



Benjamin S. Hsiao

Distinguished Professor, Department of Chemistry, Stony Brook University

Co-founding Director, Innovative Global Energy Solutions Center

Director, Center for Advanced Technology in Integrated Electric Energy Systems

Dr. Benjamin S. Hsiao (蕭守道) received his B.S. degree in Chemical Engineering from National Taiwan University, Ph.D. in Materials Science from University of Connecticut, and post-doctorate training in Polymer Science & Engineering at University of Massachusetts. He joined DuPont Company as a staff scientist and spent 8 years in R&D before coming to Stony Brook University (SBU). He served as Chair of the Chemistry Department, Vice President for Research and Chief Research Officer at SBU. Currently, Hsiao is a Distinguished Professor in Chemistry and the Director of Center for Integrated Electric Energy Systems, with the mission to enhance the development of advanced technologies for the innovative nexus of energy, food and water systems.

Hsiao has achieved national and international prominence in polymer science. He published over 620 peer-reviewed scientific papers, reviews and book chapters, obtained 58 issued patents with 25 pending patent applications, and edited 2 books. He was elected as Fellow of American Association for the Advancement of Science (AAAS), Fellow of American Chemical Society, Fellow of American Physical Society, Fellow of Materials Research Society, Fellow of National Academy of Inventors, AAAS-Lemelson Foundation Invention Ambassador, and received DuPont Young Faculty Award, SUNY Distinguished Professorship, Chang-Jiang Chair Professorship in China, ACS Co-operative Research Award, NSF Special Creativity Award, and The Prince Sultan bin Abdulaziz International Prize for Water - The Creativity Prize.

Hsiao and his team developed a highly permeable membrane technology using nanofibrous materials for a broad spectrum of water purification applications, ranging from microfiltration to reverse osmosis. His current research interests are focused on the development of sustainable materials from underutilized biomass for food security. In specific, he and his team have invented a simple Nitro-Oxidation Process - a zero waste technology that can rapidly convert a wide range of biowaste (e.g., food waste, animal waste, and agriculture waste) into safe nutrients and growing media for farming.

Recently, Hsiao has been involved in spearheading the establishment of a first-of-its-kind climate solutions center, the *New York Climate Exchange*, with more than \$700 million funding thus far, on Governors Island in New York City. This center will be dedicated to climate research, solution development, education, workforce training, and public programs, with three core themes: (i) environmental justice and inclusion, (2) energy, water, and food systems, and (3) sustainable urban environments.