## SE&T Colloquium Series-Fall 2012

Speaker	Dr. Danny J. Krebs Retired NASA Scientist Adjunct Professor of Department of Physics
Title	Personal Transportation in the 21st Century and Beyond
Abstract	The petroleum-based transportation system that mankind enjoyed during the 20th century is probably not sustainable into the 22nd century; and certainly not sustainable for more than two centuries, even after allowance is made for exploitation of oil from tar sands, shale, and heavy crude. America is particularly vulnerable to disruptions in petroleum supply because of our dispersed geography and current infrastructure. The pro's and con's of various alternatives to our petroleum-based transportation system are considered, including biofuels, natural gas, synthetic fuels, hydrogen, and battery-powered vehicles. Comparisons are made of the new electric, hybrid, and hydrogen-powered vehicles appearing on the market.  A version of this talk was originally presented to the Saginaw Valley Torch Club on December 7, 2009. A paper based on that talk was selected for publication in the Torch Magazine, a publication of the International Association of Torch Clubs. It was awarded the Paxton award for best paper received by the Torch Magazine in 2009. In addition, a version of this paper was published in the October 2011 issue of "Physics and Society", a publication of the American Physical Society.
Date	Tuesday, September 11
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.