

John Krupczak Appointed a Senior Fellow

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HOLLAND - Dr. John Krupczak Jr., Professor of Engineering and Chairperson of the department at Hope College, has been appointed a Senior Fellow of the Center for the Advancement of Scholarship on Engineering Education (CASEE), a program of the National Academy of Engineering.

Through the one-year appointment, which began earlier this month, he will conduct research on courses on technological literacy and integrative learning in engineering.

CASEE is the first operating center of the National Academy of Engineering, and is dedicated to achieving excellence in engineering education. CASEE Senior Fellows are selected from among distinguished and well-recognized opinion leaders with demonstrated abilities to catalyze advancements nationally as well as within their own organizations, and are chosen based upon their significant promise to provide revolutionary as well as evolutionary research breakthroughs.

As a Senior Fellow, Krupczak will be participating with other researchers in a CASEE initiative to enhance technological literacy in engineering by studying existing courses nationwide geared toward non-science majors. The project will also focus on integrative learning for both non-science students and engineering students, including both how non-science students can integrate technology into their disciplines and ways that engineers can draw upon other fields as they pursue their own disciplines.

Krupczak will be doing the bulk of his research during his current fall 2008 sabbatical leave, with additional work during the spring and summer of 2009. His sabbatical work includes compiling a database on existing technological literacy courses, an initiative supported through a National Science Foundation-funded project titled "EFFECTIVE: Exploring a Framework for Evaluating Courses on Technology in Various Environments" that also involves faculty at Penn State, Santa Clara Junior College, Mission College and Dartmouth.

Krupczak has been a member of the Hope faculty since 1994 and has been actively involved in enhancing technological literacy among non-science students throughout his time at the college. He developed and teaches the college's course "Science and Technology of Everyday Life," through which students learn about the science behind objects that they use daily, including by building items ranging from radios to keyboards. More than 1,500 non-engineering students have enrolled in the course since it debuted in 1995.

His work in the technological literacy instruction has been supported by six grants from the NSF. He has authored or co-authored numerous articles published in professional journals or made presentations during professional meetings across the country focused on teaching technological literacy for non-science students. Among other activities, he was the founding chair of the Technological Literacy Constituent Committee of the American Society for Engineering Education (ASEE).

Krupczak graduated from Williams College with a Bachelor of Science degree in physics in 1980, and from the University of Massachusetts with a Master of Science and a doctorate, both in engineering, in 1986 and 1994 respectively.

His scholarship has also included numerous publications and presentations concerning his research in low-temperature engineering. Prior to joining the Hope faculty, he was an engineer with the United States Department of Energy.

In January 2007 the college's Provost's Office presented him with the "Janet L. Andersen Excellence in Teaching Award," and in March 2007 the Division for the Natural and Applied Sciences at Hope awarded him its inaugural "Dean's Science Division Mentoring/Advising/Teaching Award."

In the fall of 2004 he represented the college as an exchange professor at Meiji Gakuin University in Tokyo, Japan. In addition to "Science and Technology of Everyday Life," his teaching at Hope also includes upper-level engineering courses such as "Fluid Mechanics" and "Introduction to Design."