



DIVISION OF POLYMERIC MATERIALS: SCIENCE & ENGINEERING

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## Cooperative Research Award in Polymer Science and Engineering

Sponsored by the Eastman Kodak Company

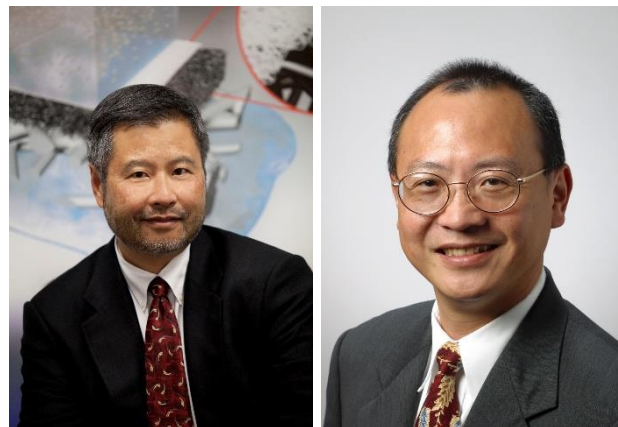
### 2015 Award Winners

Benjamin S. Hsiao

Stony Brook University

Andy H. Tsou

ExxonMobil Chemical Company



The 2015 Award for Cooperative Research in Polymer Science and Engineering from American Chemical Society Division of Polymeric Materials Science and Engineering is given to Dr. Benjamin S. Hsiao at Stony Brook University [left] and Dr. Andy H. Tsou at ExxonMobil Chemical Company [right]. This award was initiated in 1992, endowed by a generous gift from the Eastman Kodak Company.

The 2015 award is presented in recognition of outstanding contributions in polymer science and engineering by gaining new insights into the structure, property and processing relationships of polyolefins. Their sustained collaborative research activities over the past 15 years have exemplified an ideal bridging teamwork between university (Stony Brook), industry (ExxonMobil) and national laboratory (Brookhaven National Laboratory) and have brought basic and applied research together.

The major accomplishments of their collaborative research activities are in two areas: (1) development of frontier synchrotron X-ray scattering techniques for polymer research, and (2) applications of these techniques to assist the development and commercialization of new materials. Their synchrotron work has laid the foundation for the development of several important in-situ techniques; i.e. rheo/X-ray and tensile-deformation/X-ray, which have become particularly useful for cutting-edge structure-property research, such as flow-induced phase transitions and hierarchical structural changes in polymer melts, block copolymers, nanocomposites, complex fluids, structured gels and biological systems. The X27C beamline at the National Synchrotron Light Source in Brookhaven National Laboratory, being the first synchrotron facility in the United States dedicated to polymer research, has served more than 1000 researchers from over 100 research institutes since its inception in 1998. At least 40 user groups have used these in-situ techniques to investigate a wide range of polymer problems at the X27C beamline, leading to hundreds of scientific publications. Hsiao and Tsou have brought basic and applied research together by successfully utilizing synchrotron X-ray scattering to guide the development and commercialization of new polyolefin materials (e.g. Vistamaxx™ thermoplastic elastomers, Linxar™ polypropylene adhesives, Exxpro™ nanocomposites, and Exact™ plastomers).

Dr. Hsiao received a B.S. in Chemical Engineering from the National Taiwan University, a Ph.D. in Polymer Science at the University of Connecticut, and his post-doctorate training in Polymer Science & Engineering from the University of Massachusetts at Amherst. He then spent 8 years in R&D at DuPont Company at the Experimental



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Station before joining the Chemistry Department of Stony Brook University. He has also served as Chair of the Chemistry Department and Vice President for Research at Stony Brook University.

Dr. Tsou also received a B.S. in Chemical Engineering from the National Taiwan University and a Ph.D. in Chemical Engineering at Purdue University. He spent 10 years at Eastman Kodak prior to joining ExxonMobil Chemical Company in Baytown, Texas. He has also served as Section Head of the Structure and Performance of Organic Materials Section at the Corporate Strategic Research Labs of ExxonMobil Research and Engineering Company in Clinton, New Jersey.

An award symposium to honor the 2015 winners will be held at the national ACS meeting in Denver on Monday, March 23 (Starting at 8:30 AM). The award will be presented at the joint Division of Polymeric Materials: Science and Engineering and Division of Polymer Chemistry joint awards reception in Denver.