

ALUMNI SPOTLIGHT

David Reynolds Receives Career Achievement Award



David Reynolds and his wife Stacy

David Reynolds (CE, 1989) returned to campus this spring along with three other successful alumni from the class of 1989 to receive a Career Achievement award. David is a Vice President with AECOM in Chicago, a huge international consulting firm. In addition to his position at AECOM, David is an adjunct professor at Illinois Institute of Technology.

David began his career with Eli Lilly as an environmental engineer, but has gone on to serve in many consulting and governmental positions. His specialty is in green design and development and is LEED certified. He was the Assistant Director of the Chicago Department of the Environment under Mayor Richard Daley when Chicago was vying to be the greenest city in America.

David was nominated for the prestigious award by Dr. Jim McKinney. He is certainly a very worthy recipient based on his contributions to our profession. While on campus, David made a presentation to our civil engineering students, faculty, and staff. His presentation was on nontraditional career paths and the role of sustainability in the future of engineering practice. Over 120 students attended the presentation. David did a terrific job of inspiring our students as they look ahead toward their own career options.

CE Enrollment and Placement

Civil Engineering undergraduate student enrollment is stabilizing at 160 to 180 students (about 40 to 45 per class). This has been a decade long trend; the class of 2000 only had 19 graduates from the civil engineering program. This year, 29 civil engineering majors will graduate from Rose-Hulman, the smallest group in four years and likely the smallest for the next four years. There are 42 rising seniors, 46 rising juniors, and 40 rising sophomores majoring in Civil Engineering. We expect over 40 freshmen to enroll in civil engineering this fall. Our ideal enrollment, based on our facilities and the number of faculty members, is 32 students per class. Currently we have no environmental engineering (EVE) graduate students, but one or two will be coming next year to work with Drs. Robinson and Niezgod.

Placement of senior civil engineering students is nearly complete. With graduation a few days away, all but six of our 29 seniors are considered placed (i.e., they have received at least one offer or are committed to graduate school or military service). There is a wide range of employers and locations represented in the offers and acceptances again this year. The average starting salaries are slightly lower than last year reflecting the poor state of the American economy. A very large number of prospective employers conducted on-campus interviews, and many more have made contact with our students through faculty members and alumni. Five of our students are looking to go on to graduate school (University of Houston, Portland State University, Worcester Polytechnic, Rose-Hulman, and the University of Delaware – interestingly in coastal engineering). A number of them are planning to begin graduate course work immediately or within a few years.

Chairman's Perspective

Dr. Robert J. Houghtalen

Dr. Martin J. Thomas, Professor of Environmental Engineering, is retiring after 34 years of loyal and dedicated service to Rose-Hulman. He has always been our most versatile professor, teaching 25 different classes while at Rose-Hulman. His classes have included everything from calculus and graphical communications in the freshmen year to aquatic environmental chemistry and, most recently, climate change at the senior/graduate level. His broad knowledge, masterful teaching, and dry wit will be missed by students and faculty alike. Dr. Thomas was instrumental in starting the Environmental Engineering graduate program. Therefore, a commemorative plaque acknowledging his contributions and service will adorn the wall of the the environmental engineering lab.

In addition, this is my last year at Rose-Hulman. I am taking an early retirement to return to the Sudan for humanitarian and spiritual reasons. I have been at Rose-Hulman for 21 years, the last eight years as the CE Department Head. Leaving Rose-Hulman is bitter-sweet. This environment is like no other; intelligent and hard-working students, dedicated and student-centered faculty, wonderful facilities, and servant leadership on display every day. I have thoroughly enjoyed the Rose-Hulman alumni and students that have made up such a big part of my life. I have gladly invested my time and talents with no regrets. I only hope that I have given back as much as I have received. So long my friends. If you would like to stay in touch, please email me at robert.houghtalen@gmail.com.

Dr. Kevin Sutterer will take over as Department Head this summer. Kevin is completing his 11th year at Rose-Hulman. Like Dr. Thomas, he is very versatile and has taught many classes outside his specialty in geotechnical engineering. He has been active nationally on three fronts, with the American Society of Engineering Educators (chair of the Civil Engineering Division which will require him to organize the CE portion of the national conference next year), the American Society of Civil Engineering (designing the CE curriculum for the 21st century), and the award winning ASCE student chapter at Rose-Hulman (faculty advisor for seven years which will host the regional conference next year). In addition, the student chapter has won the coveted Ridgway Award (best chapter in the nation) three times under his leadership. Dr. Sutterer is intelligent, personable, and hard-working. He is sure to take the department to a new level of excellence. Please email him at kevin.sutterer@rose-hulman.edu to congratulate him and offer him your support.

Thanks To Our Donors

Civil Engineering alumni, faculty and staff continue to be generous with their gifts to the Rose-Hulman. Those who have donated to the Institute and designated that their gift should go to the Civil Engineering Department include:

Robert Houghtalen

James McKinney

Kathy Nicoson

Bill Pine (1985)

Ric Powers (1974)

Keith Royer

Kevin Sutterer

Note: If we missed your name, email Kathy.Nicoson@Rose-Hulman.edu and we will include you in our next CE Echoes.

KEEP IN TOUCH

We are always interested in how our alumni are doing. Let us know about you! Keep in touch by e-mailing us at kathy.nicoson@rose-hulman.edu with your current contact information and what you are doing.

Houghtalens Sudan Bound

By Dale Long

A year-long humanitarian journey to serve and bless the people in the Republic of Sudan wasn't a life-changing experience for Robert and Judy Houghtalen. Rather, it was an experience that changed their perspective on life.

That's why the longtime Rose-Hulman civil engineering professor and his wife are leaving the comforts of life in the United States to spend the rest of their professional careers to help improve living conditions in Africa's largest country whose landscape is scattered with unpurified water, poor economic conditions and civil strife.



Robert and Judy Houghtalen

The Houghtalens will be returning in August to Sudan's capital city of Khartoum — Robert to work with humanitarian organizations or the University of Khartoum; Judy to lend her accounting skills to support human relief agencies. These are some of the same tasks that the couple undertook last year during an 11-month educational sabbatical to the country, which is split by the Nile River and contains war-torn Darfur.

"There's a lot of need there," admitted Robert during an interview in his Olin Hall office, where he has served as chair of Rose-Hulman's Department of Civil Engineering since 2001. "Judy and I kept asking ourselves 'How can we make a difference?' We have some basic skills that can help others. We had a test drive for a year. Now, we're ready for a longer trip. We hope we can give as much as we get from the experience."

Judy added: "A lot of people think that we're doing this because the Sudan needs us. Really, at this point in our lives, we recognize that we need the Sudan much more than they need us."

Last year, Robert Houghtalen applied his expertise in hydrology, environmental engineering, and point-of-use water treatment to educate residents of rural Sudanese villages on how to create bio-sand filters that provide clean water for family units. Over 25 percent of the country's people lack access to a pure water supply. The simple concrete filter purifies polluted water through biological and mechanical processes. Each filter costs approximately \$200 (covering equipment, labor and education) and can provide clean, safe drinking water for a compound of 20 people. Robert also conducted educational workshops on bio-sand filters, and one of his trainees has implemented more than 220 filters in the sugar cane region of eastern Sudan.

"Really, it's inspiring to see how one person, by educating another, can make a significant difference. Clean water is such a delicate resource in that region of the world. Each water filter has the opportunity to impact so many — young and old, men and women, city and village dwellers," says Robert, who also helped write fund-raising proposals to support the bio-sand filter program. The upcoming journey may have Houghtalen also assisting the Swedish-based International Aid Services humanitarian agency in designing and building small water supply reservoirs throughout the country.

The couple lived in a modest basement-level apartment on approximately \$18,000 a year. They will be looking for similar living arrangements as permanent residents.

"Living outside of your comfort zone changes your perspective, your values and what's important to you," admits Judy, former conference organizer for Rose-Hulman's Office of Institutional Research, Planning and Assessment. "You find that our way of living (in America), with all of our conveniences, drains the life out of you. Instead, you spend more time on interpersonal relationships — the way things used to be here."

The Houghtalens' humanitarian efforts were recognized at Rose-Hulman's Martin Luther King Jr. Leadership Awards Dinner. In nominating the couple, Diversity Council member Carey Treager Huber proclaimed, "I believe that (the Houghtalens') work and their commitment to improving the conditions for the people living in their impoverished areas of the Sudan resonate well with the leadership ideals of Dr. Martin Luther King Jr., who said 'An individual has not started living until he can rise above the narrow confines of his individualistic concerns to the broader concerns of all humanity.'"

Houghtalens Sudan Bound (cont.)

The service component of engineering has always been important to Robert Houghtalen, who helped oversee the civil engineering department's senior design course since 1988. In 2005, he helped bring the first international capstone project when the couple's son, Jesse (Civil Eng. '06), and three other students designed a battered women's shelter and soup kitchen complex in Trinidad (following a 2005 church-sponsored family trip). Other international projects have had students designing an agricultural training center in Ghana (2007), academic and athletic facilities for Nile Valley Academy in Sudan (2008), and a water supply system for a village in Pakistan and warehouse facilities for the Ghana Cocoa Board (2009).

"These projects should change students' world view and make them better engineers," stated Robert Houghtalen. "For me, my work in Sudan and Trinidad has put engineering in a new context. Now, I appreciate the service aspect of engineering."

If you would like to stay in touch with the Houghtalens, email Robert at Robert.houghtalen@gmail.com.

Civil Engineering Department News

- A senior project to design a LEED certified road maintenance facility was completed for Los Angeles County, and Carrie Wiley (Class of '05) was the client contact.
- A senior project to design a sustainable storm water management plan for the east side of Terre Haute was completed, and Larry Robbins (Class of '03), the Assistant Terre Haute City Engineer, was the client contact.
- A senior project to design a low-head dam with a canoe chute on the White River was completed for the Veolia Water Company and the City of Indianapolis, and Glen Morrow (Class of '91) was the client contact on behalf of Burgess and Niple.
- We completed our fourth and fifth international senior design projects this year, a cocoa warehouse facility in Ghana and a water supply pipeline in Pakistan.
- Three exchange students from Brazil spent most of the year at Rose-Hulman. They were in their fourth year of study (majoring in civil/environmental/architectural engineering), enrolled in our senior capstone design, and contributed greatly to the senior projects and the broadening of our students' world view.
- The freshmen design field trip was to St. Louis where we visited a lock and dam, a new section of Interstate 64, and a wastewater treatment plant. Kudos to David Maxwell (class of '91) from our CE Advisory Board for all of his assistance.
- Dr. Jim Hanson won the Outstanding Paper Award at the Illinois/Indiana Section Conference of the American Society for Engineering Education (ASEE). The paper is titled "Preliminary Results from Teaching Students How to Evaluate the Reasonableness of Results." This same paper won the zone award (the United States is divided into four zones) and is now in contention for the national award.
- Dr. Robert Houghtalen is the lead author on the textbook "Fundamentals of Hydraulic Engineering Systems, 4th Edition" (Pearson/Prentice Hall) due out this fall.
- Dr. John Aidoo will be moving to Pittsburg for the summer to work with a Rose student and Dr. Kent Harries of the University of Pittsburg on FRP composites.
- Dr. Sue Niezgodka is actively working in her area of expertise (stream restoration). She had a journal article and four conference papers published in the last year.
- Drs. Hanson and Sutterer each published two journal articles this past year.
- Drs. Aidoo, Hanson, Houghtalen, and Sutterer continue to publish papers on educational initiatives for the American Society for Engineering Education and Dr. Michael Robinson continues to publish articles on water quality modeling.
- Once again, all of our CE students sat for the FE exam this spring. Of course there is a big difference between sitting for the exam and passing the exam. Good luck!!
- Next years senior class will include 42 students, up from the 29 seniors graduating this year. Civil engineering enrollment is 160 to 180 students for all four years.

CE Award Winners 2008-2009

ASCE Alumni Award

Presented annually to an ASCE member who has made an outstanding contribution to the chapter. This award is made possible by the interest and dedication of the Civil Engineering Class of 1978, especially Matt Wiesenberg. His intention was to stimulate participation and activity in the ASCE Student Chapter. The criteria for the award includes the following: Active participation in the ASCE Student Chapter; Enthusiasm for Civil Engineering and Professionalism as exemplified by Mr. Wiesenberg.

Andrew J. Pinkstaff: Vincennes, Indiana - Moffatt & Nichol, Norfolk, Virginia

Shelton Hannig Award

Presented annually to the civil engineering student of senior standing judged by the faculty to be most outstanding on the basis of scholastic achievement, extracurricular activities, character, responsibility, attitude and practical problem-solving ability. This award has been established through the generosity of Muriel and Shelton Hannig, former President of Marsh, Inc., a leading civil engineering firm based in Terre Haute. It honors the Hannig's late son, Mark Shelton Hannig.

Jennifer M. Lyman: Irwin, Pennsylvania - seeking employment

Civil Engineering Faculty Award

Established in 1961 and funded by the civil engineering faculty, this award is given to a sophomore or junior civil engineering student on the basis of scholarship, student activities, citizenship, and enthusiasm for civil engineering. The award consists of a monetary award, and the recipient's name is engraved on a plaque in the Department of Civil Engineering.

Elias E. Tselentakis: Junior; Thessaloniki, Greece

Morris L. Cleverley Award

This award is presented in honor of Morris L. Cleverley, a 1962 Rose Polytechnic civil engineering graduate, who had a distinguished career as an engineer, contractor, businessman and entrepreneur. Cleverley, a faithful and loyal supporter of Rose-Hulman civil engineering, founded Morris L. Cleverley Engineering, a design and construction firm based in Syracuse, N.Y. The award is presented to a senior civil engineering student who best typifies the following qualities exemplified by Morris Cleverley: common sense and hard work, focused career objectives and perseverance, work ethic and employment record, scholastic achievement, motivation for a career in design/construction and commitment to the entrepreneurial spirit.

Avoree S. Gore: Paris, Illinois - Hannum, Wagle & Cline Engineering - Terre Haute

Edward A. Maclean Award

This award was established in 1964 in memory of Edward A. Maclean, Professor and Head of the Civil Engineering Department, Rose Polytechnic Institute, 1937-1962. This award is open to all Rose students. The recipient has completed his junior year at Rose; the recipient should have good grades in mechanics courses; the recipient should have an above the all-student average; the recipient has shown considerable improvement in both academic work and general attitude since he entered Rose; and the recipient is active in extracurricular activities.

Bernard B. Vannoy: Junior; Westminster, MD

J.B. Wilson Consulting Engineering Award

This award was established by Rose-Hulman alumnus J.B. Wilson, '27, and is awarded annually to a Rose-Hulman senior in the consulting engineering program. The recipient must have the highest grades in at least sixteen credit hours of the courses in that program completed by the end of the winter quarter of the senior year

Chelsea S. Abram: Bloomington, Indiana - Rose-Hulman Institute of Technology (EVE Graduate Program)

CE Award Winners 2008-2009 (cont.)

Star Student Award

The Department of Civil Engineering started the "Star Student" award in 2001 to recognize the graduating senior who is most likely to be a "difference maker" in the civil engineering profession. The student selected for this award is considered one of the best and brightest civil engineering graduates in the country in light of his or her collegiate accomplishments and Rose-Hulman's reputation. The selection criteria is based on the candidate's potential for success as indicated by scholastic achievement, leadership, communication skills, work experience, and professionalism.

Elizabeth J. Ridgway: Grosse Pointe Park, Michigan - Exxon Mobil, Fairfax, Virginia

ASCE Student Chapter Update

The spring of 2009 was another busy time for the Cecil T. Lobo ASCE Student Chapter. The final quarter of the school year has been highlighted by numerous community service activities, monthly meetings, and social activities. These events came together with great teamwork and extra effort put in by so many of our chapter members, proving once again how important ASCE is to all of us.

Recently, the chapter took a field trip to see the final construction phase of Union Hospital in Terre Haute. The 575,000 square foot expansion will be completed in the fall.

Chapter members have also spent time reaching out to our younger generation. The chapter gave a presentation to several groups of middle school students at our annual Youth Science Day. This event provided young students with the opportunity to learn and become interested in science and engineering. The ASCE Golf Tournament for Habitat for Humanity was held on May 23. Although we only had nine teams this year, we had a great turnout on hole sponsorships and donations. The final amount to be passed on to Habitat for Humanity was not known at the time of this printing, but we are confident we will be able to donate more than \$2,000 to that cause.

The chapter has been working especially hard preparing for the Great Lakes ASCE Student Conference, which is to be held at Rose-Hulman in the spring of 2010. The chapter has compiled lessons learned from attending this year's event at Notre Dame and our Conference Planning Committee is already discussing possible competitions and social activities to make Rose-Hulman a great host for the event.

The chapter is saying goodbye to two loved professors this spring: Drs. Houghtalen and Thomas. We would like to thank them for their involvement with ASCE and let them know that they are welcome to come back anytime to update us on their adventures in the coming years. They will be missed and we wish them luck in their future endeavors.

We would like to thank everyone who has been a part of the past year's accomplishments. We would also like to congratulate all of our seniors who have graduated and wish them luck as they move on to higher education or begin their professional careers!

Alumni Spotlight

Mark Federle (1985) took a new position in April 2008 as the McShane Chair in Construction Engineering and Management at Marquette University. He is responsible for starting what will become the 13th ABET-Accredited Construction Engineering program in the country. He, wife Michele and their three children relocated to New Berlin, Wisconsin (just outside of Milwaukee) just in time to experience 49.5 inches of snow in December of 2008!! Personal email is markfederle@gmail.com.

Trent Bennett (1987) Trent's wife (Christine Diana Bennett) passed away on May 17, 2009. Our sympathies go out to their entire family.

Lantz McElroy (1988) has left the Schneider Corporation after 15 years of employment. He is now working for the Ports of Indiana (POI) as an eventual replacement to head up the engineering department when the current head retires in the next few years. He will be engineering and maintaining facilities for three ports in Indiana (Burns Harbor, Mt. Vernon, and Jeffersonville). He will be doing road work, railway work, dock work, etc. Congratulations Lantz!

James Inge (1999) has accepted a position as a Water Resources Engineer with AMEC Earth and Environmental in Louisville, KY.

Joel Anderson (2007) is a structural engineer with HDR in Phoenix. He plans to spend his summer vacation in rural Ecuador on the second phase of a water treatment project with Engineers Without Borders. Engineers Without Borders is an international non-profit humanitarian organization established to help developing communities worldwide to improve their quality of life. This will be his second trip for the organization. His journey with the group began when he helped develop and construct an agricultural training center in Ghana. He made it his senior design project for his bachelor's degree and became interested in the organization.

Matthew Childs (2007) is currently at Fort Lewis, Washington near Seattle working as a Combat Engineer Platoon Leader in a Stryker Brigade. He is in charge of 32 soldiers training in the fields of demolitions, topography, Army battle drills with the primary mission of route clearance. Route Clearance is the primary mission of most Combat Engineer units which entails traveling the major routes in search of enemy IED threats. Essentially, they try to find the bombs and bad guys by either visually spotting them or getting blown up. Stay safe Matt!

Jake Wagle (2007) has returned to Terre Haute to re-join the Garmong Construction Services team. For the past two years, he has been employed by Hunt Construction Group in Chapel Hill, North Carolina as an Assistant Project Engineer. He is an active member of the American Society of Civil Engineers and a member of the Saint Joseph's University Parish Catholic Church. Jake is also an Alpha Tau Omega Fraternity Alumnus.

Mark Your Calendar

September 26, 2009 (Saturday) — Homecoming Reception for Civil Alumni hosted by the CE Department

December 2, 2009 (Wednesday) — CE Board of Advisors Meeting (Tentative Date)