In memoriam Professor Stefan Rolewicz
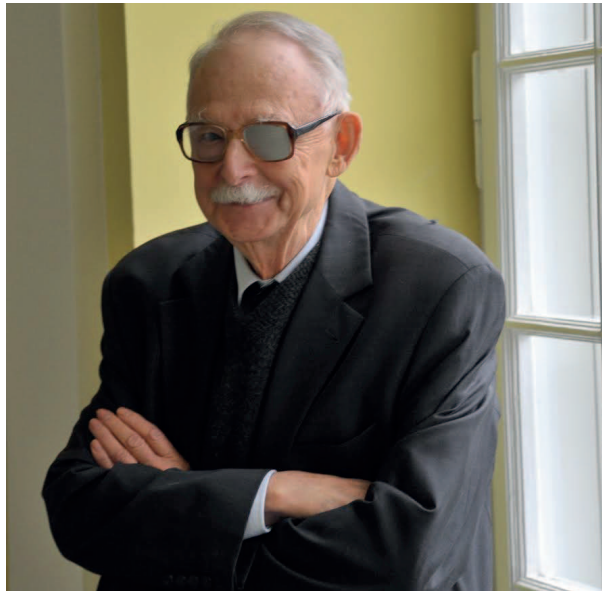
Stefan Rolewicz (1932-2015)
Pioneer of applications of functional analysis to optimization
in Poland,
mathematician, professor, educator and author

Professor Stefan Rolewicz, a pioneering researcher in the field of applications of Functional Analysis to optimization in Poland, died on July 9th, 2015 in Warsaw.

He graduated in Mathematics at the University of Warsaw and there obtained his Ph.D in 1958. He received his Dr. Sci. (habilitation) at the Institute of Mathematics of the Polish Academy of Sciences in 1962, and the title of professor in 1970.

Since 1956 he was associated with the Institute of Mathematics of the Polish Academy of Sciences, since 1970 as a professor. There, for many years, he was the Head of the Division of Mathematical Analysis.

His early interests focused on the theory of non-locally convex spaces and locally convex algebras, his research having been pursued under the guidance

of Stanisław Mazur. The results of this research have been mostly published in the book *Metric Linear Spaces*, published in 1973.

In the middle of the sixtieth his scientific interests extended also to control theory and optimization. He was a pioneer of applications of functional analysis to those fields in Poland. In 1964, he held a seminar on *Mathematical Methods in Engineering and Economics* and has continued to hold it regularly until June 2015, one month before his death. From the beginning, for about 35 years, he directed the seminar together with his wife, Professor Danuta Przeworska-Rolewicz.

In 1974 Professor Stefan Rolewicz published his seminal book *Functional Analysis and Control Theory*. The book has been published twice in Poland (1974, 1977) and abroad (German edition 1976, English edition 1987).

His later research concentrated on optimization over metric spaces, especially on the theory called convex analysis without linearity. This theory is the subject of the book *Foundations of Mathematical Optimization*, written together with Diethard Pallaschke and published in 1997.

Professor Stefan Rolewicz was a devoted lecturer and educator - he had fourteen Ph.D. students - and an active member of international mathematical community. He was a member of Editorial Boards of numerous periodicals including the present journal, *Control and Cybernetics*.

His scientific track is marked with great curiosity and enthusiasm, both led him to formulate many open questions, some of which were later developed into separate domains of research. In personal contacts, he was modest, but always willing to give his help and support. He will be remembered as a passionate scholar and an exceptional teacher.