Ira A. Fulton School of Engineering
ARIZONA STATE UNIVERSITY

50 YEARS of ENGINEERING at ARIZONA STATE UNIVERSITY

Fall 2008

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

INTERSECTIONS

Friends of Civil Engineering (FOCE) give back to support profession and students

We have all said at one time or another that we need to put something back as we progress through our careers. Approximately seven years ago we formed FOCE (Friends of Civil Engineering) for exactly that purpose. It was our industry and academia coming together to insure that resources exist to help recruit, retain and graduate the future leaders of our industry.

Until I got involved with FOCE I had no idea to what extent the various schools within the university compete for the best and the brightest. The state procurement laws under which the university operates are very restrictive on how and for what you can spend money. To that end, the FOCE funds are discretionary and can be spent to support student activities that would not be allowed with state funds.

When we started FOCE, we formed a steering committee made up of a number of dedicated leaders from both academia and industry. This group has helped solicit industry participation and act in an advisory capacity to the Chair.

Above: CEE students and FOCE members attend the 2008 FOCE Mixer held at the University Club

Above: Tingting Gao receives door prize from Tom Schmitt at the 2008 FOCE Mixer

Over the last seven years the number of Friends has grown to over 40. Annually this generates discretionary funds of over $40K or nearly equal to a $1M endowment. These funds are used by the Chair to support students, student activities, seminars and a variety of other needs.

FOCE also helps bring academia, students, and industry together. The purpose of these events is to allow industry to meet the future leaders of our industry and allow the students an opportunity to discuss and plan their future.

We would like to thank the Friends and encourage those that are not members to please join. It's the right thing to do.

Tom Schmitt
Chairman, FOCE Steering Committee

Below: 2008 Concrete Canoe team is supported by FOCE members. (left to right) Rene Bermudez, Yuliana Armenta, Andrea Goldfarb, and Ivan Bermudez on race day at Castaic Lake Recreational Park near California State University Northridge, which hosted the competition.

Letter from the Chair

Paul Westerhoff, Ph.D., P.E.
Chair

Rome and Chichen Itza were not built in a day. These civilizations required leaders with vision. Italians and Mayans prospered for centuries because, in part, from their foresight and investments in civil infrastructure such as roads, bridges, buildings, water and sanitation systems that were built to sustain the health and wealth of society. Today, nations also recognize the importance of civil infrastructure in sustaining a prosperous society. Our students are excited by the new applications of materials, sensors, and bio-inspired processes that keep our profession on the cutting edge of science and technology and leaders in creating sustainable futures.

This issue of our biannual INTERSECTIONS newsletter focuses for the first time exclusively on how generous alumni and friends are supporting our vision and students. Many of you are already making a difference from the Friends of Civil Engineering (FOCE) who support numerous student activities, generous gifts from graduates for geotechnical laboratories, donations of time to teach the application of engineering, anonymous donors who recognize the need for safe and sustainable water resources, faculty who endow fellowships, to our own students who give back to communities around the world in programs like Engineers Without Borders. We hope this is just a beginning of the great service and experience we can provide to students.

To provide state-of-the-art programs to attract and retain the most enthusiastic and talented undergraduate and graduate students we are looking to expand our ability to support student associations & activities, undergraduate research opportunities, community outreach in Arizona and abroad, special seminars with invited speakers, local internships, improved freshman engagement with CEE and other exciting ideas. We are asking for your support of our department and ideas for continuously improving our program. (See back page.)

Why I Give Back

by Enamul Hoque

Enamul Hoque

My desire to give back to society stems from three different phases in my life including my family background, the environment in Bangladesh during the floods and famine of the 1960's and 1970's and finally the progression into my profession in the United States.

My family came from rural Bangladesh in which the society was generally agrarian and people were poor but cooperative while helping each other. I saw that my family and others were very attentive to helping their neighbors and those less fortunate. My father, a school teacher and local elected official and the only educated person within several villages, decided upon graduation from Calcutta University to return to his humble roots to help the poor in flood-ravaged areas of Bangladesh.

During my time in Dhaka, I participated in helping the slum dwellers by setting up a temporary school with the help of friends and colleagues. I travelled to rural and coastal areas, and slums of industrial areas such as Narayanganj to help build shelters or distribute clothing, food and medicine during a time when flood, cyclone and famine struck Bangladesh.

In December 2007 the geotechnical laboratory in the Department of Civil and Environmental Engineering at ASU was renamed the E.M. Hoque Geotechnical Laboratory to mark the $250,000 gift received from Enamul

While obtaining my education I received scholarships to attend college and university in both Bangladesh and a graduate degree at ASU and believe the scholarship money came from the citizens of those countries. Eventually I was able to establish a company of my own in the U.S. and decided to pay back my debt to society by donating to education which I believe brings out the best in our society.

$1.6M Endowment to address groundwater contamination

The Phoenix/Scottsdale Groundwater Contamination Endowment for Research on the Risks and Mitigation of Chemical Releases to the Environment, has recently been established. It is the intent that the research funds will be used to fund studies which focus on the links between pollutants occurrence in the environment, pollutant exposure, and community heath impacts, with a particular emphasis on issues relevant to the community involved in this case. In the near-term there is naturally an interest in studies related to groundwater contamination, for example:

- New methods for estimating residential exposures to pollutants found in the local environment (groundwater, indoor air, etc.), as these can be used to identify scenarios of concern before they happen.
- Developing a better understanding of the fate and longevity of pollutants in residential settings and in water distribution systems, to be better able to anticipate the durations and magnitudes of exposure to pollutants in the local environment and introduced to water distribution systems.
- New low-cost sensors to provide early warning of exposures to pollutants in residences, drinking water, and the local environment.
- New physiologically-based pharmacokinetic modeling to provide the link between exposures and observed health impacts.
- New methods that can provide cellular-level early warning detection of possible health impacts (i.e. well before they reach the tumor or organ failure stage).
- Bioinformatics studies that might lead to better identification of sensitive populations (that most likely to have the adverse impact after exposure) based on genetics.
- Technology that might be used to prevent or reduce the potential for unknown exposures to pollutants in the environment.

In the long-term it is expected that topics of interest may develop with the evolution of scientific knowledge and the identification of new contaminants and exposure scenarios of concern.

Equipment Donations from Dial Corporation

- Wescan Ion Analyzer
- AF8 Volumetric Karl Fischer Orion
- Hewlett Packard 5890 Series II Gas Chromatograph
- Tmi Digital/Crush Instron testing machines Inc.
- Microwave – Lab Wave 9000 from CEM Corp.
- HP Controller 7673A Autosampler

Alumnus provides support for future civil engineering students

Chris Kmetty, CEE alumnus Class of 1997 and his wife Sandra have established a planned gift to support undergraduate student clubs within the Civil and Environmental Engineering Department. When Chris and Sandra were making their estate plans, they decided that making a gift back to ASU was critical to ensuring a solid foundation for the students' experience. "The undergraduate student programs are a very effective way to experience real world engineering problems," says Kmetty. "The student led projects are an invaluable out-of-classroom experience that I personally benefitted from while a student and my wife and I felt were important to support through our estate."

Chris, who currently works for the City of Peoria as Senior Civil Engineer, has always felt it is important to support undergraduate students. "Both my father and I are graduates of the CEE department and continue to serve as advisors to the department through the Friends of Civil Engineering. This gift is just another way for my wife and me to show our commitment to the undergraduate experience at ASU."

Chris and Sandra are hoping that their gift might encourage other alumni to support the CEE department as a way to show their support and passion for their alma mater.

Sandra and Chris Kmetty with their son

Elyse and Paul Johnson Environmental Scholarship

This award was established by **Elyse** and **Paul Johnson**, Executive Dean in the Ira A. Fulton School of Engineering and Professor in the Department of Civil and Environmental Engineering to recognize undergraduate or graduate engineering students who strive for excellence in their education and in their research to develop tangible solutions to the environmental challenges facing Arizona.

Hong Luo receives 2007 Johnson Environmental Scholarship from Dr. Paul Johnson at the annual Celebration of Excellence ceremony.

PBS&J Foundation has donated a $5,000 scholarship to the Ira A. Fulton School of Engineering at ASU that will be awarded each year for three years ($15,000 total).

AT&T Inc. awarded Arizona State University (ASU) a $25,000 environmental research grant and designated ASU faculty members **Brad Allenby** and **Eric Williams** as AT&T Faculty Fellows in Industrial Ecology. The grant, which will support the research projects of Allenby and Williams, is one of only three grants awarded through the annual AT&T Industrial Ecology Faculty Fellowship Program.

The Arizona Section of the Society of Civil Engineers (AZSCE) has provided a generous endowment of $25,000 for undergraduate Civil and Environmental Engineering students at ASU.

Brooke Mayer and **Dan Gerrity, Ph.D.s** in Environmental Engineering, Class of 2007 and 2008 respectively in the Department of Civil and Environmental Engineering received three-year graduate fellowships from the Department of Homeland Security.

Tom Sands ('74) is contributing his time by helping educate water engineers as a visiting speaker in CEE 341.

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Ira A. Fulton School of Engineering
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GIVING BACK

Giving Back...

In celebration of the Ira A. Fulton School of Engineering's 50th Anniversary, we invite you to celebrate your alumni status and make a gift in support of the Department of Civil and Environmental Engineering.

Our alumni and friends have always been strong supporters of ASU. Your unrestricted gifts help create our future through scholarship and fellowship support, enhancing student experiences, retaining and attracting top faculty, and fueling innovative ideas that set us apart from the rest.

Now making your gift in support of the Ira A. Fulton School of Engineering and the Department of Civil and Environmental Engineering is even easier! We invite you to go online, make a gift and help us reach our goal of $25,000 in gifts from CEE undergraduate and graduate student alumni. Every gift matters - $50, $100 or $250 – so make your gift today!

We also want your ideas on how donations would most benefit the next generation of CEE Sundevils that will make them leaders in our field with clear visions for sustainable futures; email your ideas directly to me (p.westerhoff@asu.edu).

To make a gift:

Go online to www.asufoundation.org and click on the gold "ASU Invest" button. Then select Engineering, Ira A. Fulton School of and then select Civil and Environmental Engineering.

Alternatively, make your gift with a check made payable to the ASU Foundation to:

Ira A. Fulton School of Engineering
Development Office
Attn: Kendra Quandt
PO Box 879309
Tempe, AZ 85287-9309

To learn more about the Ira A. Fulton School of Engineering's efforts to address society's grand challenges, visit **www.fulton.asu.edu/video**.

Thank you for your time and support!

Please accept this gift in support of the Department of Civil and Environmental Engineering.

❑ $50 ❑ $100 ❑ $250 ❑ Other $ _____

Your gift may be considered a charitable contribution. Please consult your tax advisor regarding the deductibility of charitable contributions. All funds will be deposited with the ASU Foundation (30001463), a separate non-profit organization that exists to benefit ASU.

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❑ My check for the full amount, payable to ASU Foundation, is enclosed.

❑ My gift should be charged to my credit card.

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