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Civil Engineering Department
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CIVIL ECHOES

ROSE-HULMAN INSTITUTE OF TECHNOLOGY

John J. Lueken, P.E.—2007 Rose-Hulman Career Achievement Award Winner

John J. Lueken, PE, was selected as a 2007 Rose-Hulman Career Achievement Award Winner. John, a 1987 RHIT Civil Engineering graduate, has had a colorful and varied professional career. Starting with his duties as the RHIT ASCE Student Chapter Moment Editor, through his initial job as a graduate engineer with MasterBrand Cabinets: Aristokraft, to his present duties as Director of Construction for McDonalds USA, John has demonstrated professional excellence. In his current position John is responsible for construction support and development for over 13,000 US locations. Along the way John has received the McDonalds President's Award, earned a Masters of Project Management from the Keller Graduate School of Business, became registered as a Professional Engineer in Indiana, Arizona, and Nevada, as well as receiving the RHIT ASCE Alumni Award.



John has three children, all of different ages, but born on the same day - December 5. Among his many interests, John spends his free time “pulling G’s” by flying WW II fighter aircraft.

During his time on campus John spoke to all members of the Civil Engineering Department. John proved to be an ideal person to provide the RHIT Civil Engineering students with a look at a professional Civil Engineering career that would serve as a role model worthy of emulation.

Civil Engineering Department News

- A senior project requiring the design of a signature bridge across the Wabash River was performed for the Wabash River Development and Recreational Committee, and Pat Goodwin (Class of 1995) is a member of the committee.
- A presentation of this project was made to the community, city/county officials, and newspaper reporters. A front page article appeared the next day in the Tribune Star.
- The freshmen design field trip was to Indianapolis where we visited the new airport, the new Colts stadium, the super 70 project, and a constructed wetlands. Kudos to Joel Ericson (class of '02), Drew Furry (class of '04), Robert Fuller (class of '88), and John Stolz from our CE Advisory Board for their assistance.
- One senior group designed a low impact subdivision for Josh Reed (class of 2003).
- We completed our second international senior design project this year, an agricultural education center in Obodan, Ghana. Another project was a social sciences building for Yale University in New Haven, Connecticut (Robert Fuller, class of 1988).
- Dr. Aidoo will present a paper at the national Capstone Design Conference meeting in Boulder, Colorado on international senior design projects. Co-authors include Drs. Hanson, Houghtalen, Sutterer, and Dr. Mark Adom-Asamoah from Kwame Nkrumah University of Science and Technology in Ghana.
- 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!!
- The 48 senior CE's in the May 2007 graduating class represents the second largest major; only mechanical engineering has more Rose-Hulman graduates this year.
- Drs. Hanson and Sutterer will visit five CE alumni in Honolulu in June. They are from the post World War II era, and all are very accomplished. The alumni include Don Shimazu, Shinji Soneda, Fujio (Fudge) Matsuda, John Loomis, and Al Yee.

REFLECTIONS—CECIL T. LOBO

By Dr. Robert J. Houghtalen



Cecil T. Lobo taught at Rose-Hulman from 1964 until his untimely death in May 1997. We thought it might be nice to write a tribute to him on the 10th anniversary of his passing since he meant so much to our alumni over the last five decades. After his funeral, I wrote the following reflections on Cecil that I would like to share with you.

I am writing to you with a heavy heart. I have just come from the funeral service of my colleague and friend, Cecil T. Lobo.

I was reflecting on what the priest said at the funeral service. He said that there is no room for prolonged sorrow when a Christian passes on to be with his Lord. I agree with that. However my heart still aches. I do feel sorrow.

I feel sorry for his wife and children. Cecil was a loving husband and father. They will have to adjust to a new life without him. That will not be easy.

I feel sorry for the civil engineering students at Rose-Hulman. They will no longer receive knowledge from a wise and caring professor. That is unfortunate.

I feel sorry for the faculty and staff at Rose-Hulman. Cecil was more than a colleague. He was a kind and gentle man, the consummate professional. We will find someone to teach structures and soil mechanics, but we will never replace Cecil. This is our loss.

But most of all, I feel sorry for myself. I am selfish. I want him in his office so I can drop by to visit him. I want to share with him the milestones in my family life. (He always asked.) I want to laugh with him about his disheveled office. (He saved everything. "Cecil, I'm looking for the minutes of the faculty meeting held on January 17th, 1968. Do you have them?") I want to talk with him about the joys of teaching, and the tedium of grading. (He was always willing to talk about teaching.) And, I want to be the recipient of his sage advice. (Wisdom is knowledge rightly used, and Cecil had a lot to share.)

Yes, I do feel sorrow. It will pass. But in the mean time, the sorrow reminds me of how special he was to me. Goodbye Cecil.

Thanks To Our Donors

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

Joe & Sue Denney (1958)

Marc E. Neihaus (1993)

Steven D. Swanson (1986)

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

Mark Your Calendar

September 29, 2007—Homecoming Reception for Civil Alumni hosted by the CE Department

November 28, 2007—CE Board of Advisors Meeting

Chairman's Perspective

We are coming to a close of another academic year, and there are a lot of great things to report. For example, the Civil Engineering "Class of 2007" is the largest ever to have graduated at Rose-Hulman (or Rose Poly). We had one student graduate in February, 48 more students in May (this month), and another student who is likely to be a November completion making a class of 50 students. A prominent feature of the Civil Engineering curriculum continues to be our client-based, senior design course. One of our senior design teams won the ASCE Presentation Competition at the Indiana Section meeting (for the 12th time in 14 years), another group won the poster competition at the American Society for Engineering Education meeting (Indiana-Illinois section), and a third team came in 3rd in a national Federal Aviation Administration Airport Design Competition (environmental division). In addition, we completed our second international senior design project, an agricultural education center in Ghana. Dr. John Aiddoo is accompanying the entire student team to Ghana in late May to deliver the report and an oral presentation to the client.

The Civil Engineering Department and its faculty were the recipient of some nice achievements this year. U.S. News and World Report once again ranked our CE program as the top undergraduate program in the United States for those schools that do not offer the PhD (Fall 2006 rankings). This is the seventh year in a row that we have achieved the top ranking. In addition, Dr. James Hanson received the 2006 Ferdinand P. Beer and E. Russell Johnston, Jr. Outstanding New Mechanics Educator Award at the American Society of Engineering Education's annual conference. He also wrote an article for **Structure** magazine entitled "Quick Methods for Finding Errors in Structural Analysis and Design Results," which has a circulation of over 32,000 engineers worldwide. And finally, Dr. Michael Robinson was the lead author of the February 2007 cover story in **CE News** magazine ("Dangerous Designs, Improving Safety at Low-Head Dams"), which has a circulation of 50,000. Cole Marr, a 2006 Rose graduate, was a co-author on the article.

In other news, we are very hopeful that we will be fully accredited for another six years based on a visit last October from our accrediting agency, ABET Inc. In addition, our student chapter of ASCE received terrific recognition once again, being named one of the top six chapters in the nation (after two straight years as the top chapter in the nation). Finally, we are excited to welcome a new faculty member next year, Dr. Sue Niezgodka, who is coming to us from the University of Wyoming to help with our growing enrollments. Her expertise is in the environmental-water resources area, and she will be teaching my classes next year. I am going to be on sabbatical leave to revise my 1996 hydraulics textbook and work with rural water supplies in the Sudan.

Civil Engineering Graduate Placement

The demand for civil engineering graduates was extremely strong this year. All of our seniors are considered placed (i.e., they have received at least one offer or are committed to graduate school or military service). Most of our graduates had three or more offers to consider, and there was a wide range of employers and work locations represented. The average starting salaries are up about 10% this year (\$52K+) reflecting high market demand and specific demand for Rose graduates. 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 (200+ companies for 50 graduates). With the strong economy, many employers missed out on hiring our graduates for permanent positions. Therefore, many employers are using summer internships as a way of recruiting for next year.

The breadth of opportunities continues to expand for our graduates. Almost 70% of our graduates are taking jobs outside of Indiana, particularly in the Sun Belt. Employers continue to diversify as well. Two of our graduates are going to work for oil companies, one for a large chemical company, one for a mining company, a number for specialty consulting firms in large cities, many for international consulting firms, and one with Indiana's leading entrepreneurial companies as a Governor Bob Orr Entrepreneurial Fellow (CE graduate Yaw Aning, one of 13 fellows competing against hundreds of applicants). In addition, it is very encouraging to see our graduates in demand by some of America's elite graduate schools. Six of our graduates are heading to graduate school, and the list includes: Cornell, the University of Pennsylvania, Notre Dame, the University of Southern California or New York University (dental school), the University of California at Berkeley, and Illinois Institute of Technology. Two alumni from the class of 2001 and 2002 have just received their PhDs from Vanderbilt University.

Faculty Spotlight—Dr. Michael A. Robinson

Education: BS—Chemical Engineering—West Virginia Institute of Technology
MS—Environmental Engineering—Virginia Tech
PhD—Civil Engineering—Virginia Tech

Starting Date at Rose: August 2002

Family: Wife—Ruby and daughters Casey (age 4) and Kendall (age 2), and Jake and the cats (family pets)

Hobbies: Daddy to Casey and Kendall, working in the yard (if I was good at it I'd call it landscaping)

Specialty Courses: Contaminant Transport Modeling, Environmental Chemistry, Environmental Management

Recent Professional Development Activity: Paper/presentation 2006 IWAE Annual Conference “Theory of Anaerobic Digesters”; CE News (Cover) Article—February 2007 “Dangerous Designs—Improving Safety at Low-head Dams”

Chairman Appreciation Comment: “Even though Michael’s expertise is in the environmental area, he has done a great job teaching our students to become GIS savvy. This was one of our big weaknesses as a department when he came five years ago.”

As previously mentioned, Dr. Michael Robinson was the lead author of the February 2007 cover story in CE News magazine. The title of the article was “Dangerous Designs, Improving Safety at Low-Head Dams”, and the article generated many letters to the editor the following month. One of the most interesting responses to the article is given below.

Michael,

I enjoyed your article on dangerous dams as it brought some interesting memories back from my childhood. I was in my early teens and swimming with a friend in central Kansas. We decided it would be pretty cool to fake a fight while walking along the top of the dam and to simply jump over the edge of the 4 - 5 foot drop to the downstream side of the dam. We were obviously trying to impress some one at the time. Well I slipped on the moss covered surface and fell in the water directly at the base of the dam. I was a very strong swimmer and had very little concern on the way down. After the splash though I struggled mightily and was repeatedly sucked back into the base of the dam. I was very panicked at the time and for some reason, whether it was the hand of God or simply some other miracle, through no coherent thought process of my own, I suddenly quit struggling and the water just "flushed" me out of the problem area and all was well. I have always had some inkling as to what forces were at work in this experience and now have a very good understanding after reading your very informative article. Thanks for your good works on a rarely discussed problem.

Karl Visser, Clark Dietz, Inc. - Engineers

ASCE Student Chapter News

The Cecil T. Lobo student chapter of ASCE has been hard at work once again in the spring of 2007. With the advancement of civil engineering, community service, and student involvement at the pinnacle of our chapter’s goals, the many individuals of our student chapter and supporting cast of faculty and staff have stepped up when needed most. Teamwork defines what ASCE at Rose-Hulman is all about!

After two years of being honored with the Robert Ridgeway Award, the student chapter was named a finalist for the award this year. The recognition our chapter receives from this award is a testament to both past and present ASCE members who have given up their leisure time in the pursuit of a better civil engineering profession.

Community service has always been a focal point of our chapter, and these past few months have provided many opportunities for the students to give back to the public. On May 12th, the chapter hosted its annual golf tournament and raised nearly \$3000 for Habitat for Humanity. The field of entrants was blessed with great weather and all those in attendance had a wonderful time. In addition to the tournament, the students put their technical and physical skills to the test with the design and construction of a wooden wheelchair ramp for an elderly citizen of Terre Haute and a small press box for the Riley Youth Baseball League. The students have a feeling of satisfaction when serving others, but the camaraderie felt among the chapter makes it a win-win situation.

A final activity of the chapter worthy of notification was a baseball game attended with the Younger Members group of the Metro Indy Branch. The relaxed environment of the game made it easy for the young professionals and students to get to know one another. With the approval of the Younger Members, our chapter hopes to make this activity an annual event for years to come.

While classes are out and a break seems close, many of our students are just a week away from challenging internships, research opportunities, and study abroad programs. We are all looking forward to applying the knowledge we gain this summer to close out another great year for the Cecil T. Lobo student chapter this fall.

Alumni Spotlight

JEFFREY MUELLER (1976) has been appointed as manager of business development for Foundation Coal Holdings. He will focus on implementation of overall business development initiatives. Foundation Coal Holdings is a coal producer with 14 mines and corporate offices in Linthicum Heights, Maryland.

RANDY R. MOSELE (1979) relocated back to Indiana in 2005 and currently owns two small businesses in the Metro Louisville area: Triple Crown Logistics, Inc. which provides Third-Party Logistics services to the commercial explosives industry and Aris Associates, a division of Triple Crown Logistics, Inc., which provides management advice to small and medium-sized privately held businesses.

JOHN LUEKEN (1987) and his wife report the birth of their 3rd child, a daughter who joins two older brothers. All three children have the same birthday... December 5th.

GLEN MORROW (1991) started a new job around April 9th at the consulting engineering firm of Burgess and Niple located in Indianapolis. He had been with the City of Greencastle for 6 ½ years.

ROB COOP (1993) has been elected to the National Board of Directors for Alpha Phi Omega as the Region VI director. APO is a national service fraternity with 372 chapters across the country, including the chapter at Rose-Hulman.

MICHAEL WALDBIESER (1993) and his wife Doreen announce the birth of a son, Martin Michael born on May 20, 2006. He joins his sisters Amanda and Karen. Congratulations to the Waldbieser family.

MARK YOUNG (1994) joined the Vecellio Group in West Palm Beach, Florida, where he will manage \$350 million in construction contracts and optimize construction change order collections.

JERRY MILLIMAN (1997) reports he is married with a two year old daughter. He is teaching at the US Air Force Academy.

CHAD MILLS (1998) and his wife, Joellen, welcomed their second daughter, Abby Elizabeth, born last year.

TERRA BARANOWSKI (2001) successfully defended her dissertation on March 29, 2007 at Vanderbilt. Congratulations Dr. Baranowski!

CHRISTOPHER BAUER (2001) and Christa Lau (now Bauer) were joined in marriage in Sarasota, FL on April 7, 2007. They reside in Sarasota FL.

JOEL ERICSON (2002) passed the PE exam in October 2006.

ROBERT F. GURATZSCH (2002) successfully defended his Ph.D. dissertation in January 2007 at Vanderbilt. The title of his research was "Sensor Placement Optimization under Uncertainty for Structural Health Monitoring Systems of Hot Aerospace Structures." He moved to Rio de Janeiro, Brazil and married his fiancé, Joana, on February 24, 2007. A few Rose-Hulman alumni that were able to attend were his best man Josh Hudson, and groomsmen Jaret Gaither and LaMarr Taylor. Michael Phillips was also present. Congratulations Dr. Guratzsch!

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.

Alumni Spotlight (Cont.)

FIONA (HAULTER) KING (2002) and her husband have moved to Nashville, TN. She is working for Gresham, Smith and Partners as their infrastructure marketing specialist.

PATRICK ALLEN (2003) is working with a startup in San Francisco after finishing two years in Honduras with The Peace Corps. Most of his work is project management and geotechnical engineering. We wish him good luck as he participates in the San Francisco Marathon this July.

AMY HAYMAKER (2003) passed the California PE exam in October 2006.

SARAH (BIRELEY) FURRY (2004) AND DREW FURRY (2004) would like to announce the birth of their son, Lincoln John Furry. Lincoln arrived on May 12th and weighed 6 lbs. 8 oz. and 19 3/4" long. He's doing great and very healthy (so is Mom). Congratulations to the Furry family!

MATT HORNE (2004) passed the National 8-hour PE Exam and the California Engineering Survey Exam.

TY GREMEAUX (2005) has been named an "Analyst of the Year" for 2006 with Kimley Horn. Only nine of these awards were given to engineering analysts (young engineering professionals in the firm who have yet to achieve professional licensure) across the nation in a firm with 2300 employees. Congratulations Ty!

CORY HOWELL (2005) has been named an "Analyst of the Year" for 2006 with Kimley Horn. Only nine of these awards were given to engineering analysts (young engineering professionals in the firm who have yet to achieve professional licensure) across the nation in a firm with 2300 employees. Congratulations Cory!

SHAWN SMITH (2005) has relocated with Kimley-Horn to Boston, MA to help open a new office in Quincy. The anchor project is a 1500 acre Naval Air Station redevelopment project planned to have 3,000 residential units, 1-2 million square feet of retail, and its own town charter, a very unique item for the northeast.

CE Award Winners 2006-2007

ASCE Alumni Award

Michael H. Krantz—Class of 2008 from Hanover, IN

Civil Engineering Faculty Award

Jeremy S. Burch—Class of 2008 from Bedford, IN

Indiana Section ASCE Outstanding Student Award

Derek W. Davidson—Class of 2007 from Bridgeport, IL

Matthew A. Trowbridge—Class of 2008 from Ft. Collins, CO

Morris L. Cleverley Award

Nicole A. Sanders—Class of 2007 from Montezuma, IN

Shelton Hannig Award

Joel Anderson—Class of 2007 from Fishers, IN

CE Department "Star Student" Award

Ryan A. Robinson—Class of 2007 from Danville, IN

Edward A. Maclean Award

Adam M. Knaack—Class of 2007 from McHenry, IL

J. Ben Wilson Consulting Engineering Award

Jacob B. Wagle—Class of 2007 from Terre Haute, IN