

PROFESSOR ION PĂVĂLOIU AT HIS 70TH ANNIVERSARY

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Professor Ion Păvăloiu was born on November 2, 1939, in Drăguțești, Gorj county. He followed the primary school in his village, and he graduated in 1956 the “Tudor Vladimirescu” High School, Târgu Jiu. In 1962 he graduated the Faculty of Mathematics, “Babeș-Bolyai” University, Cluj-Napoca. During the courses he was remarked as an active member of the Scientific Student Meetings, where he presented different communications at the Scientific Sessions. In 1962 he was awarded at the National Scientific Students Session, for a result on an optimum problem regarding the movement of the material point in one variable.

He was remarked by acad. T. Popoviciu as an outstanding student, hard-worker, with inclination and aptitude for the scientific research. Therefore, in 1962 when he graduated, he was appointed as probationer researcher at the Institute of Numerical Analysis, institute lead at that time by the eminent academician.

In 1971 he defended the Ph. D. Thesis “Contributions to the study of rapid convergent iterative methods, applied to solving operatorial equations”, having acad. T. Popoviciu as supervisor. In his thesis he studied and extended to Banach spaces the inverse interpolatory methods, achieving a unitary treatment of a class of rapid convergent iterative methods.

For the results obtained and published, in 1970 he was awarded the “Gheorghe Lazăr” Prize of the Romanian Academy.

From 1962 until 1991 he was successively promoted, up to Scientific Researcher I.

In 1975 the Institute of Numerical Analysis was reorganized by the communist regime. For this reason, from this year until 1990, the institute has functioned only with a group of 7 researchers within the Faculty of Mathematics of “Babeș-Bolyai” University. During this period dr. I. Păvăloiu was in charge for guiding the activity of the group. In 1990 the Institute was transferred to the Romanian Academy, and in the period 1990-2008 dr. I. Păvăloiu was the director of the Institute.

Dr. I. Păvăloiu has published over 100 scientific papers in prestigious journals from our country and from abroad (including ISI journals). He has also published four books at different publishing houses from our country. He guided and contributed to the realization of 20 research contracts of the Institute with different institutions from our country, while starting with 1998 he

has collaborated for the realization of 10 grants with the Romanian Academy and Ministry for Education and Research.

The main topics of research approached by prof. Păvăloiu during over 47 years of research within “T. Popoviciu” Institute of Numerical Analysis consists of: extensions of divided difference formulas to Banach spaces, applications to inverse interpolation method; determination of methods with highest convergence orders among of a given class; study of methods having optimal efficiency index; iterative methods for operatorial equations in Banach spaces; stability of numerical methods and estimation of errors.

Among the results obtained by prof. I. Păvăloiu we notice the generalization of Aitken-Steffensen type methods with controlled nodes, obtained by inverse interpolation, and the study of their convergence.

The results obtained by dr. Ion Păvăloiu have been positively reviewed in the reviews journals. The results have been adopted, used and quoted by several mathematicians such as R. Bellman, M. Altman, M. Kuczma, I.K. Argyros, etc.

Besides the scientific activity, prof. I. Păvăloiu has also performed a rich didactic activity. He taught mathematical courses at “Babeș-Bolyai” University, Technical University, “Avram Iancu” University (Cluj-Napoca) and North University of Baia Mare. In 1998 he was appointed as full professor at North University of Baia Mare (as cumulated job), and in 1999 he is appointed as doctoral supervisor at the same university.

He is a member of the Editorial Board of the following journals: *Revue d'Analyse Numérique et de Théorie de l'Approximation* (Deputy Editor-In-Chief), *SouthWest Journal of Pure and Applied Mathematics* (1996-2004), *Mathematica (Cluj)* (1990-2004), *Carpathian Journal*, *Creative Mathematics*, *Researches on Numerical Methods of Analysis and Optimization*.

