

## PREFACE

Hans Schneider was born on January 24, 1927, in Vienna, Austria. In 1938 he fled from the Nazi regimes to Scotland where he completed his high school education as well as university education. Hans received his Ph.D. in 1952 from Edinburgh University, under the supervision of A.C. Aitken. Hans has been a faculty member in University of Wisconsin - Madison since 1959. In 1988 he was named James Joseph Sylvester Professor of Mathematics. Hans is currently Emeritus Professor of Mathematics with a post-retirement employment agreement that is due to expire at the end of 1998. In the fall semester of the 1998-99 academic year, Hans will teach his last formal course in Madison, appropriately a graduate course on matrix theory.

For very many years, Hans has been one of the leading scholars in the world in the general area of linear algebra. He has been a key figure in the development of the field in the last forty years and has made fundamental contributions across a broad range of topics within linear algebra and in related areas. One cannot mention linear algebra, matrix theory, nonnegative matrices, M-matrices, inertia theory, matrix scaling, ... without the name of Hans Schneider coming to one's mind.

Partially with collaborators, Hans obtained important results on the interface of linear algebra and combinatorics, initiated innovative approaches in the study of nonnegative and M-matrices which are important in many applied areas, made important contributions in inertia theory, numerical ranges, matrix stability, scalings and diagonal equivalence. Overall, Hans has published extensively and over a hundred and thirty of his papers appeared in major mathematics journals.

Above and beyond Hans' distinguished research record, he has been central to the development and crystallization of the community of researchers in linear algebra and matrix theory. He undertook the editorship of Linear Algebra and Its Applications (LAA) twenty-seven years ago, and developed it into a major mathematics journal publishing now over 4000 pages a year. Under his leadership (jointly with Richard Brualdi for the last twenty years), LAA has maintained its role as the major journal in linear algebra.

In addition, Hans has been a major force in the creation of a more cohesive identity of researchers in linear algebra and matrix theory. The creation of the SIAM activity group in linear algebra, which attracted hundreds of members within a short period, was the outcome of Hans' ideas of organizing that community. Appropriately, he became the first chairman of the above group. More recently, he was instrumental in the creation of the International Linear Algebra Society (ILAS) of which he was the founding president (1987-1996). Hans has been frequently introduced as Mr. Linear Algebra and many feel that this is a fitting nickname.

Hans has been an active educator. Beyond being the advisor of seventeen Ph.D. students, he has been a major influence on many others. His accessibility and personality have been a drawing force into research activity in linear algebra and matrix theory.

During all the years of his remarkable career, Hans has been blessed with having a wonderful, warm, and very supportive wife Miriam behind him. We are very pleased to dedicate this volume of ELA to our colleague and friend, Hans Schneider.

RICHARD A. BRUALDI AND DANIEL HERSHKOWITZ