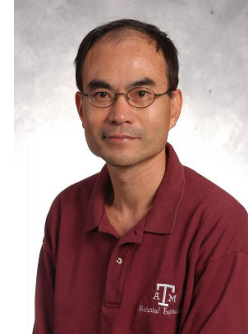


Title **Nanomaterials and Polymer Nanocomposites
for Energy Sector Applications**

Speaker Prof. Hung-Jue Sue
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Department of Mechanical Engineering
Texas A&M University
USA



Date & Time Friday, July 13, 2012 4:30 p.m.

Place INAMORI Hall, Ito campus, Kyushu University

Abstract

Demands for sustainable and environmentally friendly energy sources and for energy conservation have propelled generation of vast numbers of new concepts and approaches to harvest clean energy, to safely explore hard to reach oil and gas reservoirs, and to improve efficiency in energy consumption. To deploy many of these attractive new ideas, such as wind energy, solar energy, and deep sea oil drilling, it is imperative that high performance polymeric materials be utilized to satisfy desired economy, environment, and safety requirements. One important enabling factor to realize the above opportunities is the utilization of well-dispersed and/or well-organized nanomaterials in the form of polymer nanocomposites or thin films as structural or device components in applications. In this presentation, successful examples of nanomaterials/nanocomposites prepared using a novel approach will be given to illustrate how it is possible to manipulate nanoparticle dispersion and assembly in media of interest for energy sector applications.

About the Speaker

Professor H.-J. Sue is a Full Professor and teaches at the Department of Mechanical Engineering, Texas A&M University (TAMU) since 1995. He received his Bachelor's degree from the Chung-Yuan Christian University in Taiwan in 1981. He then obtained his two Masters' and Ph.D. degrees from the University of Michigan in 1985, 1987, and 1988, respectively. Before joining TAMU, Dr. Sue was employed by Dow Chemical at Freeport, TX, for seven years. He has focused most of his research work on fundamental understanding of structure-property relationship of polymeric materials. His recent research interests include micro- and nano-scratch behavior of polymers and nanomaterials for nanotechnology applications. Dr. Sue is currently the Director of the Polymer Technology Center at TAMU. He received both endowed Linda & Ralph Schmidt Professorship and Society of Plastic Engineer Fellow honors in 2010.

Host: Professor Atsushi TAKAHARA

For registration, please visit our website:<http://i2cner.kyushu-u.ac.jp/>

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