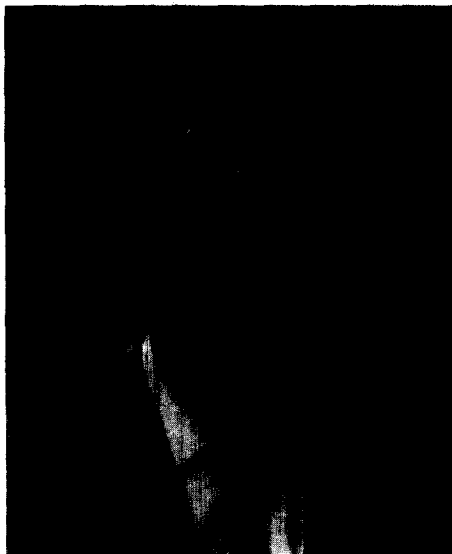


Professor Walther Burchard on his Sixtieth Birthday



In this issue of *Polymer* we honour Professor Walther Burchard of the University of Freiburg on the occasion of his sixtieth birthday. Among polymer physicists and chemists he is known for the broad range of his research interests and for his outstanding contributions to both experimental and theoretical aspects (both physical and chemical) of our science.

Walther Burchard was born in Posen (now Poznan, Poland) on 15 May 1930, and lived in East Prussia till near the end of the War. The family then moved to Detmold, Westphalia, where Walther completed his secondary schooling. He began his university studies in physics at Marburg in 1950 and continued them in Freiburg, which has been his home ever since.

Walther was first attracted by nuclear physics, but gradually shifted his interests to atoms and ultimately to big molecules. His doctoral research, on the solution properties and structural analysis of the carbanilates of amylose and cellulose, was performed under the supervision of Professor Elfriede Husemann (affectionately known as "Husefrau"), who directly succeeded Hermann Staudinger as Director of the Institute for Macromolecular Chemistry. Walther has been a member of that Institute ever since. His longest sabbatical absence came in 1968–1969, when he worked under a Royal Society grant at the University of Essex with Manfred Gordon.

Walther is perhaps best known as a master of essentially all known methods for the characterization of macromolecules in solution, including integrated and dynamic light scattering, diffusion, sedimentation, viscosity, flow birefringence and dielectric permittivity. He has used these techniques to study many natural polymers (among them cellulose, amylose, amylopectin, glycogen, bacterial polysaccharides, xanthan, casein, fibrinogen and insulin) and an equally large host of synthetic polymers, including specially prepared rings, stars and microgels.

Walther has published many pioneering theoretical works on various statistical problems offered by polymeric systems. In these pursuits he was sustained by his knowledge of cascade theory, which he fondly recalls having first encountered at a dinner party during his stay in England. In recent years his major interests have embraced such varied themes as association of polymers in solution (and the related 'slow mode' of dynamic light scattering), network statistics, and chain flexibility. Readers of his papers will observe symbiotic relations between experiment and theory at a level that is increasingly rare nowadays.

Walther Burchard has published about 150 papers. He is scrupulously devoted to his teaching duties and to the welfare of his students. He is liked everywhere for his stimulating and friendly personality as much as he is admired for his scientific work. On this occasion we affectionately and gratefully greet him and his wife Else-Marie and wish them many happy years to come.

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