

2007-2008

Materials Council Seminar Series

Georgia Institute of Technology

Trung Van Nguyen

Program Director

CBET Division - Engineering Directorate

National Science Foundation

I. "Energy for Sustainability Program"

II. "Transport and Interfacial Phenomena in PEM Fuel Cell"

Tuesday, November 27, 2007

Verco Classroom 299 – LOVE Bldg.

3:00 - 4:00PM

ABSTRACT

I. The Energy for Sustainability Program is one of seventeen programs in the Division of Chemical, Biotechnology, Environmental and Transport (CBET) Systems of the Directorate for Engineering (ENG) in the National Science Foundation. This program is one of four programs in the Environmental Engineering and Sustainability Cluster. It is the newest program in the CBET Division, created in 2006, with the mission of funding long-term, basic and fundamental research and education that will have major impacts on the generation, conversion and storage of environmentally friendly and renewable energy. Additional program background information along with areas of interest and examples of recent awards will also be presented.

II. Two phenomena that are of great importance to the performance on a PEMFC, 1) liquid water transport in the catalyst and gas diffusion layers and 2) ionic activity at the ionic polymer phase and the catalyst interface and the ionic polymer phase and membrane interface. This talk will discuss some of the research activities in these areas at the University of Kansas.

BIOGRAPHY

Trung Van Nguyen was elected to be the first Director for the Energy for Sustainability program at NSF and started his position in June 2007. Concurrently, he also holds the title of Professor of Chemical & Petroleum Engineering at the University of Kansas. He has a BS from NCSU and MS and PhD from TAMU, all in Chemical Engineering. Prior to joining the faculty at the University of Kansas, he was a Postdoctoral Fellow at Los Alamos National Lab, Senior Product & Process Development Engineer at Duracell, and Member of Technical Staff at Bell Labs. His research is on transport and interfacial phenomena in fuel cells and batteries and mathematical modeling of electrochemical systems.

Host: Professor Gleb Yushin, 404-385-3261; gleb.yushin@mse.gatech.edu

Sponsored by the School of Materials Science and Engineering and
The Materials Council

