

# INGENUITY

## Chemical engineering conference honors

Chemical engineering students brought home team and individual honors at the American Institute of Chemical Engineers National Meeting, held October 31–November 4, 2005, in Cincinnati. While their competitors' entries exploded or burst into flames, the Chem-E-Car Team's entry placed 11th of 28 teams. Russ Farquhar, B.S.C.H.E. '06, took first place in the catalysis and environmental group for his poster "Hydrogen Production from the Electrooxidation of Ammonia Catalyzed by Carbon Fiber and Carbon Nanofiber Based Platinum." Chemical engineering senior Char Fields also took first place, in the environmental group, for her poster "Summertime Reactivity of Atmospheric Organic Species in Athens, Ohio."

## Mechanical engineering goes on the road

Mechanical engineering Ph.D. student Zahirul Hasan Khan was one of 77 students selected from about 300 to receive an \$850 travel grant to participate in a premier NSF poster competition, the 2006 NSF Design, Service, and Manufacturing Grantees and Research Conference, July 24–27, 2006, in St. Louis, MO, hosted by the University of Missouri-Rolla. The conference's theme was "Infotronics in Manufacturing and Services."

## 3, 2, 1 . . . liftoff

Five EECS senior design students won second place in the CanSat competition, held June 3 in Manassas, VA. The students designed a payload the size of a soda can using miniature GPS, processor, and telemetry hardware, and launched it 2,000 feet and measured the results. Adam Meyers, Jeff Friedlander, B.S.E.E. '06, Josh Kephart, B.S.E.E. '06, Matt Meyers, and Don Venable, B.S.E.E. '06 received \$1,500 total and a plaque for their design and documentation.



(L to R): Team CanSat: Associate Dean for Research and Graduate Studies Angie Bukley and students Adam Meyers, Matt Meyers, Jeff Friedlander, and Don Venable. Not pictured: Josh Kephart.

## Technology honor society named region's best

The Epsilon Pi Tau Lambda Chapter has been awarded the 2006 William E. Warner regional chapter award for the second consecutive year. The award is given for excellence in local chapter operation, including program activities, retention of membership, service projects, accuracy, and in promoting and achieving the ideals of Epsilon Pi Tau, the international honor society for professions in technology. The Lambda chapter, which received a certificate and an award of \$500, is now in its third year of reactivation.

## Student scholar builds big

Blake Andrews, B.S.C.E. '06, was selected as a Tau Beta Pi Fellow, an American Society of Civil Engineers (ASCE) Arthur S. Tuttle Scholar, and a Dwight D. Eisenhower Graduate Fellow. He will receive \$10,000 from Tau Beta Pi, \$2,000 from ASCE and \$62,300 from the Eisenhower Institute in Washington, D.C. Blake's undergraduate research and skill application includes participation in the Steel Bridge Competition, for which he helped



design, construct, and test a 25-foot-long steel bridge and the Big Beam Competition, for which he helped design, construct, analyze, and test a 20-foot-long pre-stressed concrete beam.

## Student's research earns him more than a lump of coal

Mechanical engineering graduate student Edward Achaab has been named a National Society of Black Engineers (NSBE) Board of Corporate Affiliates Scholar. Scholars are recognized for their academic achievements, as well as their dedicated service to NSBE and local campus community. The scholarship carries an award of \$3,000. Achaab works with the Ohio Coal Research Center, where he researches coal gasification and how to use the products of coal gasification (hydrogen and carbon monoxide) as a source of fuel.



## Flight team soars high at national competition

Ohio University's Flying Bobcats Flight Team placed 9th among 28 schools at the 2006 National Intercollegiate Flying Association's Safety and Flight Evaluation Conference, held May 8–13 at The Ohio State University. The Flying Bobcats out-competed Oklahoma State University, Florida Institute of Technology, University of Illinois, and Kent State University. This year, more than 80 university flight teams competed first at qualifying regional championships to receive a bid to compete at the national level. The 28 teams invited to the national competition were teams that ranked either first, second, or third in regional competitions.

## Computer science students on line for high rankings

Computer science students are ranked 34th in the world in online programming contests held by TopCoder, a company fast becoming the major player for programming competitions. It brings members together weekly to compete online in single round matches and twice a year for both online and on-location tournaments. The competition ranks both individuals and schools. At the 2005 Association for Computing Machinery East Central North America Regional Programming Contest, consisting of 13 teams drawn from 65 colleges and universities, Ohio University placed eighth. The team consisted of Chad Mourning, Slave Jovanovski, and Hiep Dinh.

## To infinity and beyond

For the past three summers, mechanical engineering senior Chris Dodson, B.S.M.E. '06 has been living out his dream—working for NASA—through the undergraduate student research program (USRP) at its Marshall Space Flight Center. In October 2005, Chris was one of nine USRP students chosen to represent NASA in Fukuoka, Japan, for the annual International Astronautical Congress. Chris presented a poster there about his research with the design, construction, and testing of an electromagnetic flow sensor to be used on an electric thruster feed system—"alpha<sup>2</sup>"—being developed by Princeton and NASA.



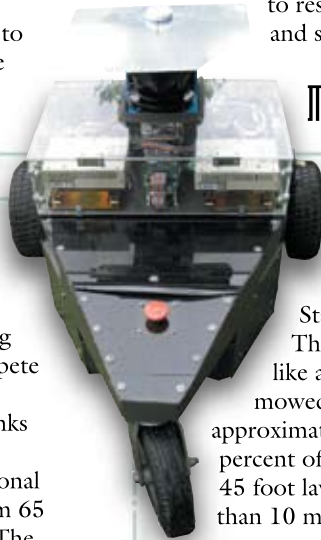
Mechanical engineering student Chris Dodson, B.S.M.E. '06, with his poster.

## Pilot's achievements take flight

Aviation senior Karrie Shank was honored with the 2006 Dr. Harold S. Wood scholarship from the General Aviation Manufacturers Association. The annual recipient of the \$1,000 award and an engraved propeller trophy must demonstrate academic excellence, promote aviation on and off campus, and actively participate in activities and community service outside of aviation. Shank is the safety officer of the Ohio University Flight Team, is an active member of the University's Women in Aviation International student chapter, and holds commercial and flight instructor certificates.

## Scholar plans to give back to schools

Computer science/Spanish junior Candice Montgomery has been named a McNair Scholar. The program traditionally aids first-generation, low-income, and/or minority students in obtaining admittance into graduate school and Ph.D. programs through involvement in research and other scholarly activities. The Russ College's first McNair Scholar, Montgomery plans to research technological differences between urban and suburban school districts.



## Mowing down the competition

Russ College students Dustin Bates, B.S.E.E. '04, Nirav Parikh, and Jidong Huang collected \$8,000 when they placed first for the third year in a row at the Third Annual Institute of Navigation Autonomous Lawn Mower Competition, held on the Wright State University Campus in Dayton on June 3. The team's mower, named Sherman after its tank-like appearance, mowed approximately 90 percent of the 30-by-45 foot lawn in less than 10 minutes.



(L to R): Russ Professor Frank Van Graas, the team's leader, with Jidong Huang, Nirav Parikh, Dustin Bates, and Sherman.

## Research and creative activity awards

Twenty-five Russ College students were among 110 Ohio University students to win awards at the 5th Annual Student Research and Creative Activity Fair in May 2006. More than 400 undergraduate, graduate, and medical students, as well as post-doctoral fellows, presented original work. Winners were:

- **Chemical and Biomolecular Engineering (Session 1)**  
1st: Viral Doshi; 2nd: Sudhir Deosarkar
- **Chemical and Biomolecular Engineering (Session 2)**  
1st (tie): Prithu Sundd and Egilda Bonnin; 2nd: Jiabin Han
- **Chemical and Biomolecular Engineering/Civil Engineering (Session 3)**  
1st: Xin Jin; 2nd: Regan Welch
- **Electrical Engineering and Computer Sciences (Graduate)**  
1st: Aleksey Imaev; 2nd: Yi Luo
- **Electrical Engineering and Computer Sciences (Undergraduate)**  
1st: Joshua Kephart, Jeff Friedlander, Don Venable, Matt Myers, and Adam Myers; 2nd: Mark Smearcheck, Joe Trick, Brian Kishpaugh
- **Industrial and Systems Engineering, and Industrial Technology**  
1st (tie): Arun Nambiar, M.S. '04, Khalilah Catchings-El, Sadie Roth, Jeff Arnold
- **Mechanical Engineering**  
1st: Christopher Gregg, Timothy Delashmutt, Mahesh Biradar 2nd: Mahmoud Shaltout