

**International Polymer Physics Symposium**  
**Honouring**  
**Professor John D. Hoffman's 70th Birthday**



*John D. Hoffman*

During a career spanning five decades in science and technology, Professor John D. Hoffman has served in the public sector, the private sector and academia. In both his research and the management of research, he has made many widely recognized contributions which are difficult to overestimate.

Born into a Pennsylvania 'Dutch' family, Professor Hoffman received his undergraduate education in chemistry at Franklin and Marshall College. This was followed by a period in the US Army with the Manhattan Project, during which he received the Soldier's Medal for actions indicative of 'heroism in the highest degree'. Upon returning to civilian life, he went on to Princeton University to carry out doctoral research with C. P. Smyth on molecular rotations in the solid state. Thereafter, at the General Electric R&D Center, he extended his work on orientational dielectric relaxations in long chain hydrocarbons by developing multiple site models for relaxations in the solid state.

During service of almost 30 years at the US National Bureau of Standards (NBS), Professor Hoffman continued his experimental and theoretical work on dielectrics. It culminated in a detailed analysis, with others, of the dielectric and mechanical relaxations in crystalline polymers. The resulting paper became a Citation Classic. During this period, he initiated his pre-eminent work on phase changes and crystallization processes in polymers. In a long frenzy of productive scientific activity (when not hunting), he and colleagues developed theories and models of polymer crystallization with molecular folding. They considered the crystal growth rate, different crystallization regimes, the relationship between crystallization temperature and melting temperature as well as a number of other topics. These accomplishments

received many recognitions, including the Stratton Award (the highest research award of NBS), the High Polymer Physics Prize of the American Physical Society and election to the National Academy of Engineering. While at NBS, he rose from Research Chemist to Director of the National Measurement Laboratory. During this advance, he maintained his ability to communicate with bench scientists. This enabled him to use his gift of identifying outstanding talent in his staff and enhanced his ability to manage. He pioneered innovations such as matrix management, Equal Employment Opportunity Advisory Committees and central experimental facilities, among others. His managerial accomplishments were recognized by a Presidential Commendation and the Presidential Meritorious Executive Award. Other recognitions of his skills included appointment to the Board of Directors of ASTM and selection as Chairman of the Board of Trustees of the Gordon Research Conferences.

In more recent years, Professor Hoffman served as Director and CEO of The Michigan Molecular Institute. He also entered academic life as a professor, first at The University of Maryland and now at The Johns Hopkins University. During this time, he has continued to advance his theories concerned with different crystallization regimes and the kinetic theory of polymer crystallization.

In May 1993, a symposium to celebrate John Hoffman's 70th birthday was held at the Cosmos Club in Washington, DC. The papers in this issue of *Polymer* were presented at that symposium. The authors feel that it is fitting that the issue be dedicated to Professor Hoffman. They congratulate him and they salute him.

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