Chemical Engineering Graduate Student Takes Second at Student Paper Conference

Recently chemical engineering graduate student, Casey Kick took second place for the “Best Student Paper” which he presented at the American Society for Engineering Education (ASEE) North Central Section (NCS) regional conference at Ohio State University. Casey’s student paper was titled, “Using AspenPlus Resources to Model Bio-diesel Production Applicable for a Senior Capstone Design Project.” There were a total of 27 peer reviewed student papers presented.

Also at the conference, Andrew Kline was elected to a two-year term, beginning in June 2013, as Chair of ASEE NCS, after having served as Vice-Chair since June 2011. Betsy Aller was re-appointed as the Campus Representative Coordinator for ASEE NCS.

Dr. Valerian Kwigizile of Civil and Construction Engineering Receives $268,560 MDOT Grant

Dr. Valerian Kwigizile joined the Civil and Construction Engineering faculty at WMU in August 2011. He teaches transportation engineering courses. His research interests include traffic safety, traffic enforcement, traffic operations and simulations, transportation planning and application of GIS in Civil Engineering. He has published more than 22 peer-reviewed research articles and is conducting research projects funded by the Michigan Department of Transportation (MDOT) and the Michigan State Police (MSP). He established and is maintaining the Transportation Research Laboratory. Dr. Kwigizile received his doctorate from the University of Nevada, Las Vegas, and is a registered Professional Engineer (PE).

The project title is “Evaluating Michigan Commercial Vehicle Enforcement Strategies and Facilities”, and the co-PI is Jun-Seok Oh also of Civil and Construction Engineering department.

The abstract of the project is as follows: over the past several decades, there has been significant growth in commercial vehicle traffic in Michigan. Nearly 70% of all of Michigan’s freight is shipped by truck and Michigan is ranked eighth in the USA in terms of the value of its exports with $50 billion per year.

Michigan maintains a number of fixed weigh stations used as primary locations for enforcing commercial vehicle laws. However, when fixed weigh stations are in operation, operators are quickly aware and may use alternative routes to bypass them. With the annual $1 million capital budget for upgrading and maintaining existing enforcement sites and for building new enforcement sites, Michigan Department of Transportation (MDOT) and Michigan State Police (MSP) need to determine the effectiveness of existing fixed weigh stations and the use of alternative technologies. Specific objectives of this research include:

(1) Quantifying the value of each fixed weigh station and selected virtual weigh stations (WWIM and safe enforcement site with a PIWTS); (2) Performing a life cycle analysis of each fixed weigh station versus converting it to a virtual weigh station. Include pros and cons for each strategy; (3) Evaluating the use of alternative technologies to replace and/or enhance existing fixed weigh stations; and (4) Evaluating the safety impacts of each enforcement strategy and perform a risk assessment in the event a weigh station is closed.

The recommendations resulting from this research are intended to serve as the necessary foundation to guide investment decisions in the infrastructure and facilities needed to efficiently and effectively provide commercial vehicle enforcement.

~ Valerian Kwigizile, Contributor
Zheng "Rachel" Wei, a graduate student from China earning a master's degree in paper and imaging science and engineering, has won the TAPPI PaperCon 2013 best student paper award. Technical Association of the Pulp and Paper Industry (TAPPI) is the largest global organization of pulp and paper industry professionals. Each year, the TAPPI Coating and Graphic Arts Division selects one student-authored-and-presented paper at PaperCon, the industry's largest annual meeting and exhibition, as the outstanding student paper.

Pictured right, L-R: Zheng "Rachel" Wei and Al Osgood, the Coating and Graphic Arts division chair.

Margaret Joyce Receives TAPPI Award

Dr. Margaret Joyce was the recipient of the Technical Association of the Pulp and Paper Industry (TAPPI) Coating and Graphic Arts Division and MWV Outstanding Educator Award at the recent PaperCon Innovation Generation trade fair. The honorarium is endowed by MeadWestvaco Corp.

Industrial Manufacturing Professors Win IEE Innovations in Curriculum Award

Dr. Tyco Fredericks, Dr. Azim Houshyar, and Dr. Robert White won the 2013 Institute for Industrial Engineers Innovations in curriculum and education competition for the development of curriculum for Industrial and Entrepreneurial Engineering.

L-R: Tyco Fredericks, Azim Houshyar, and Robert White

Margaret Joyce

Commencement June 29th at Miller Auditorium

Starting at 9 a.m., for more information visit:

Summer 2013 Commencement