

## **Dr. Matthew W. Witczak**



Dr. Matthew W. Witczak served on the faculty of the University of Maryland for twenty six years before becoming Professor of Civil Engineering at Arizona State University in 1999. Upon receiving his Ph.D. degree from Purdue University in 1969 he served as Special Projects Engineer with the Asphalt Institute in College Park, Maryland, for four years before joining the faculty at the University of Maryland in 1973.

An internationally recognized expert in the area of highway and airfield pavements, Dr. Witczak is the co-author, with Professor E. I. Yoder, of the textbook, "Principles of Pavement Design" and has authored over one hundred and twenty technical papers and reports in the areas of pavement design, rehabilitation, materials, and management systems.

Dr. Witczak has served as a major contributor and developer to several internationally-used pavement design and rehabilitation manuals. He was the major contributor to the development of the theoretically based Asphalt Institute's "Thickness Design - Asphalt Pavements for Highways and Streets" and "Thickness Design - Asphalt Pavements for Air Carrier Airports". He was responsible for the development of Part III of the 1986 AASHTO Guide dealing with the rehabilitation design of pavement systems. He was the research team leader of the design group responsible for developing the AASHTO 2002 Design Guide for new and rehabilitated asphalt pavements.

As a researcher, Dr. Witczak was involved in the planning and technical research phases of the Strategic Highway Research Program (SHRP). He was a member of the original STRS committee on Asphalt in 1983 and served as co-PT, dealing with the overview and integration planning of the total SHRP program. Dr. Witczak serves as the PT of the multi-year, multi-million dollar FHWA and NCHRP research effort dealing with the development of mechanistic-based performance models for rutting, fatigue fracture, and thermal cracking of asphalt pavement layers. This study is focused upon the development of advanced material characterization techniques for AC mixtures, new test protocols, and the development of a Simple Performance Test for rutting and fracture that will be a complementary test to the Superpave volumetric mix design procedure.

**Elected: 2002**