member and President of this academy. For many years he is also the director of the Institute of Mathematics at the Georgian Academy of Sciences and co-organizer of several research institutes of the academy. In 1933 he becomes Corresponding Member of the Academy of Sciences of the USSR and, in 1939, Full Member, whereafter on frequent occasions he performs the duties of the member of the Presidium of this academy.



To give a full picture of the unwearying activity of N. I. MUSKHELISHVILI, let us mention his numerous social and political responsibilities; among others he was a delegate to the Supreme Council of the USSR.

The total output of the research work of the Academician N. I. MUSKHELISHVILI includes more than 50 scientific reports, monographs and academic manuals on the mathematical theory of elasticity, the theory of integral equations, boundary value problems of the theory of potential and mathematical physics. However, the basic contribution of N. I. MUSKHELISHVILI to science are, above all, his two original monographs.

The first, published in 1933, was the book entitled "Some Basic Problems of the Mathematical Theory of Elasticity" which, in following years, was reprinted several times, expanded and translated into many foreign languages. It is an original, already classical, and

up to now the most complete study of the plane problem of the theory of elasticity, based entirely on the use of the theory of complex variable functions. The second monograph, "Singular Integral Equations", which was first published in 1946 and was also reprinted and translated several times, is devoted to the theory of integral equations, as developed by the Author, and to its application to solving boundary value problems in various branches of mathematical physics, in the theory of potential, and especially in contact problems of the theory of elasticity.

In 1956 N. I. MUSKHELISHVILI was elected member of the International Committee of Congresses of Applied Mechanics, and in 1960 he became a member of the Office of the International Union of Theoretical and Applied Mechanics, IUTAM. He was President of the Organizing Committee of the XIII IUTAM Congress in Moscow. Professor N. I. MUSKHELISHVILI also maintained close ties with Polish science. He visited our country for the first time in 1959 while participating in the symposium "Non-homogeneity in the Theory of Elasticity and Plasticity". In 1960 he became Foreign Member of the Polish Academy of Sciences.

Crowds of people, inhabitants of Georgia and representatives of Soviet science, came to the funeral which took place in Tbilisi on July 20, 1976. The delegation of the Polish Academy of Sciences, with the Editor-in-Chief of our periodical as a member, also assisted at the ceremony.