2000 Paul J. Flory Award

James E. Mark, Distinguished Research Professor of Chemistry at the University of Cincinnati will receive the 2000 Paul J. Flory Polymer Education Award of the ACS Division of Polymer Chemistry, sponsored by the Du Pont Company. The Paul J. Flory Polymer Education Award recognizes outstanding achievement by an individual in promoting undergraduate and/or graduate polymer education.

James E. Mark was born in Wilkes-Barre, Pennsylvania. He received his B.S. degree in Chemistry in 1957 from Wilkes College and his Ph.D. degree in 1962 in Physical Chemistry from the University of Pennsylvania. After serving as a Postdoctoral Fellow from 1962 to 1964 at Stanford University under the direction of Professor Paul J. Flory, Dr. Mark joined the Polytechnic Institute of Brooklyn as Assistant Professor from 1964-1967. He then moved to the University of Michigan, where he became Full Professor in 1972. In 1977, he joined the University of Cincinnati as Professor of Chemistry and served as Chairman of the Physical Chemistry Division until 1984, and Director of the Polymer Research Center until 1988. In 1987, Prof. Mark was named the first Distinguished Research Professor.

Professor Mark is considered to be one of today's most outstanding polymer scientists. He is an internationally recognized authority on the physical chemistry of polymers with specific pioneering contributions in the areas of rubber-like elasticity, properties of networks, strain-induced crystallization and the statistical and conformational properties of chain molecules. Professor Mark is an extensive lecturer in polymer chemistry and has published over 500 research papers and co-authored or co-edited eighteen books. Professor Mark has trained approximately 10 MS students, 40 Ph.D. students and 35 postdoctoral associates. He is the editor of the journal "Computational and Theoretical Polymer Science", and currently serves or has served on at least 15 additional editorial boards of polymer science journals. Mark is a Fellow of the New York Academy of Sciences, the American Physical Society, and the American Association for the Advancement of Science. Other awards include the Dean's Award for Distinguished Scholarship, Rieveschll Research Award, and the Jaffe Chemisrty Facutly Excellence Award from the University of Cincinnati, the Whitby Award, the Charles Goodyear Medal from the ACS Rubber Division, and the ACS Applied Polymer Science Award.

In addition to his organization and presentation of highly acclaimed lecture courses in polymer chemistry, Professor Mark has contributed in a major way to polymer education outreach programs. In particular, he has helped organize and has served as a major participant in the ACS Short Course on "Polymer Chemistry" which has been ongoing for nearly 30 years. To date, several thousand students have benefited from research, lecture courses, and ACS Short Courses developed and taught by this outstanding scientist and educator.
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1998 Paul J. Flory Award

Roger S. Porter
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1996 Paul J. Flory Award

Eric Baer
1994 Paul J. Flory Award

At the POLY Awards Banquet at the Smithsonian Institution in Washington DC, Leo Mandelkern was presented with the Paul J. Flory-Polymer Education award. The Flory Polymer Education award was established to recognize, encourage, and stimulate outstanding achievements by an individual in promoting undergraduate and/or graduate polymer education. The award was established in 1981 and administered POLY. Some of Leo's accomplishments are summarized below.

Leo has made a number of contributions in the area of polymer education, but the most important of these is probably the training he has given his large group of research students over the last three decades. He has instilled in these students and collaborators the highest standards of scientific investigation, at least in part by his own outstanding example. Another salient aspect of his education activities is his presentation of courses in polymer science, mainly undergraduate and graduate courses given at Florida State University, but also include valuable contributions in the American Chemical Society Short Course Program.

One of Leo's major goals in the educational area has been to convince the academic community of the need to introduce sound, quantitative principles of polymer science throughout the standard undergraduate and graduate chemistry curricula. For example, he has submitted to the Polymer Division a very carefully thought-out proposal for "Polymer Curriculum Development." It was successfully received and is currently being extensively implemented. Specifically, a set of polymer-related experiments is being introduced into an Instrumental Analysis course, which is a standard senior-level course in analytical chemistry.

Leo has served with great distinction on the Polymer Division Education Committee, one of his contributions being to serve as coauthor of the two-part series "Polymer Principles in the Undergraduate Physical Chemistry Course". He himself has published additional articles of this type, and all have been important in documenting the critical importance of polymer subjects in the chemistry curriculum. Finally, Leo has had indirect but very important educational impact through the two books he has published, both well-received. The first, "Crystallization of Polymers", is addressed more to the specialist interested in crystalline polymers. The second, however, is a fascinating introductory text for lower-level undergraduates entitled "An Introduction to Macromolecules", first published in 1972. A revised and expanded edition appeared in 1983.

Out of his broad experience in the field, Leo has achieved a presentation that deals descriptively and in lucid terms with the complete spectrum of polymers ranging from those of commercial interest to biopolymers. It has had a great influence on the teaching of the basic concepts of polymer science, and has received many favorable reviews.

Leo Mandelkern's contributions in undergraduate and graduate education in polymers have been absolutely superb. They have been invaluable to our polymer community for more than thirty years and show no signs of slackening. It is rewarding to polymer scientists world-wide to see contributions such as his recognized by the Paul J. Flory Polymer Education Award.
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1992 Paul J. Flory Award

E. Pearce
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1990 Paul J. Flory Award

George B. Butler
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1988 Paul J. Flory Award

M. Morton
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1986 Paul J. Flory Award

P. J. Flory
POLY Awards
Paul J. Flory Polymer Education Award-Previous Awardees
1982-2001

1984 Paul J. Flory Award

C. S. Marvel
1982 Paul J. Flory Award

H. F. Mark