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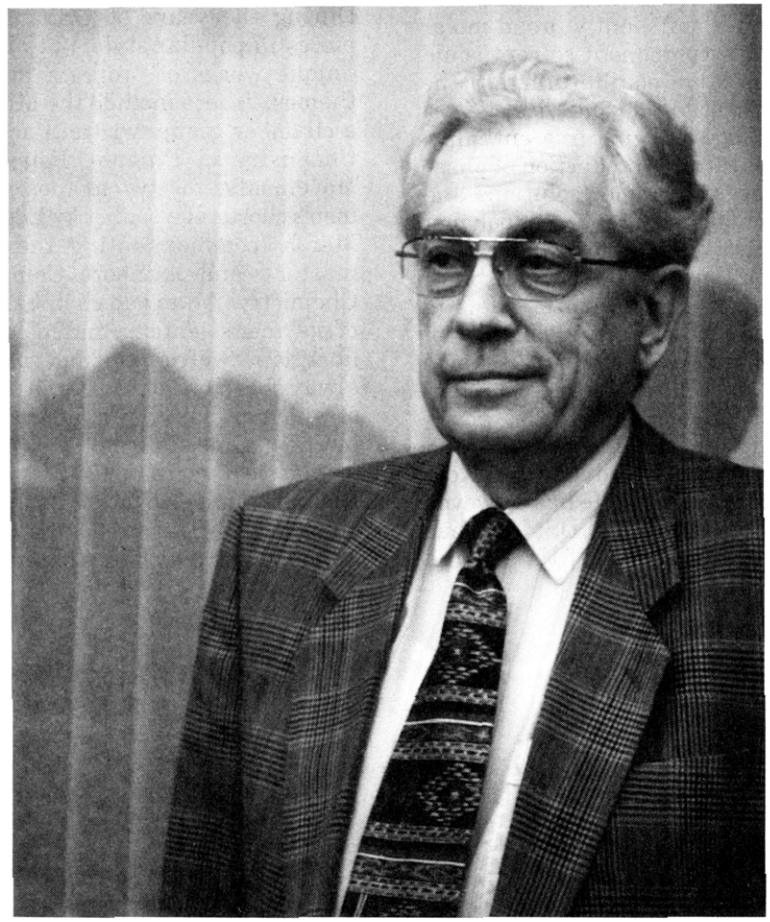

Ron Koningsveld at 70

Ronald Koningsveld, polymer thermodynamicist and polymer musician extraordinary, has been internationally known for close to four decades as a leader in studies of polymer fractionation and characterization but above all for his work on phase equilibria in polymer solutions and blends. His notable research accomplishments in these areas are matched by his zealous devotion to the teaching of polymer thermo to all on several continents who might listen.

Ron was born on April 15, 1925, and grew up in Rotterdam, spending his teen years there during the Nazi occupation. Science and music both seized his imagination, and for some time the latter discipline seemed to have the upper hand. His studies at the Rotterdam Conservatory embraced orchestral conducting as well as piano and composition. At some stage, however, practical parental advice favored his scientific bent, and after due consideration he enrolled in the chemical engineering course at the Technical University in Delft.

Upon graduating in 1956, Koningsveld joined the research staff of the Dutch State Mines (DSM) in Geleen (Limburg) near Maastricht, and worked there until his retirement in 1985. From 1963 to 1980 he was Director of Fundamental Polymer Research, and then became Director of General Basic Research. As is not uncommon in Europe, Ron was able to pursue formal graduate work while employed at DSM, and he submitted his doctoral thesis to the University of Leiden in 1967, under the guidance of A. J. Staverman. This document dealt largely with the theory and practice of polymer fractionation, and thus confirmed his interest in the

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effects of polymolecularity of molar mass and composition, subjects that have remained the dominant themes of his scientific work. Throughout the years at DSM, Ron had a number of able collaborators of various generations, including Bert Rietveld, C. F. Tuijnman, Theo Scholte, Huub Chermin, Albert Pennings, Ludo Kleintjens, and Henk Booij. He also formed close personal and scientific friendships with the late Guenther Rehage, who was then nearby at Aachen, and with Manfred Gordon at the University of Essex in England. The latter not only became one of Koningsveld's collaborators in several papers, but accepted Chermin and Kleintjens as doctoral students.

It is perhaps arbitrary to choose single examples from the cumulative impact of Koningsveld's work on polymer thermodynamics. We could mention the experimental verification of Tompa's prediction from Flory/Huggins theory that a polymer with a sufficiently broad molar mass distribution in a single-component solvent could exhibit three liquid phases in equilibrium; or the development of several versatile and practical generalizations of the simple Flory/Huggins free enthalpy, capable of essentially quantitative reproduction of phase equilibria in a large variety of polymer solutions and blends. It is largely through his work that most polymer scientists (though unfortunately still not all!) have come to realize that cloud point curves for polydisperse polymer solutions are very different from binodals in strictly binary systems, and that the critical point is not located at the extremum of the cloud point curve. Some of these efforts have involved collaboration with scientists in other countries, including Belgium, Czechoslovakia, England, Germany, and the U.S.A.

As a pedagogue of polymer thermodynamics, Koningsveld is probably unique as a *guru*. He has conveyed this lore to generations of colleagues at DSM; he has been a guest professor for long periods of time at the universities of Essex (U.K.), Massachusetts (Amherst) and Leuven (Belgium); and he was Professor of Polymer Science at Antwerp for 18 years. Shorter visiting professorships have been held at many other universities, including Case-WRU, Akron, SUNY Albany, Connecticut, Duisburg, Ulm, and Dresden and at the Max-Planck-Institut in Mainz. For his research and teaching accomplishments he has received honorary doctorates from the University of Bristol (U.K.) and the Technical University of Dresden. For the past several years he has been Chairman of the Scientific Advisory Board of the European Polymer Federation.

Music has continued to sound a strong note in Koningsveld's life. While a student in Delft he was pianist and arranger for the Dutch College Swing Band, a group that produced several successful recordings. During the years at DSM he continued to compose pieces in popular style, but also produced a number of unique works of program music based on polymeric themes. These include the Microsymposium Music (for a chamber group, written for the Institute of Polymer Chemistry in Prague), Polymer Music Suite (in six movements, for two pianos), To Science (setting for men's chorus of a sonnet by Edgar Allen Poe), Staudinger March (commemorating the 100th birthday of that master), and A Short Communication on Polymer Chemistry (for an odd chamber group composed entirely of polymer scientists, and including a formidable Schoenbergian twelve-tone movement). He has of course always been one of the performers in these works, some of which are familiar to attendees at IUPAC Symposia, but he has also taken part as a pianist in many recitals of classical chamber works at several locations in Limburg and elsewhere. It is rumored that additional polymerically inspired compositions are being kept under wraps awaiting an appropriate occasion.

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