



E. R. G. ECKERT

ON THE OCCASION OF HIS SEVENTY-FIFTH BIRTHDAY

THIS ISSUE is dedicated to the seventy-fifth birthday of Professor E. R. G. Eckert. Professor Eckert occupies a unique position among researchers in the field of heat transfer. His active professional career has spanned five decades, and more than any other person, he has influenced the emergence of the modern science of heat transfer.

His impacts have taken several forms. As a researcher, his work has delved into almost all aspects of heat transfer, as well as into many related phenomena. His approach, which is characterized by a search for understanding of fundamental processes, has now become standard practice in all heat transfer research. His textbooks have served as beacons in which complex phenomena have been described in

their essential terms and in a manner so clear as to make them understandable to all. His first book, *Introduction to the Transfer of Heat and Mass*, led the way to a new era of textbooks where understanding of phenomena was given at least equal place with empiricism. His last book, *Analysis of Heat and Mass Transfer*, is a rich legacy filled with deep insights.

As a teacher, Professor Eckert demonstrated that he could verbalize with a clarity equal to that which characterizes his books. His impact on the thinking of others, both students and faculty colleagues, has been enormous. Intertwined with all of this professional brilliance is a sense of humanity and concern for others. That, too, has had profound affirmative impacts.

Professor Eckert was born on 13 September 1904, in Prague, Czechoslovakia. He attended the German Institute of Technology in Prague, obtaining the Diploma Ingenieur in 1927 and the Dr. Ing. in 1931. He remained at Prague as an assistant in the Institute until 1935 when he moved to Danzig where he completed his habilitation under Professor Ernst Schmidt. In 1938 Dr. Eckert followed Professor Schmidt to Braunschweig where he assumed the post of docent at the Institute of Technology and section chief at the Aeronautical Research Establishment. In 1943, he returned to Prague to accept the Chair of Thermodynamics at the German Institute of Technology but retained his position at the Aeronautical Research Institute. He served in both capacities until the end of the war.

Professor Eckert came to the United States in 1945 and for the next four years was associated with the Power Plant Laboratory at Wright Air Force Base, Dayton, Ohio. In 1949 he joined Lewis Flight Propulsion Laboratory of the National Advisory Committee for Aeronautics in Cleveland, Ohio, as a consultant to the Compressor and Turbine Division.

In 1951 Dr. Eckert returned to the academic life of teaching, research and writing at the University of Minnesota as Professor of Mechanical Engineering. In 1955 he was named Director of the Thermodynamics

and Heat Transfer Division and the Heat Transfer Laboratory. In 1966 the University bestowed its highest honor on Dr. Eckert by naming him Regents' Professor of Mechanical Engineering. Since 1972, he has continued his research at the University of Minnesota as an emeritus professor. Here, Professor Eckert has received numerous honors and awards in recognition of his outstanding professional achievements. These include honorary doctorates from the Technische Hochschule in Munich, from Purdue University and from the University of Manchester; a Gold Medal from the Institute of Energy and Combustion in Paris; and the Max Jakob award, the highest recognition in the field of heat transfer.

Dr. Eckert has always recognized that cooperation among scientists on the world scale contributes to international understanding. He played a leading role in the establishment of this Journal and has been Chairman of the Honorary Editorial Advisory Board from its beginning. His colleagues at Minnesota join with the editors of this journal and with his many friends throughout the world in wishing Professor Eckert a happy and healthy seventy-fifth birthday and many returns of the day.

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E. M. SPARROW