

OhioENGINEER

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OHIO'S ENGINEERING SCHOOLS HIGHLIGHT VICTORIES



Education &
Technology

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University of Toledo bioengineers fly high with NASA

In April 2010 a team of bioengineering students from The University of Toledo traveled to NASA (Houston) to participate in the Microgravity University-Systems Engineering Educational Discovery (SEED) Program. The team, one of only 14 selected by NASA, was challenged to create a sharps container for use in a zero gravity environment. The container not only had to hold sharps (e.g., needles /scalpels), but also had to prevent liquids from escaping. The students tested their prototype in a modified Boeing 727 in order to experience zero gravity. Their prototype was successful and research on the container is ongoing.

Micro Air Vehicles at Wright State University

It's a bird! It's a plane! It's a Micro Air Vehicle! Students at Wright State University are working on cutting-edge technology called micro air vehicles (MAVs). Patterned after insects, MAVs are next-generation flying machines, which have a 6-15 cm wing span and



Jeremy Crank (bottom right) has a great view of Wright State's MAV landing into Jaderick Dawson's waiting hands. Behind them, Alex Feist pilots the MAV while Angela Griffith looks on.

weigh 3-12 grams. MAVs have both military and civilian applications and will be used for surveillance as well as search and rescue missions. Wright State has an Ohio Center of Excellence for MAV Research, and MAV teams receive extensive attention from the media and are invited to demonstrate their inventions world-

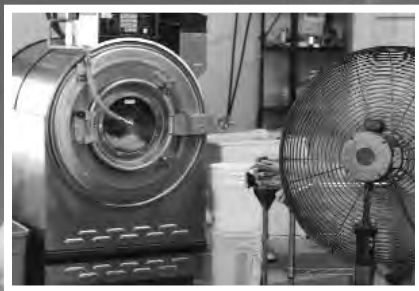
wide in places such as Japan and India.

Youngstown State University students produce marketable hydrochloric acid product out of a waste stream

Youngstown State University (YSU) chemical engineering students are working with Heritage-WTI in East Liverpool to produce a marketable hydrochloric acid product out of a waste stream. Peter Borovitcky and Kristina Davidson are using a 10-stage pilot continuous-feed distillation column to purify and concentrate a weak acid stream produced during the chemical incineration process employed by WTI. Laboratory results are then used to predict the performance of a full-scale system.

In other news at YSU, the School of Engineering Technology is developing a certificate program in sustainable design. The goal is to provide practicing professionals with strategies for implementation of sustainable design into site planning and design, building design and construction, and building operation and management practices.

Together We Can Clear the Air



CARC helps drycleaners and other small businesses improve Ohio's air quality and comply with environmental standards

The Clean Air Resource Center (CARC) can help your small business find solutions to air quality challenges.

CARC is an independent, non-regulatory one-stop shop that confidentially helps small Ohio businesses navigate the complexities of environmental mandates of federal and state agencies.

CARC also helps businesses utilize tax benefits for financing air quality improvement projects through bond financing available from the Ohio Air Quality Development Authority (OAQDA). For more information, contact CARC at 614-224-3383 or visit www.ohioairquality.org.



Ohio

**Air Quality
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Scholarships

Ohio's top engineering students awarded EFO scholarships

2010-2011 EFO New Scholarship Recipients

Cyril W. Neff, PE, PS,
Memorial Scholarship



Matthew Konderson,
Broadview Heights, OH
The Ohio State University

Peter Peterson Fund
– University of Toledo
Scholarship



Matthew Hankenhof,
Toledo, OH
The University of Toledo

OSPE Franklin County
Chapter Scholarship



Arathi Mani, Dublin, OH
The Ohio State University

Raymond H. Fuller, PE,
Memorial Scholarship



Lauren George, Mason, OH
The Ohio State University

Melvin Bauer, PE, PS –
OSPE, N. Central Chapter
– Memorial Scholarship



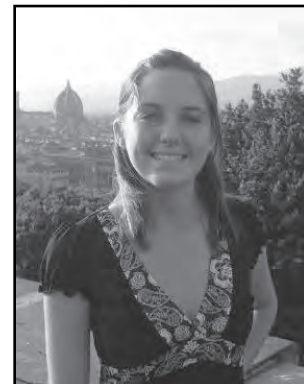
Jarred Napier, Mansfield, OH
Case Western Reserve University

Auxiliary to the Franklin
County Chapter of OSPE
Scholarship



Jordan Cripe, Mason, OH
The Ohio State University

EFO General Fund
Scholarship



Dezaeae Holman,
Cuyahoga Falls, OH
University of Akron

Auxiliary to the Franklin
County Chapter of OSPE
Scholarship



Michael Griscom,
Reynoldsburg, OH
The Ohio State University

"Thank you for awarding me the Cyril W. Neff, PE, PS, Memorial EFO Scholarship. With the aid of your scholarship, I am able to attend the University of Notre Dame to pursue a degree in computer engineering. It is comforting to know you have enough faith in my future success as an engineer to award me this generous financial contribution."

Michael O'Brien, 2009-2010 Recipient,
Cyril W. Neff, PE, PS, Memorial Scholarship

SCHOLARSHIP RENEWALS:

Kohli and Kaliher, Inc.–Ohio Northern University–Scholarship:
Katherine Miller

Cyril W. Neff, PE, PS, Memorial Scholarship: Brian Lane, Lindsie MacPherson & Michael O'Brien

Peter Peterson–University of Toledo Memorial Scholarship:
Gretchen Hartley, Zachary Reaver & Jonathan Sander

Systems Research Laboratories–Ohio University–Scholarship:
Robert Craig & John Linser