

Education

Doctor of Philosophy in Materials Engineering

Drexel University, 1985

Master of Science in Materials Engineering

Drexel University, 1979

Bachelor of Science in Materials Engineering

Drexel University, 1976

Professional Associations

American Chemical Society

American Physical Society

Society of Plastics Engineers

Specialized Expertise

Materials engineering

Chemistry

Plastic pipe and conduit

Plastic cable

Molded plastic parts

Patents

A. Lustiger, C.N. Marzinsky and Y. Devorest, "Polypropylene/Fiber Composites", Patent 5,627,226, Issued May 6, 1997

A. Lustiger, "Semicrystalline Polymer Blend Compositions with Enhanced Interspherulitic and Interlamellar Strength", European Patent 0550214, Issued January 10, 1997

L. Monette, A. Lustiger, M.P. Anderson, J. P. Dismukes, H. D. Wagner, C. N. Marzinsky and R. R. Mueller, "Composites with Interphases and Methods of Making Same", Patent 5,288,555, Issued February 22, 1994

Publications

Extensive publications, list available on request



Professional Experience**Institute for Products, Engineering & Construction****2001 to Present**

Consulting and forensic engineering services for attorneys and insurance companies. Projects involve the discipline of materials engineering and address the failure of plastic pipe, conduit, cable and molded parts.

Exxon Research and Engineering Company**1990 to Present**

Senior Research Scientist, Exxon Research and Engineering Company, Annandale, New Jersey. Performing research on morphology-property relationships in metallocene-based polyethylene and polypropylene resins and composites. Projects include improving environmental stress crack resistance and toughness in high density rotational and injection molding resins, improving tear strength and transparency in low density polyethylene film, and improving toughness in glass-polypropylene composites. Also involved in micromechanical and analytical characterization of glass- epoxy composite interfaces after environmental exposure.

AT&T Bell Laboratories**1986 - 1990**

Member of Technical Staff. Performed basic and applied research in morphology of polyethylene, failure analysis and prediction in polyethylene cable, and morphology-failure relationships in thermoplastic composites. Also performed failure analysis of microelectronic components using acoustic microscopy.

Battelle Columbus Laboratories**1979 - 1986**

Principal Research Scientist. Primarily involved in various programs for the natural gas industry involving polyethylene pipe for fuel gas distribution. Research areas included developing structure-property relationships, failure analysis, butt fusion joining, environmental stress crack test development and evaluation. Edited Plastic Pipe Line, a quarterly newsletter on polyethylene pipe research, and was primary author of Field Failure Reference Catalog for Polyethylene Gas Piping, both published by the Gas Research Institute. Other research areas included aging of polyethylene dielectric cable insulation, evaluating the effect of processing on the morphology and mechanical properties of thermoplastic composites, and development of transparent elastomers.