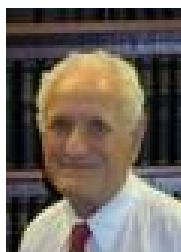




## **AERTC Launches Distinguished Lecture Series**

The Advanced Energy Research and Technology Center, (AERTC), is proud to announce a Distinguished Lecture Series. The Lecture Series is designed to showcase the forefront of research in the energy sciences, as well as promote collaboration between the AERTC and world-renowned scientists. The AERTC Distinguished Lecture Series will address problems and highlight solutions in the global energy community. Three lectures will be presented each semester. Visit the AERTC website for updates and speaker information.

### **AERTC Distinguished Lecturer**



#### **Dr. Richard S. Stein**

Goessmann Professor of Chemistry, Emeritus  
University of Massachusetts at Amherst  
Member of the National Academy of Engineers

**Date: Wednesday, Feb. 6, 2008**

**Time: 12:30 PM**

**Location: Room 231, Engineering**

## **"Energy and the Climate - What Next?"**

Assuming that the energy shortage and global warming are real problems, I will address the matter of what we should do. It is obvious that we need to conserve in energy use and find either energy sources not dependent upon fossil fuel and/or means for preventing carbon dioxide concentrations in the atmosphere from increasing at the present rate. Alternatives are considered and compared.

There appears to be no "magic bullet", so in view of time constraints and lack of sufficient knowledge, it appears wise to consider several options before "putting all our eggs in one basket".

### **DR. RICHARD S. STEIN**

Richard S. Stein was born in Far Rockaway, NY in 1925. His undergraduate studies were at Brooklyn Polytechnic, where he made some of the first studies of the dimensions of polymer molecules in solution using light scattering. Graduate studies at Princeton University with Tobolsky involved using birefringence and x-ray diffraction for following the orientation and relaxation of polymers. This was followed by a postdoctoral year at Cambridge University in which studies were extended through use of infrared dichroism. Stein joined the University of Massachusetts in 1950 as an Assistant Professor and initiated its polymer program and started its Polymer Research Institute, which evolved into the Polymer Science and Engineering Department. He now serves as Emeritus Goessmann Professor of Chemistry. He has continued to develop and use rheo-optical techniques for studying orientation and phase transition phenomena in amorphous, crystalline and liquid crystalline polymers. These have more recently been supplemented by neutron scattering and reflectivity techniques. Stein's efforts have been recognized by awards from the American Chemical Society, the American Physical Society, the Society of Rheology, the Society of Plastics Engineers and the Society of Polymer Science, Japan. He has been elected to membership in the National Academies of Sciences and of Engineering and awarded honorary degrees by the Universitat Ulm and the University of Massachusetts.