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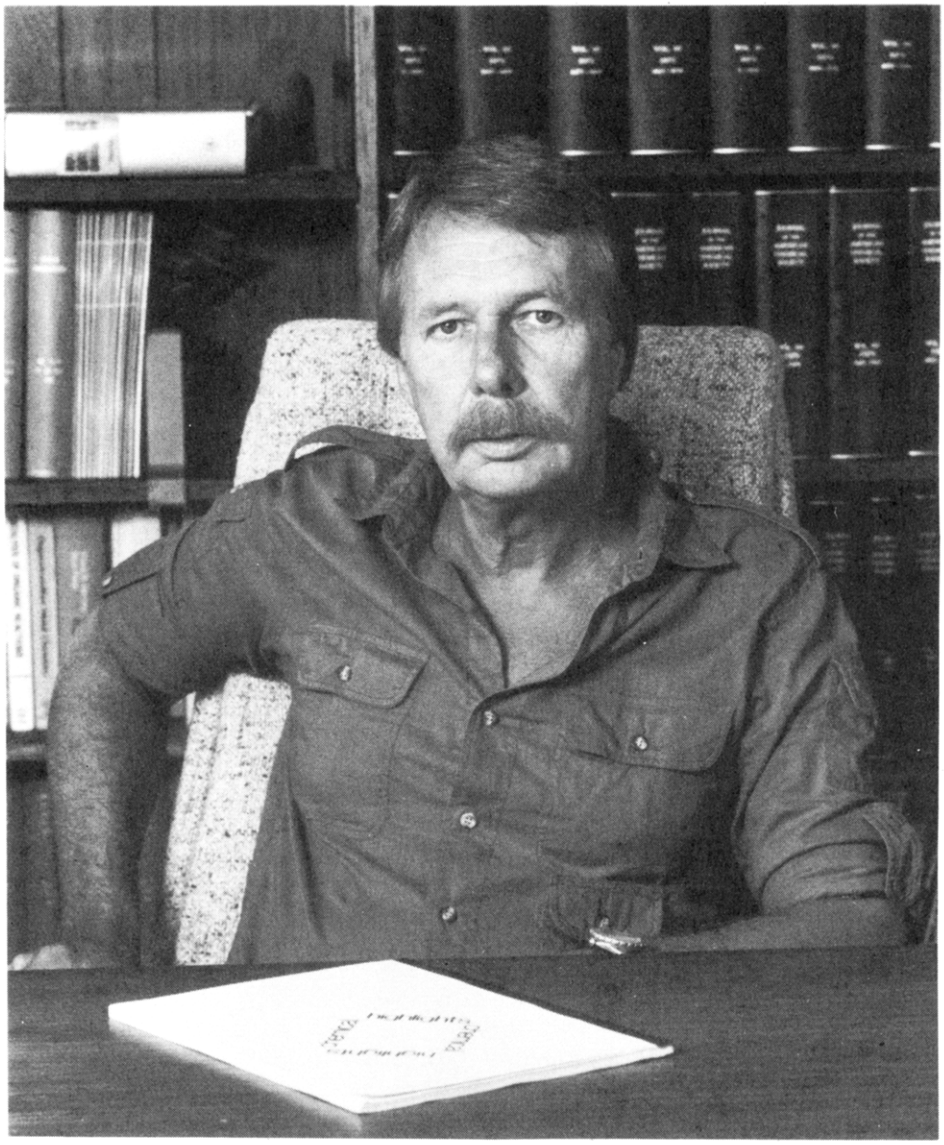

In Memory of John Kenneth Stille

John Stille died on July 19, 1989, in the crash of the United Airlines flight in Sioux City, IA, the same state in which he began his professional career in 1957 as a member of the faculty of the University of Iowa. It is astonishing to realize that John was only 59 at the time of his death because he had accomplished so much of importance to science and the chemistry profession, had contributed so much of himself to so many people, and had been involved so extensively in the development and maturing of polymer chemistry. Hardest of all to accept is the realization that he had so much yet to offer to his friends, family, and colleagues. During his tenure on the faculties of the Universities of Iowa and Colorado State, a total of 110 graduate students, 97 postdoctoral fellows and visiting scientists, and numerous undergraduates served as co-workers in his laboratories and had the privilege of knowing this unique person.

John was born in Tucson, AZ, on May 8, 1930. He received his B.A. and M.A. degrees in Chemistry at the University of Arizona and his Ph.D. with Carl Marvel at the University of Illinois, where he met his wife-to-be, Dolores Engelking. Between earning his M.A. and Ph.D. degrees John served in the Navy during the Korean War. The love of water and of the ocean which he acquired in

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the Navy later developed into an interest in scuba diving, generally off the shores of Florida and Mexico.

John and Dolores married in 1958 and have two sons: John Robert, who is a faculty member in the Chemistry Department at Michigan State University, and James Kenneth, who is a chemical engineer in the Ciba Geigy Corp. in New Jersey.

John is claimed as their own by two distinctly different groups of chemists because he made especially important contributions to both of their fields: polymer chemistry and organometallic chemistry. His 270 publications, two books, and several book chapters include basic, pioneering contributions to both of these fields as well as to synthetic organic chemistry. This issue of *Macromolecules* contains the last paper that John submitted before his death to this journal.

Perhaps first and foremost John was an organic chemist, who brought his wide-ranging interests and unique perspective to the original application of organic reactions both to polymer synthesis and to the reactions of organometallic compounds. He also served both fields professionally as the first Associate Editor for organic-polymer manuscripts for *Macromolecules* from 1967 to 1981 and then as an Associate Editor for the *Journal of the American Chemical Society* from 1982 to 1987. For his many important contributions to polymer chemistry he received the prestigious American Chemical Society Award in Polymer Chemistry in 1982. For his excellence in research in organic, organometallic, and polymer chemistry he was named a Colorado State University Distinguished Professor in 1986. He was given the ACS Colorado Section Award in 1988, and he was to receive the Arthur C. Cope Scholar Award in 1990. Over the years John made numerous contributions to the professional activities of the American Chemical Society by serving as chairman of the Iowa Section in 1965, as organizer and chairman of the Biennial Polymer Symposium in 1972 and in 1974, and as chairman of the Division of Polymer Chemistry in 1975.

The graduate students and visiting scientists who had the opportunity to work with John will always remember him fondly as a teacher who provided encouragement and insisted on excellence. He is also remembered as a "boss" who was deeply concerned with their professional development and welfare and as a co-worker who shared his wonderful sense of humor and love for life with them on a daily basis both in the laboratory and in research group get togethers and parties. John was viewed by his co-workers as a role model who expected much but always gave much more.

John had the ability to instill his fascination and enthusiasm for science in those around him—his family, his co-workers, and his colleagues. He was an outstanding research scientist and teacher, but a teacher of more than science. To his students he taught discipline, responsibility, and hard work. To his sons he was a friend who taught love and caring and the fun of a career in science. To us, his colleagues, he taught the importance of total commitment to creativity, originality, and excellence.

The Chemistry Department faculty at Colorado State University has established a memorial lectureship in his name in recognition of that dedication to research and that commitment to teaching, in all its forms.

The contributions from John R. Stille, Denise R. Rutherford, Dirk M. Sutherlin, and David R. Tueting in the preparation of this memorial are gratefully acknowledged.

Robert W. Lenz

Articles

Thermal Rigidification of Polyquinolines by Thermolytic Elimination of Ethylene from a 9,10-Dihydro-9,10-ethanoanthracene Unit

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ABSTRACT: Polyquinolines 7 and 8 containing the 9,10-dihydro-9,10-ethanoanthracene unit as the connecting group between bis(4-phenylquinoline) units were prepared by the condensation of 2,6-diacetyl-9,10-dihydro-9,10-ethanoanthracene (4) with 4,4′-diamino-3,3′-dibenzoyldiphenyl ether (5) and 3,3′-dibenzoylbenzidine (6), respectively, in the presence of diphenyl phosphate and *m*-cresol. Both of the polymers were soluble in chloroform and tetrachloroethane, exhibiting T_gs of 270 and 295 °C, respectively. Heating 7 or 8 at 200 °C for 6 h followed by 300 °C for 2 h resulted in the extrusion of ethylene via a retro [4 + 2] reaction to yield polyquinolines 9 and 10, now containing the 2,6-diacetylanthracene connecting group. These thermally stable polymers were insoluble in chloroform and tetrachloroethane, exhibited T_gs at 308 and 360 °C, respectively, and showed increased storage moduli over the uncured samples.

Introduction

Conjugated polymers, particularly polyaromatics possessing a rigid-rod configuration, often attain considerable crystallinity with correspondingly high melting temperatures and poor solubility in common organic solvents. Such polymers, which are valuable light-weight, thermally stable engineering materials, are especially difficult to fabricate. In addition, their syntheses often are

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† Deceased.

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