

## **László Kalmár**

(1905—1976)

It was an irreplaceable loss to Hungarian science that Professor László Kalmár, a member of the Hungarian Academy of Sciences unexpectedly died on August 2, 1976.

He was born in a small Hungarian village, Alsó-Bogátpuszta, on March 27, 1905. He started to be interested in mathematics as a high school student. In 1922 he won the first prize of a mathematical contest organized by the Loránd Eötvös Mathematical and Physical Society for the high school graduates of that year.

After studying mathematics and physics at Budapest University, he received his doctor's degree in mathematics at the same university. For a few months he worked as a physicist in a radio tube factory.

From 1930 to 1947 he was an assistant of F. Riesz and A. Haar in Szeged, and in 1947 he was appointed professor of mathematics. Until his retirement in 1975 he headed the Department of Computer Science and the Laboratory of Cybernetics of Szeged University as well as the Research Group on Mathematical Logic and Automata Theory of the Hungarian Academy of Sciences. Besides, he was a member of several national and international committees and was on the editorial board of numerous international periodicals. He taught and researched at Szeged University until his death.

Professor Kalmár had been among the editors of our Acta for thirty years and in his youth he had the duties of a technical editor. Many of the present editors were his students.

He was elected a corresponding member of the Hungarian Academy of Sciences in 1948, and a member in 1961. He was awarded the Kossuth prize in 1950 and the State prize in 1975.

The preponderant part of his mathematical activity falls in the field of mathematical logic, in several branches of which he achieved basic results. Much of his work is related to the decision problem of logic. For instance, he proved that Church's theorem is just a special case of Gödel's theorem on relative undecidability. Another significant result of his is a counterexample to a hypothesis of Schröter that intended to support Church's thesis.

His ability to see the basic points of a newly acquainted proof led him more than once to essential simplifications of the original reasoning. It is enough to mention the ingenious simplification of Gentzen's proof of the consistency of the arithmetics of integers. This result was included in the fundamental work of Hilbert and Bernays: *Grundlagen der Mathematik*.

He was the first in Hungary to realize the use of mathematical logic in sciences and in practice. In the middle 50's he initiated the teaching and research of computer science and cybernetics in Hungary. His own results in these fields contributed to the theory of programming languages. He also obtained interesting results that have applications in medical diagnostics and linguistics. With his manifold ability to conceive the new he also won others for computer science and cybernetics. He raised numerous problems which he did not elaborate himself but made it possible for others to start working in computer science.

Besides his main research areas he obtained many results in analytic number theory, analysis, algebra, and the theory of games.

He always felt obliged to popularize mathematical logic and computer science. He wrote several papers and gave lectures to achieve this goal, and much helped to organize the scientific life in Hungary; in particular we owe him for the foundation of the Laboratory of Cybernetics and of the Research Group on Mathematical Logic and Automata Theory at Szeged University.

We honour the memory of Professor László Kalmár, the mathematician, the teacher and the man.

*The Editors*