



DIVISION OF POLYMERIC MATERIALS: SCIENCE & ENGINEERING

2014 PMSE Fellow Ceremony

The American Chemical Society Division of Polymeric Materials: Science and Engineering (PMSE) has just completed its process to select a new class of PMSE Fellows for 2014 and the following distinguished PMSE members have been chosen:

- Emmanuel Giannelis
- Jay Friedrich Kunzler
- David Martin
- Edwin L. "Ned" Thomas

They will be inducted as the fourteenth class of PMSE Fellows at the New Orleans ACS Meeting during the joint PMSE/POLY Awards Reception on Wednesday evening, March 19 2014. PMSE is pleased to welcome this distinguished group of polymer scientists and engineers to the ranks of fellows.

A short description of their work up to the point of the induction as a PMSE Fellow is on the following pages.



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2014 PMSE Fellow Induction Biographies

2014 PMSE Fellow

Emmanuel Giannelis
KAUST



“For his pioneering contributions to the study of polymer nano-composites and his service to the polymer community of the ACS”

Emmanuel P. Giannelis is the Walter R. Read Professor of Engineering at Cornell University. He received a BS degree in chemistry from the University of Athens, Greece, and a Ph.D. in chemistry from Michigan State University. He is currently the co-Director of the KAUST-CU Center for Energy and Sustainability. He also serves as the Chief Technical Advisor at the Boston Research Center of Aramco Services Company.

Giannelis is a member of several organizations and serves or has served on the editorial boards of *Small*, *Polymer*, *Chemistry of Materials*, and *Macromolecules*. He has delivered more than 400 invited talks and seminars. He is the author or co-author of about 220 papers/book chapters and 11 patents. He is a member of several professional organizations and a corresponding member of the European Academy of Sciences. He is a highly cited author in Materials Science and he was listed as one of the top 25 cited authors in Nanotechnology by ISI.

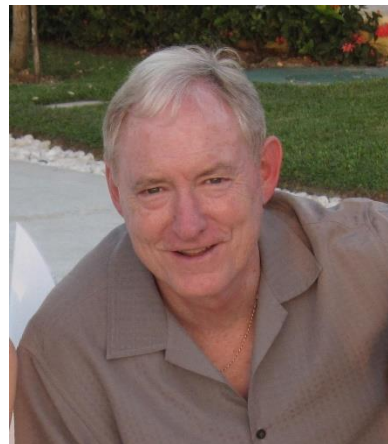


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2014 PMSE Fellow

Jay Friedrich Kunzler

Künzler Biomedical



“For his seminal contributions to the synthesis and process development of silicone and fluorosilicone containing hydrogel polymer networks. His accomplishments, leading to the first commercial continuous wear permeable contact lens; have ultimately resulted in silicone hydrogel contact lenses becoming a major segment of the contact lens business.”

Jay F. Künzler is currently the President of Künzler Biomedical LLC located in Canandaigua, NY. In this role, Jay is involved in the development of biomedical materials, custom synthesis, chemical sourcing and consulting. Prior to this, Jay worked at Bausch & Lomb (BL) where he was Distinguished Research Fellow and Director of the Department of Polymer Chemistry in Rochester, New York. Here he directed a multifaceted synthetic, formulation and process group towards design and commercialization of several novel biomedical materials and engineering processes for ophthalmic application. This included targeted drug delivery devices, vitreoretinal fluids, continuous wear and disposable contact lenses and intraocular lenses (SofLens 66, Pure Vision, Boston XO2, Biotrue One Day, SofLens 59, Naturalle, SofPort and the soon to be launched Zeus silicone hydrogel). Jay played a pivotal role in the development of the first commercial silicone hydrogel contact lens material. He is a recipient of numerous awards including the Arthur K Doolittle Award (ACS), the Industrial Innovation Award (ACS), Chief Scientific Officer Innovation Award (BL) and the Adolph Lomb Scientific Achievement Award (BL). Jay was inducted as Fellow in the American Institute of Medical and Biological Engineering in 2007. He currently holds 100 US Patents and has published extensively in biomedical journals and presented at numerous domestic and international chemical society meetings. He received a B.A. in Chemistry/Biology (Pre-Medicine) from Valparaiso University, a M.S. in Materials Science and Engineering from the Rochester Institute of Technology and a Ph.D. from Case Western Reserve University in Macromolecular Science under the guidance of Professor Virgil Percec.



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2014 PMSE Fellow

David Martin

University of Tennessee, Knoxville



“For foundational studies of conjugated polymeric material structure and properties and their use to interface with living tissue.”

Prof. David C. Martin is currently the Karl W. and Renate Böer Professor and Chair of Materials Science and Engineering and Professor of Biomedical Engineering at the University of Delaware. His research interests include the design, electrochemical synthesis, and characterization of conducting polymer coatings for integrating electronic biomedical devices in living tissue, high-resolution microscopy and impedance spectroscopy studies of defects in ordered polymers and organic semiconductors, and the deformation behavior of crystalline polymer and organic molecular materials near surfaces. Prof. Martin was previously Professor of Materials Science and Engineering, Biomedical Engineering, and Macromolecular Science and Engineering at the University of Michigan in Ann Arbor, MI, and is a Co-Founder and Chief Scientific Officer for Biotectix LLC of Quincy, MA. He is a Fellow of the American Institute for Medical and Biological Engineering, the American Physical Society, and was an Alexander von Humboldt Fellow at the Max-Planck Institute for Polymer Research in Mainz, Germany. Prof. Martin worked as a Visiting Scientist at DuPont Central Research & Development in Wilmington, DE, after receiving his Ph.D. in Polymer Science and Engineering from the University of Massachusetts at Amherst. Prof. Martin has held previous positions at the GM Research Center in Warren, MI; at IBM General Technology Division in Burlington, VT; and at GE Carbonyl Systems Division in Detroit, MI.



DIVISION OF POLYMERIC MATERIALS: SCIENCE & ENGINEERING

2014 PMSE Fellow

Ed Thomas

Rice University



“For seamlessly integrating and advancing polymers and materials, particularly in the area of structural control of waves in polymer-based materials.”

Edwin Thomas is a leading materials scientist/engineer and educator with a BS degree in mechanical engineering (University of Massachusetts) and a PhD in materials science and engineering (Cornell University). Ned’s research develops and exploits precisely designed polymer based nanostructures to provide targeted properties and to contribute to the fundamental understanding of structure-property-processing relationships. His research interests include engineering of the mechanical, thermal and optical properties of block copolymers, liquid crystalline polymers, and hybrid organic-inorganic nanocomposites as well as photonics, phononics, interference lithography, direct write lithography and large strain, highly nonlinear mechanical behavior, especially ballistics and shock waves.

To date, a total of 57 PhDs have been completed under his supervision, spanning his career of 40 years from 1973 to the present and include students from the Chemical Engineering Department at the University of Minnesota, 1973-1977, the Department of Polymer Science and Engineering at the University of Massachusetts, 1977-1988 the Materials Science and Engineering Department at MIT 1988-2011. In July, 2011, Thomas became Dean of the George R. Brown School of Engineering at Rice University and is a tenured professor in the Materials Science and NanoEngineering Department and in the Chemical and Biomolecular Engineering Department at Rice. Thomas has been recognized with election to the National Academy of Engineering in 2009, election to the American Academy of Arts and Sciences (2009), and was awarded the 1985 American Chemical Society Creative Polymer Chemist Award and most recently the 2012 Polymer Chemistry Prize of the American Chemical Society.