

*This issue is dedicated to the memory of
Academician Vakhtang Kokilashvili*



(01.05.1938–16.05.2022)

ACADEMICIAN VAKHTANG KOKILASHVILI: SCIENTIST AND PERSONALITY

This year we mark the 85th anniversary of an outstanding Georgian mathematician, internationally recognized scientist, academician Vakhtang Kokilashvili, who has recently passed away.

Vakhtang Kokilashvili was born in Tbilisi, in 1938, in a family of mathematicians. In 1959, after graduation from I. Javakhishvili Tbilisi State University, Faculty of Mechanics and Mathematics, he began to work at A. Razmadze Mathematical Institute of the Georgian Academy of Sciences. Since 1990, he was the Head of the Mathematical Analysis Department at the same institute and in the course of many years, from 1989 to 2006, he was the deputy director for the scientific affairs.

The fundamental results obtained by Professor V. Kokilashvili play an important role in the function theory and functional analysis. His valuable contribution to the investigation of harmonic analysis, weighted function spaces, operator theory, approximation theory, boundary values of analytic functions, and integral equations of mathematical physics is immeasurable. A special emphasis should be placed on his solution of the two-weighted problem for potential operators. The result has been recognized by the leading experts in the area as one of the most significant breakthroughs in the weight theory. It is worth mentioning that the prominent US scientist R. L. Wheeden, one of the founders of the weight theory, mentioned the results obtained by V. Kokilashvili as extremely important.

V. Kokilashvili's scientific team has obtained important results in the direction of non-standard function spaces, which found worldwide recognition in leading scientific centers.

In 1997 Vakhtang Kokilashvili was elected a corresponding member of the Georgian Academy of Sciences and in 2013 he was given the title of academician of the Georgian Academy of Sciences. Throughout the years, he was a governance member of the Mathematics and Physics Department of the academy and from 2014 to 2019 he served as the head of the department. In 1986 Georgian Academy of Sciences awarded V. Kokilashvili with the Andrea Razmadze Prize.

Academician V. Kokilashvili is the author of more than 340 scientific works and 9 monographs published in such leading scientific publications as "Kluwer", "Birkhäuser", "Addition Wesley Longman", "World Scientific" and others. Many prominent scientists refer to his name in their works.

Vakhtang Kokilashvili was the chief editor of the international scientific journal "Transactions of A. Razmadze Mathematical Institute", a member of the editorial board of "Georgian Mathematical Journal", and of many other international scientific journals.

Vakhtang Kokilashvili participated and was a plenary speaker at many large scientific fora. He was a regional ambassador of the International Congress of Mathematicians (ICM 2014), a participant in the International Congresses of Mathematicians (1966, 1998, 2002, 2014, 2018), etc.

Along with important scientific researches, V. Kokilashvili was engaged in fruitful teaching activities at Tbilisi State University, Technical University of Georgia, Black Sea International University and the Sokhumi branch of Tbilisi State University. Another manifestation of his pedagogical talent was the cycle of tutorial TV lectures in mathematics for high school students, brilliantly presented by him in the 1970s who gained universal approval and recognition in society. He was the supervisor of ten candidate theses and a scientific consultant for three doctoral theses. V. Kokilashvili was also an active member of the Georgian Mathematical Union.

During his last years, V. Kokilashvili was engaged in the problems dealing with the non-standard function spaces and the corresponding harmonic analysis operators, as well as in the study of boundary value problems for analytical functions in new function spaces. Furthermore, he introduced some new function spaces and successfully investigated the properties of integral operators acting in these spaces.

Vakhtang Kokilashvili's personal qualities were also prominent. Along with a high professionalism and being a man of principles, he was distinguished by great responsibility, justice and objectivity. His attentive and benevolent attitude towards colleagues and students earned him their boundless respect and love.

Vakhtang Kokilashvili served mathematical science with amazing energy, tirelessly and fruitfully till the end of his life. He will be greatly missed both to his relatives, as well as to the entire mathematical community and Georgian science.

Two forthcoming issues are dedicated to the memory of Academician Vakhtang Kokilashvili.

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