

Editorial

ON THE 70TH BIRTHDAY OF PROF. WUNDERLICH

Year 2001 was very special for people working in thermal analysis: we celebrated the 70th birthday of the greatest thermal analyst, Professor Bernhard Wunderlich.

Professor Wunderlich was born in Brandenburg, Germany on May 28, 1931. He began his university studies in 1949 at the Humboldt University in Berlin, and later switched to the Goethe University in Frankfurt am Main. During that time, he married Heidi. After immigrating to the United States, Prof. Wunderlich prepared his Ph.D. thesis on 'Thermodynamics of the Copolymer System Poly(ethylene Terephthalate-Sebacate)' in Prof. M. Dole's laboratory at Northwestern University in Evanston, IL. There he started his first heat capacity measurements with an adiabatic calorimeter. Later he lectured at Cornell University, and in 1963 he switched to Rensselaer Polytechnic Institute (RPI) where he spent the next 25 years. There he founded the famous ATHAS (Advanced Thermal Analysis System) Laboratory in 1980. In 1988 Prof. Wunderlich retired from RPI. However, he did not stop working, instead he began working simultaneously at The University of Tennessee at Knoxville and the Oak Ridge National Laboratory. In 2001 he retired from the University of Tennessee, but continues to work, mainly on temperature modulated DSC.

Professor Wunderlich has over 500 publications. In his research, he pioneered in such important areas as the theory of DSC, heat capacity measurements and calculations of macromolecules, classification schemes of matter, including the introduction of the condensation crystals, establishing Wunderlich's rule regarding the heat capacity change at the glass transition, working on the hysteresis effect at the glass transition and discovering the rigid amorphous phase. He was the first to study the melting of extended chain polymeric crystals. He was also working with macromolecular nucleation, and recrystallization during melting of semicrystalline polymers. Finally, he played the most important role in working out the theory of temperature-modulated DSC (TMDSC).

Professor Wunderlich has guided 55 postdoctoral research associates, 35 Ph.D. students and 17 master degree students during his long carrier in thermal analysis.

We warmly congratulate Professor Wunderlich, and hope that he will continue his invaluable contribution to the science of thermal analysis.

Joseph Menczel