

Prof. Dr. P. Henrici

In memoriam Prof. Dr. P. Henrici

On March 13, 1987 Professor Peter Henrici, Editor of ZAMP, passed away.

Peter Henrici was born in Basel on September 13, 1923. In 1948 he got his diploma as an electrical engineer from ETH; in 1951 he received his degree in mathematics, again from ETH, and in 1952 he completed his Ph. D thesis, which was directed by the late Professor Eduard Stiefel. From 1951 to 1956 P. Henrici was a Research Associate to the American University in Washington D.C. and the National Bureau of Standards. In 1956 he joined the University of California in Los Angeles as a professor of mathematics at the Swiss Federal Institute of Technology (ETH) in Zürich. During this period he kept various visiting positions, notably at Harvard, UCLA, Colorado State University, at Bell Labs in Murray Hill, at Stanford and at the University of North Carolina in Chapel Hill.

With a background in engineering and a profound training in analysis (in his Ph. D. thesis he dealt with function theoretic aspects of the wave equation) Peter Henrici was well prepared to start his career as an applied mathematician. Moreover it was exactly at the time when a new tool of paramount importance became available: the computer. This fact influenced Henrici's scientific life deeply. He realized that the combination of traditional mathematical methods *and* the use of modern computers would permit to attack problems which are completely inaccessible otherwise. This way he became a pioneer in numerical analysis.

Henrici published some 80 scientific papers. He made major contributions to the following fields: numerical solution of ordinary and partial differential equations, the theory of error propagation, the numerical treatment of eigenvalue problems, applied complex analysis. His first book, entitled "Discrete Variable Methods in Ordinary Differential Equations" and published in 1962, was the first systematic description of a computer oriented approach to ordinary differential equations. It was decisive for the subsequent developments and is still a classic in the field. For his contributions to differential equations Henrici was honored by the invitation to present an Invited Address to the International Congress of Mathematicians in 1962. Since about 1962 Henrici turned his attention more and more towards numerical complex analysis. It was only in 1986 when the third and last volume of his monumental "Applied and Computational Complex Analysis" appeared.

Altogether P. Henrici wrote 11 books.

By his outstanding scientific work and by his lectures in 32 of the 50 States of the US and in many countries of Western and Eastern Europe Professor Henrici became a mathematician with a world wide reputation. This is well reflected by his international activities: He was a president of the Gesellschaft für Angewandte Mathematik und Mechanik from 1977 to 1980, a von Neumann lecturer for the Society for Industrial and Applied Mathematics in 1978, and a member of the Deutsche Akademie der Naturforscher Leopoldina. He was an editor or co-editor of 13 scientific journals, and in particular a member of the Board of Editors of the Journal of Applied Mathematics and Physics (ZAMP). By his expertise and with the help of his international relations Professor Henrici contributed considerably to the development of the Journal. His fellow editors are indebted to him for his effort and for his invaluable advice.

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