



DIVISION OF POLYMERIC MATERIALS: SCIENCE & ENGINEERING

2016 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 2016 and the following distinguished PMSE members have been chosen:

- Antonio Facchetti
- Jung-Il Jin
- Shiro Kobayashi
- Karen Winey

They will be inducted as the sixteenth class of PMSE Fellows at the San Diego ACS Meeting during the joint PMSE/POLY Awards Reception on Wednesday evening, March 16, 2016. 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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2016 PMSE Fellow Induction Biographies

2016 PMSE Fellow

Antonio Facchetti
Polyera Corporation



“For seminal contributions to the synthesis of novel polymeric materials, to the development of unconventional processes, to commercially-viable opto-electronic devices”

Antonio Facchetti obtained his Laurea degree in Chemistry cum laude and a Ph.D in Chemical Sciences from the University of Milan. In 2002 he joined Northwestern University where he is currently an Adjunct Professor of Chemistry. He is a co-founder and currently the Chief Scientific Officer of Polyera Corporation. He is also a Distinguished Adjunct Professor of King Abdulaziz University and the Technology Advisor of Raynergy Tek Corporation. Dr. Facchetti has published more than 360 research articles, 11 book chapters, and holds more than 120 patents. He received the 2009 Italian Chemical Society Research Prize, the team IDTechEx Printed Electronics Europe 2010 Award, the corporate 2011 Flextech Award. In 2010 was elected a Kavli Fellow, in 2012 a Fellow of the American Association for the Advancement of Science (AAAS), and in 2013 Fellow of the Materials Research Society. IN 2010 he was selected among the "TOP 100 MATERIALS SCIENTISTS OF THE PAST DECADE (2000-2010)" by Thomson Reuters and in 2015 recognized as a Highly Cited Scientist. In 2015 he became a Fellow of the Royal Society of Chemistry. Recently he has been elected a Fellow of the National Academy of Inventors and he was awarded the 2016 ACS Award for Creative Invention. Dr. Facchetti's research interests include organic semiconductors and dielectrics for thin-film transistors, metal oxides, conducting polymers, molecular electronics, organic second- and third order nonlinear optical materials, and organic photovoltaics.



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2016 PMSE Fellow

Jung-Il Jin

Korea University, Seoul



“For outstanding contributions to the science of functional polymer materials and for enhancing polymer education worldwide”

Prof. Jung-Il Jin, a distinguished professor of Korea University, Seoul, Korea, has been teaching polymer science for more than 40 years. He is currently the president of the Korean Federation of Science Culture and Education Societies. He was the president of IUPAC(2008-9), IUPAC Polymer Division(2006-7), Federation of Asian Polymer Societies(2007-8), Korea Chemical Society(2000), and Polymer Society of Korea(1997). He is a Fellow of the Korean Academy of Science and Technology, Royal Society of Chemistry (U.K.), and Federation of the Asian Chemical Societies. He has been an ACS member for more than 35 years. He has published about 400 academic papers on liquid crystalline polymers, polyconjugated polymers, other functional polymers and on the materials science of DNA. He is a graduate of the Seoul National University (BS(1964) and MS(1966)) and the City University of New York U.S.A. (Ph.D.(1969)). He was a visiting scientist at the University of Massachusetts (Amherst, U.S.A.) and the University Cambridge (U.K.). He was awarded many prizes including the Korean National Order (1st level) in Science and International Award from the Polymer Society of Japan.



DIVISION OF POLYMERIC MATERIALS: SCIENCE & ENGINEERING

2016 PMSE Fellow

Shiro Kobayashi

Massachusetts Institute of Technology



"For outstanding contributions to novel synthesis of natural and unnatural polymers via enzymatic polymerization"

Shiro Kobayashi is a distinguished professor at Kyoto Institute of Technology. He studied polymer chemistry and organic chemistry in the graduate course of Kyoto University and received Ph.D. degree in 1969. His initial work into enzymatic polymerization helped start the field of bio-sourced polymers and green polymer chemistry. His research includes the first chemical synthesis of various natural and unnatural polysaccharides, functionalized polyesters, and polymers from phenolic compounds. He received the Award of the Chemical Society of Japan for Young Chemists (1976), the Award of the Society of Polymer Science Japan (1987), the Distinguished Invention Award (1993), the Cellulose Society of Japan Award (1996), the Humboldt Research Award (1999), the Chemical Society of Japan Award (2001), the John Stauffer Distinguished Lecture Award (2002), the SPSJ Award for Outstanding Achievement in Polymer Science and Technology (2004), the Medal with Purple Ribbon (2007), and others.



DIVISION OF POLYMERIC MATERIALS: SCIENCE & ENGINEERING

2014 PMSE Fellow

Karen Winey

University of Pennsylvania



“For outstanding contributions to the understanding of polymer nanocomposites and ion-containing polymers through quantitative scattering and microscopy studies”

Karen I. Winey is Professor and TowerBrook Foundation Faculty Fellow of Materials Science and Engineering at the University of Pennsylvania with a secondary appointment in Chemical and Biomolecular Engineering. Prof. Winey characterizes and manipulates nanoscale morphologies in various ionomers and associating polymers to discover materials with advanced mechanical and transport properties. In particular, she has quantitatively reconciled scattering, imaging and spectroscopic data to describe the morphologies in styrene-based ionomers and discovered new morphologies in several acid-containing precise polyethylenes. Winey also designs and fabricates polymer nanocomposites to understand and improve their mechanical, thermal, and especially electrical properties, which includes a novel method for extracting the contact resistance in nanowire-based transparent conductors. Polymer diffusion in the presence of nanoparticles and other types of nanoconfinement is a newer area of interest. In both areas, she couples experimental studies with simulation and theory, either within her group or with collaborators. Winey received her B.S. from Cornell University in materials science and engineering and her Ph.D. in polymer science and engineering from the University of Massachusetts, Amherst with Ned Thomas as her thesis advisor. Following a postdoctoral position at AT&T Bell Laboratories with Ron Larson, she joined the faculty of the University of Pennsylvania in 1992. Elected positions include chair of the Polymer Physics Gordon Research Conference (2010) and Chair of the Division of Polymer Physics within the American Physical Society (2013). Winey also served as an Associate Editor for *Macromolecules* for four years (2010-14). Her honors include Fellow of the American Physical Society (2003), Special Creativity Award from the National Science Foundation (2009-2011), George H. Heilmeier Faculty Award for Excellence in Research (2012), Fellow of the Materials Research Society (2013) and Visiting Miller Research Professor at the University of California, Berkeley (2014).