# FRANCIS ALISON AWARD TO DR. GEORGE C. HSIAO

Presented at New Student Convocation
Bob Carpenter Center
August 28, 2000

On behalf of the University Faculty Senate, I am pleased to add my welcome to the Class of 2004, the first entering class of the new millennium. The Frances Alison Faculty Award is presented to a faculty member of the University of Delaware who excels as a scholar and teacher. It is named for the Reverend Francis Alison who devoted his life to students and founded the school in 1743 that developed into the University of Delaware.

The Alison Award consists of a $6,000 honorarium and medal and is based on nominations of peers. The candidates credentials are carefully reviewed by the Faculty Senate Committee on Student and Faculty Honors. The Award honors the highest levels of overall excellence as a scholar-educator at the University of Delaware. Professor George C. Hsiao, University of Delaware's internationally recognized Professor in the Department of Mathematical Sciences is the recipient of this award for the year 2000.

Born in Shanghai, China, Dr. Hsiao has been a naturalized U.S. citizen since 1973. He received a bachelor's degree in Civil Engineering from National Taiwan University in 1958, a master's degree from Carnegie Institute of Technology in 1962 in the same field, and a doctorate in Mathematics from Carnegie-Mellon University in 1969. After working three years as a research engineer in civil engineering at Carnegie Institute of Technology, in 1965 he began working as a mathematician at Carnegie-Mellon. In 1969, Dr. Hsiao joined the Department of Mathematical Sciences at the University of Delaware, where he has been a full professor since 1977.

Dr. Hsiao has an outstanding international research program and reputation in his area of expertise, boundary element methods. He was a Humboldt Fellow in the Federal Republic of Germany, 1975-76 and in the springs of 1983, 1990 and 1997, quite a distinguished honor. He was a research Fellow in the Center for Advanced Study at the University of Delaware for the year 1987-1988 and was the recipient of the 1996 College of Arts and Science Outstanding Teacher Award at the University. Dr. Hsiao is an acknowledged world leader in his field and has been a guest professor at a number of institutions in: China, Germany, Chile, Italy, Finland and Denmark.

Dr. Hsiao's primary research interests are integral equations and partial differential equations with their applications in mathematical physics and continuum mechanics. He is one of the leading experts and authorities on variational and boundary element methods for integral equations. Dr. Hsiao is one of the few mathematicians who develop and apply modern mathematical analysis to the modeling of problems in mathematical physics and engineering. He is known for his very wide range of interests. A co-author of the book *Water Waves and Ship Hydrodynamics* (1985), which has become a classic, and the research monograph *Boundary-field Equation Methods for a Class of Non-linear Problems* (1995), Dr. Hsiao has had more than 150 scientific papers published. He has been invited to deliver lectures on his research throughout Europe, China and South America, as well as in the United States. Dr. Hsiao is on the editorial boards of many professional journals in mathematics and engineering, and has served as a member of advisory committees for various international scientific conferences on *Boundary Element Research.*

What distinguishes Dr. Hsiao is the intensity of his contribution to the College and to the University. He is greatly valued by his colleagues. He is a gifted lecturer and his classes have always been well recognized in the University. He has had excellent and continued success in mentoring PhD students, always encouraging them to explore new ideas. He tells his students that success depends upon understanding the terminology and principles of various disciplines that work together. A couple of his colleagues point out that he has been the thesis advisor of more graduate students than any applied math professor in the Department. These students have gone on to important positions in industry and academia and value their interaction with Dr. Hsiao very highly. He has also had a profound effect on the undergraduate program by authoring web based teaching materials. He has also chaired the department faculty search committee and served actively on the department advisory committee.

It is with great pleasure that I present this year's Alison Award to one of the finest scholar-educators at the University of Delaware: Dr. George C. Hsiao.

Judith Van Name

President, Faculty Senate