

Introduction

The ASTM National Symposium on Fracture Mechanics (NSFM) is sponsored by ASTM Committee E24 on Fracture Testing. The objective of these symposia is to promote technical interchange between researchers in the field of fracture, not only within the United States but international, as evidenced by participation in these proceedings. The meeting attracted about 165 researchers in the field of fracture with presentations covering a broad range of issues in materials, computational, theoretical, and experimental fracture.

The National Symposium on Fracture Mechanics is often the occasion at which ASTM awards are presented to recognize the achievements of current researchers. At the Twenty-Second Symposium several awards were presented. The ASTM Committee E24 Fracture Mechanics Medal was presented to Mr. Edward T. Wessel, Consultant and formerly with the Westinghouse Research and Development Center, Pittsburgh, for his outstanding leadership in guiding the Subcommittee on Elastic-Plastic and Fully-Plastic Fracture and the development of various elastic-plastic fracture mechanics standards. The ASTM Committee E24 George R. Irwin Medal was presented to Dr. John H. Underwood, U.S. Army Armament Research and Development Center, for his pioneering efforts in developing methods and standards in linear and nonlinear fracture mechanics. The ASTM Award of Merit and honorary title of Fellow were given to Dr. John P. Gudas, National Institute of Standards and Technology, for his distinguished service and leadership in Committee E24. Dr. Jun Ming Hu, University of Maryland, received the ASTM Committee E24 Best Student Paper award for his paper "Deformation Behavior During Plastic Fracture of C(T) Specimens." Dr. C. Michael Hudson, Chairman of Committee E24, made the presentations.

In 1989, ASTM Committee E24 lost one of its exceptional members and colleague, Professor Jerry L. Swedlow. For many years until his death, Dr. Swedlow was responsible to Committee E24 for the organizational oversight of all National Symposia on Fracture Mechanics. He played a crucial role, along with several others, in assuring the very high quality and vigor that we have come to associate with these Symposia. In the fall of 1989, the Executive Subcommittee of E24 passed the resolution initiating "The Jerry L. Swedlow Memorial Lecture" to be given at each National Symposium. The First Annual Jerry L. Swedlow Lecture was presented by Professor M. L. Williams, University of Pittsburgh. Dr. Williams presented a most interesting lecture which provided a "technical biography" of Professor Swedlow as well as suggesting various topics for future research (see ASTM STP 1131, Volume I).

We take this opportunity to express our appreciation to the late Jerry L. Swedlow, Chairman of the National Symposium on Fracture Mechanics Executive Subcommittee, for his support and guidance in initiating this symposium.

**Executive Organizing Committee of the
Twenty-Second National Symposium
on Fracture Mechanics**