

PROFESSOR JÁN JAKUBÍK NONAGENARIAN

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*Dedicated to Professor Ján Jakubík on the occasion of his 90th birthday**(Communicated by Anatolij Dvurečenskij)*

ABSTRACT. This issue of *Mathematica Slovaca* is in honour of Prof. Ján Jakubík's 90th birthday. We present here a brief account of his research (to date) and a personal sketch of the gentleman.

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1. Numbers, numbers, ...

Consider the following sequence: 1, 36, 27, 40, 55, 86, 57. Guess what it represents? The answer is unbelievable: professor Jakubík was born in 1923, his first paper appeared before 1954, and the other elements in the sequence are the numbers of his papers published in the consecutive decades, 1954–1963, 1964–1973, ..., 2004–2013. Let X be a mathematician and let $\|X\|_{80}$ be the number of papers published by X being an octogenarian. Let us call it the *Jakubík number* of X . Then for $X = \text{Jakubík}$ we get $\|X\|_{80} = 57$. How about that?

Mathematics is about numbers, but the life of professor Ján Jakubík cannot be reduced to any sequence of numbers whatsoever. More information about his life, his professional achievements before becoming an octogenarian can be found in [a], [b], [c], [d], [e] and clicking Google.

Besides other distinctions, in 2008 professor Ján Jakubík was awarded by the 1st Class Ľudovít Štúr Order by the State President of the Slovak Republic and he is a member emeritus of the Learned Society of the Slovak Academy of Sciences.

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It is fitting that this tribute to Professor Jakubík be published in *Mathematica Slovaca*, as this is the journal that published both his first and his last paper. Coauthors, former students and worldwide colleagues wanted to pay their tribute to J. Jakubík, mathematician, teacher, boss and, above all, a great man, by contributing to the present volume just as they had done for the two volumes of *Tatra Mountains Mathematical Publications* (**5** (1995), **27** (2003)).

The main research field of Jakubík, throughout his whole career, has been the theory of ordered algebraic structures, especially lattice ordered groups and related algebras. This is fully true also for his scientific work in the last decade. Among the papers from this period, an important part is devoted to MV-algebras and their generalizations. Jakubík's research covers a broad spectrum of algebraic problems, sometimes with a geometric or topological flavour (isometries, convergences). He often considers analogous questions under various circumstances, or for various classes of structures. For instance, we can find several papers on various types of distributivity, on homogeneity, on direct and subdirect decompositions, on fractal and quasi-fractal objects, on Schröder-Bernstein and Cantor-Bernstein type of problems, on affine completeness, or on Boolean extensions. A significant piece of work is devoted to a classification of ordered structures, using the concepts of a variety, a radical class, a torsion class or a formation. Invariably, no matter what the topic is, Jakubík's papers are thoroughly written and, at the same time, full of original ideas.

2. From Roman Frič

What follows is a brief recollection of some of my memories. Anyone having met professor J. Jakubík, or are familiar with his research, could certainly add many more items to my story.

My first encounter with professor Jakubík dates back to 1961. As an already established Slovak mathematician, he lectured in Košice to high school students participating in Mathematical Olympiad. Modestly dressed and wearing rather thick glasses, he certainly did not look like a movie star. But his lecture, the way he formulated mathematical propositions, questions, answers, proofs, and examples made him an apostle of mathematics in the best sense. He lectured in the same manner all his long and fruitful professional life. Years later, in 1979, I became a member of a recently founded Košice branch of the Mathematical Institute, Slovak Academy of Sciences in Bratislava, headed by professor Jakubík until his retirement in 2013. My experience, both professional and personal, can be condensed into one phrase: "it is great to have a good boss". Certainly, he is a gentleman, was correct to his subordinates, supportive to younger colleagues, willing to listen and give advice, both in mathematics and in private matters.

A world authority in algebra, in particular in ordered structures, with a broad background in other fields of mathematics, he encourages his colleagues to understand and appreciate the research of other mathematicians and scientists. Many of his papers originated from questions and discussions and represent the effort to a hard work to understand what others do and to do it better . . .

3. List of publications of Ján Jakubík

The complete list of publications of J. Jakubík consists of 302 published papers and two papers will appear soon. The first 162 papers, [1]–[162], were listed in [d]. Papers [163]–[238] were listed in [e]. Here we list the additional papers [239]–[302], published up-to-date.

Scientific Papers of J. Jakubík since 2003

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