

ELENE OBOLASHVILI
(1924 – 2005)



Elene Obolashvili, a scientific consultant of A. Razmadze Mathematical Institute, Doctor of Physical and Mathematical Sciences, Professor, is no more alive.

Elene Obolashvili was born on December 8, 1924 in the village of Bodbiskhevi of Signagi District of Georgia. Her father was a mathematician, mother a chemist. She finished with honors the 52nd secondary school of Tbilisi and entered the Faculty of Mathematics and Physics of Tbilisi State University to the specialty of mathematician. In 1946, after graduating the university, she stayed at the faculty of Physics as a laboratory assistant. In 1947–1950 she continues her post-graduate studies under the guidance of the Academician I. Vekua. After completing the post-graduate studies, in 1950–1957 she works as assistant at Faculty of Physics and during the same period, in 1953, she defends her Candidate of Sciences thesis.

From 1957 up to the end of her life she worked at A. Razmadze Mathematical Institute: in 1957–1958 as a junior researcher, in 1958–1986 as a senior researcher, from 1986 to 2000 as a leading researcher, and in 2000 she became a scientific consultant of the Institute.

In 1996 Elene Obolashvili defended her Doctor of Sciences thesis “Solution of Some boundary Value Problems of the Theory of Elasticity and Theory of Shells” and becomes the first women in Georgia Doctor of Sciences. In 1970 she was awarded the title of professor, in 1985 she becomes a honored scientist. The sphere of her scientific interest covered the boundary value problems of the theory of analytical functions, theory of elasticity, theory of shells and mathematical physics.

Elene Obolashvili devoted much time to education of younger generation. At the same time she was also involved in public activities – in 1969–1971 she was a Deputy of the City Council of Tbilisi.

In 1979 the monograph of Elene Obolashvili “Fourier Transformation and Its Application to the Theory of Elasticity” was published, followed by a series of investigations on problems of generalized analytic functions in multi-dimensional spaces and strained and deformed states of the surface of the elastic body. For those works she was awarded I. Vekua prize in 1981. It should be noted that she was the first winner of that prize.

In 1993 Tbilisi State University published the book of Elene Obolashvili “Foundations of Mathematical Theory of Elasticity”. The work is based on the lectures delivered by the authors in Tbilisi State University during many years. It is the first Georgian textbook in the Theory of Elasticity.

Elene Obolashvili traveled a lot. She has participated in many international symposiums and conferences in various countries of the world. She delivered lectures during many years in various scientific centers abroad. For instance, in 1976 she was invited to University of Halle (Germany), in 1991 under the recommendation of Prof. H. Begehr she delivered lectures in Mathematical Institute of Berlin, in 1997 on invitation of Prof. W. Tutschke she lectured to students and staff members of Technical University of Graz (Austria).

In the last years Elene Obolashvili became interested in Clifford Analysis and devoted two monographs to its application to Partial Differential Equations. In 1998 the Longman

Publishers published her monograph “Partial Differential Equations in Clifford Analysis” dedicated to the memory of her mother. 5 years later Birkhauser Publishers publishes her another monograph “Higher Order Partial Differential Equations in Clifford Analysis. Effective Solution to Problems”. In that monograph a series of initial and boundary value problems are solved explicitly in quadratures. Those solutions have important applications to Mechanics of Deformable Bodies and Theory of Electromagnetic Field, as well to Quantum Mechanics.

Along with her favorite sphere, Elene Obolashvili took a great interest in literature, poetry, art. She also could write excellently. She devoted a lot of splendid lines to the memory of her teacher Ilia Vekua. Not long before her end, already being seriously ill, she wrote two booklets. The first one, “Academician Ilia Vekua. From Shesheleti to Mtatsminda” is dedicated to the memory of Ilia Vekua, while in the second one “Mathematical Beauty – a Symbol of Faith” one can read excellent recollections on her teacher and friends.

The demise of Elene Obolashvili was a great loss to mathematical community not also of Georgia but also of the world. This is evidenced by the messages from abroad received by her family in the days close after her death.

The remembrance of Elene Obolashvili will remain for ever in the memory of her colleagues and friends.

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