CACHE News
Summer 2015

Fuel Cell Curriculum Project

Jason M. Keith, Dean of Engineering at Mississippi State University has developed fuel cell and alternative energy-related modules written for the sophomore, junior, and senior level chemical engineering curriculum. These modules transformed the educational experience for Michigan Tech and Mississippi State students and are currently doing the same for other students at the national and international levels. They have been distributed widely and complimentary problems have been developed for two mainstream chemical engineering texts.

Overall, there have been 41 chemical engineering modules with an additional 29 (including some cross-listed modules) for mechanical engineering and another 13 (including some cross- listed) for electrical engineering. The modules have been tested and assessed at over a dozen ABET accredited institutions and the feedback has been very positive.

Jason also worked with his PhD student Daniel Lopez Gaxiola (MTU PhD '11) to develop hydrogen and fuel cell based on-line interactive materials for the text *Elementary Principles of Chemical Processes* by Felder & Rousseau (90 modules) and *Transport Processes and Separation Process Principles* by Geankoplis (75 modules).