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NEWS AND NOTICES

SEVENTY FIFTH BIRTHDAY OF PROF. KAREL REKTORYS

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On February 4 one of the most prominent Czech mathematicians and teachers Professor RNDr. Karel Rektorys, DrSc. has celebrated the 75th anniversary of his birthday. All who know his youthful zest and vitality have found the event quite unbelievable.

Karel Rektorys was born on February 4, 1923 in the South Bohemian town of Písek. In 1941 he received his baccalaureat and till the end of the Nazi occupation worked at the local post office. After the World War II he started to study Mathematics at Faculty of Science of Charles University in Prague and after graduating in 1949 he got a job in the research section of Škoda Works in Plzeň (Pilsen). Even if this did not represent a long period of Rektorys's life it turned out to be of great importance for his later mathematical activities. After his military service he was employed in the Central Mathematical Institute, later Mathematical Institute of the Czechoslovak Academy of Sciences, which he left in 1954 to join Faculty of Civil Engineering of Czech Technical University. He has worked at its Department of Mathematics and Descriptive Geometry ever since, being appointed Associated Professor in 1957 and Full Professor in 1964. He received his degrees in 1952 (RNDr), 1956 (CSc.), 1960 (DrSc.) and was appointed Corresponding Member of the Czechoslovak Academy of Sciences in 1988.

The second important period which influenced Rektorys's scientific interest was his participation in the work on the Orlík Dam project. The problem to be dealt with was of great importance from the viewpoint of national economy, namely, how to accelerate the construction of a massive concrete dam, as compared with the traditional methods, without increasing the risk of occurence of dangerous cracks. These can appear as a consequence of stresses in the concrete block caused by nonuniform warming in the course of hydratation of the cement. Professor Rektorys was responsible, especially during the first phase of this research, for the calculation of the temperature field in a dam during continuous laying of concrete, that is, mathematically speaking, for the solution of a partial differential equation of parabolic type

in a time variable domain. This was the source of his lifelong interest in evolution problems.

Professor Rektorys published a number of original scientific papers from mathematical analysis and approximate methods in various journals and proceedings of conferences at home and abroad. However, his main power consists in his ability of writing books. They comprise most of the results of his longterm research work and we can only admire the pedagogical mastery with which Rektorys has been able to present even the most difficult mathematical results. Thus his books are useful not only to specialists in Mathematics but have served equally well to those for whom Mathematics is a means and a tool. The art and skill of writing books has accompanied Rektorys through all phases of his scientific career. As soon as in 1955 he published the monograph Mathematical Theory of Plane Elasticity (together with I. Babuška and F. Vyčichlo), which was later translated into German. Of great success was his second monograph Variational Methods in Engineering Problems and in Problems of Mathematical Physics which appeared in Czech in 1974 and was then published also in English, Russian and German. The pedagogical mastery of the author shows here in full strength and we can say without exaggeration that this is a work belonging to the peaks of mathematical pedagogical literature.

The important original results of Rektorys's research in the field of evolution problems are collected in his book Method of Discretization in Time an Partial Differential Equations, which appeared in 1982 and then in Czech in 1985. The author himself regards this book to be the work of his life and it is necessary to emphasize that this opinion is fully justified since in the book he presented a modern, selfcontained and very general numerical method for the solution of parabolic and hyperbolic partial differential equations.

If we recall some significant publications of Karel Rektorys we must not omit his comprehensive mathematical encyclopedia Survey of Applicable Mathematics from 1963 which originated as a joint work under his supervision. He himself was author of more than a half of the book which became world famous. Its English translation from 1969 became an official handbook of the famous MIT in Boston, U.S.A. A new, revised and extended version of the book appeared first in English in 1994 and a year later also in Czech.

The teaching activities of Professor Rektorys have been extraordinarily rich and extensive. During the many years of his work at Technical University he has taken part in the education of thousands of engineering students, educated hundreds of postgraduate students in Engineering, and tens of postgraduate students in Mathematics prepared their theses under his kind and patient guidance.

Professor Rektorys has been equally successful in another field of activities—organizational work. He worked or is still working in a number of committees. For

example, he was member of the Scientific Board for Mathematics of the Academy, two national committees for defenses of doctoral theses, Editorial Board of the journal Applications of Mathematics. He devoted considerable time to working as coordinator and project leader of national research projects.

Among the most significant awards by which his work was appreciated we should mention especially the National Prize (1979), Golden Medal of Honour of Bernard Bolzano for merits in mathematical sciences(1983), Golden Felber Medal (1983), State Prize (1989) and Prize of the Minister of Education (1991).

Karel Rektorys can be regarded without exaggeration one of the most prominent Czech mathematicians of the second half of the 20th century. His works are frequently cited, used, and his monographs and books have been and still are suitable for education of graduate students and doctorands. His industriousness, mathematical erudition, endurance in research and patience in teaching makes him an unattainable paragon for all of us. First of all, however, it is to be pointed out that in spite of all honours and awards he has remained an extremely modest, sensitive and tactful person upon whose help and understanding we can always rely.

Therefore, on behalf of the great number of colleagues, friends and students, we extend to Karel Rektorys our wishes of good health, personal happiness and professional success for many years to come.