Marino Xanthos was a professor of chemical, biological and pharmaceutical engineering, associate provost for graduate studies, and senior technical adviser to the Polymer Processing Institute (PPI) at NJIT until his passing in the summer of 2013. Dr. Xanthos earned a bachelor’s degree in chemistry from the Aristotelian University of Thessaloniki and master’s and Ph.D. degrees in chemical engineering from the University of Toronto, where he studied under Professor R. T. Woodhams.

After receiving his doctorate in 1974, he joined the research division of Martin Marietta Resources International, where he rose to the position of research, development, and technical services manager. From 1980 to 1986, he served as professor and later as director of the Stevens Institute of Technology Overseas International Programs Office, Department of Polymer Science, Engineering and Technology, jointly operated with the Algerian Petroleum Institute. Then, from 1987 to 1995, he was the research director of the PPI and a Stevens research professor. He was appointed professor of chemical engineering at NJIT in 1995, where he served until his passing as director of the Polymer Engineering Center, director of the Center for Processing of Plastic Packaging, chairperson of the Executive Committee of the Materials Research Council, senior technical adviser to the PPI, and finally associate provost for graduate studies.

Dr. Xanthos was internationally recognized for his polymer blends, polymer composites and polymer foams expertise, and his studies of polymer modification through the use of functional particulate additives and reactive extrusion processes, which he also applied to the processing of pharmaceutical oral dosage forms. His research work and publications involved Ph.D. and master of science students at NJIT and Stevens. He was also involved with PPI’s technical staff and industrial colleagues nationally and internationally, in the solution of important industrial problems.

Dr. Xanthos became a fellow of the Society of Plastics Engineers (SPE) in 2003 and received the NJIT Board of Overseers Harlan J. Perlis Award that same year in recognition of his exemplary scholarship and outstanding research in the field of polymers. He served as the U.S. representative to the Board of the Polymer Processing Society since 2005. In 2010, he received the Heinz List Award in recognition of his outstanding achievements in reactive processing and devolatilization.

Dr. Xanthos deeply cared for and was a renowned mentor and advisor to his graduate and undergraduate students. For many years, he was the adviser and life force of the NJIT student chapter of the SPE.

This lecture series was established by his family, friends and colleagues to memorialize his accomplishments and love of his chosen field.
David L. Kaplan

Professor David Kaplan is the Stern Family Endowed Professor of Engineering at Tufts University and a Distinguished University Professor. He is Professor and Chair of the Department of Biomedical Engineering, with joint appointments in the Tufts University Schools of Medicine and Dental Medicine, the Department of Chemistry, and the Department of Chemical and Biological Engineering. His research interests are in biopolymer engineering and in the fundamental understanding of structure-function relationships of biopolymers, with specific focus on silks, collagens and elastins. The main activities of his research group are centered on the utilization of these biopolymers for biomaterials, tissue engineering and regenerative medicine. Professor Kaplan and his team have conducted pioneering work on the use of silk-based biomaterials in regenerative medicine, from fundamental studies of the biochemistry, molecular biology and biophysical features of this class of fibrous proteins, to their impact on stem cell functions, utility in medical device formation, and introduction into complex tissue formation. Since 2004, Professor Kaplan has directed the National Institutes of Health P41 Tissue Engineering Resource Center (TERC) involving Tufts University and Columbia University. Professor Kaplan has published over 700 peer reviewed papers. He is also the editor-in-chief of ACS Biomaterials Science and Engineering, and he serves on many editorial boards and programs for journals and universities. He has served as NIH study section chair and he has received a number of awards for teaching. Professor Kaplan was Elected Fellow of the American Institute of Medical and Biological Engineering, he received the Columbus Discovery Medal, and he was awarded the Society for Biomaterials Clemson Award for contributions to the literature. He has mentored dozens of Ph.D. students and postdoctoral fellows; many of them now hold positions in academia and industrial research laboratories. Professor Kaplan and his team have also been responsible for over 100 patents, issued or allowed, which have supported about a dozen startup companies to date.

PROGRAM

2:30 p.m.
Opening Remarks
Moshe Kam
Dean
Newark College of Engineering

Welcome
Joel S. Bloom
President
New Jersey Institute of Technology

Introduction of Lecturer
Piero Armenante
Distinguished Professor of Chemical Engineering
New Jersey Institute of Technology

2:50 p.m.
Engineered Silk Protein Biopolymers for Regenerative Medicine
David L. Kaplan
Department of Biomedical Engineering
Tufts University

4 p.m.
Social Hour
Eberhardt Hall
Room 113