

Esther S. Takeuchi, PhD
William and Jane Knapp Chair in
Energy and the Environment
established 2016

Esther Takeuchi, PhD, a SUNY distinguished professor, holds joint appointments at Brookhaven National Lab and Stony Brook University. Directing a U.S. Department of Energy \$10 million Energy Frontier Research Center, The Center for Mesoscale Transport Properties, Dr. Takeuchi is leading the research investigating alternative, environmentally friendly battery systems with powerful energy and life span capabilities.

Her work has revolutionized battery chemistry and technology since she arrived at Stony Brook University in 2012 and led to her appointment as the inaugural William and Jane Knapp Chair in Energy and the Environment. Dr. Takeuchi and her team of top-notch researchers and Stony Brook graduate students — with backgrounds in chemistry, material science, electrical engineering and physics — are expecting to find new energy storage alternatives by studying the two most basic products of all energy, work and heat. The collaborative, interdisciplinary research aims to develop reliable, high-power energy storage with the goal of helping us to fully benefit from renewable energy and foster a more sustainable Earth.

Dr. Takeuchi holds more than 150 U.S. patents. She is recognized for developing the battery technology that implanted cardiac defibrillators employ today. President Obama bestowed her with the highest honor possible for technological achievement in the United States — the National Medal of Technology and Innovation. Moreover, she is an inductee of the prestigious National Academy of Engineering and National Inventors Hall of Fame, and is a fellow of both the American Institute for Medical and Biological Engineering and The Electrochemical Society.

Dr. Takeuchi received her BA in chemistry and history from the University of Pennsylvania and her PhD in organic chemistry from The Ohio State University. She completed her postdoctoral work at the University of North Carolina, Chapel Hill, and the University at Buffalo. Before assuming an academic position, Dr. Takeuchi spent more than 20 years at Greatbatch Inc.

