

A Year in the Sudan By Robert J. Houghtalen

In the past, many Rose-Hulman faculty sabbaticals were spent at another American university doing teaching or research. Another common destination was American industry. On all occasions, faculty members sought to bring something back to the classroom or laboratory that would benefit our students. So how does a year working for a Sudanese humanitarian organization achieve this same goal?

First let me describe the destination of my sabbatical. Sudan is in northeast Africa and is like two countries in one. The northern part of the country resembles a Middle Eastern nation, and the southern portion resembles sub-Saharan Africa. Living in the capital of Khartoum (10+ million population) allowed me to sample both cultures, return to the classroom to learn some Arabic, and obtain a better understanding of Islam. I also spent some time in both Kenya (during their election conflict/civil unrest) and Egypt.



Bio Sand Filter Construction

As the world flattens (according to the terminology of Thomas Friedman), our graduates will be working with engineers from other nations, and soon may be competing with them for jobs. Our graduates are already beginning to work for American companies that have a strong international presence, and many will spend a portion of their career in foreign countries. In preparation for this, the Civil Engineering Department has sponsored international senior design projects for the last three years (Trinidad, Ghana, and Sudan). Some students are spending a summer or year abroad. Our own Dr. Aidoo, who grew up in Ghana, has helped broaden our students' perspective. The professional development of our faculty continues to take on an international flavor (Fulbright fellowships for Drs. Jones and myself; an Australian education tour by Dr. Sutterer). International sabbaticals are merely an extension of the activities that are already taking place in the department.

Next, let me discuss the work that I performed in Sudan. Humanitarian work is not alien to engineers; witness the rapid growth of "Engineers without Borders" and similar organizations. I was fortunate to be able to work on a bio-sand, water filter program. These water filters are made from concrete and are for home or public building use. They were designed by a Canadian organization. Many universities have tested the treatment effectiveness. They have been adopted as an acceptable world standard in the use of "appropriate technology" and "sustainable design." These two concepts are increasingly common in engineering circles and certainly something I can share with my students.

Finally, I spent a portion of my time updating and drafting the 4th Edition of the textbook entitled "Fundamentals of Hydraulic Engineering Systems." I thoroughly enjoy working on textbooks that will help students understand difficult concepts. I hope that this new edition will be completed by the end of the year and be published early next year.

Apart from the humanitarian and textbook work, I had personal and spiritual motivations for my sabbatical. I hope to give a number of presentations on my sabbatical at Rose-Hulman and ASCE venues (i.e., student chapter, metro branch, and Indiana Section).

Chairman's Perspective by Robert J. Houghtalen

The summer is over and the 2008-09 academic year has begun. My sabbatical in the Sudan ended in July, and it is nice to be back in America and at Rose-Hulman. (There is a short article about my sabbatical in this newsletter.) The first thing I would like to do is thank Dr. McKinney and the rest of the civil engineering faculty for their excellent work and accomplishments in my absence. Dr. Jim McKinney agreed to act as interim department head for the year. Most of you are aware that he served as department head for 19 years from 1983-2001, so this made his tenure in that post an even 20 years. However, he says that this is "**THE LAST TIME**," and I really think he means it.

By all accounts, the year was a grand success. Last fall, US News and World Report once again rated Rose-Hulman the top undergraduate engineering school in the country (9th year in a row), and the civil engineering program was rated on top for the 8th straight year. This is really a tribute to our great students who are in demand by employers and graduate schools nationwide. The large class of 2008 is now placed, and the variety of jobs, locations, and graduate schools continues to support the school's high ranking.

In other happenings, Drs. Jim Hanson and Michael Robinson received tenure. They are fine educators who are committed to the success of our students and our Institute. Congratulations are in order the next time you see or email them. In addition, Dr. John Aidoo had an excellent third year review by the Institute's Promotion and Tenure Committee, and Dr. Sue Niezgodka completed a very successful first year. Dr. Sutterer is heading up Operation Catapult to give Dr. Patsy Bracken a one year break from this formidable task. Also, Dr. Thomas announced his retirement to be effective at the end of this academic year. His last year will be his 34th at Rose-Hulman. We will miss his versatility, his dry wit, and his intellect, as will future students in our program.

But the crowning achievement for the year was the receipt by our ASCE student chapter of the Ridgway award signifying that it is the nation's best. What makes this even more special is that this is the third time our students have received the award in the last four years and fourth time in the last 10 years. With all of the accomplishments from the year gone by, it is a wonder that the department wants me back at all!

Finally, I want to extend a heartfelt invitation to you and your family to join us in the 2008 homecoming festivities. Homecoming will be held on October 3-4, 2008. Of particular interest to us is being able to see you at the department open house on Saturday from 11 am until 1 pm. We will supply the lunch, you supply the conversation. If you are coming to Homecoming please RSVP to Kathy (Kathy.Nicoson@rose-hulman.edu) for planning purposes. One of the greatest joys of teaching is to hear about your career accomplishments and to catch up with you on your personal lives.

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:

Brennan D. Banion (1974)

Kevin H. Forbes (1985)

Jason A. Gregor (1996)

John J. Lueken (1987)

Cole A. Marr (2006)

Shinji Soneda (1949)

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

Scholarship Recipients

American Structurepoint Scholarships:

Derik Doughty
Jeana Eviston
Jason Kimmel
Navjot Lakhan
Jonathan Oakley

Jim Diehl Memorial Scholarship:

Daniel Clapp
Jonathan Korff
Justin Perry
Caleb Ross
Zach Smith

Hannig Scholarships:

Chelsea Abram
Nick Corkill
Avoree Gore
Jennifer Lyman
Liz Ridgway
Bryan Ruiz

Hannum, Wagle, & Cline Scholarship:

Anthony Celebucki

Lobo Scholarships:

Katrina Mader
Sebastian Mendes
Andrew Pinkstaff

We would like to thank all of the scholarship sponsors. The student recipients are high achievers, and you have helped them to realize their lofty goals.

EM 103 Introduction to Design Projects

Project: Dobbs Park ADA Accessible Trails, Terre Haute
Client: Pat Martin, Terre Haute City Engineer's Office

Project: Dobbs Park Wetland Dam Restoration, Terre Haute
Client: Carissa Lovett, Terre Haute Parts Department

Project: Historic Home Relocation and Restoration, Vigo County, Indiana
Client: Tom Kleckner (owner)

Project: Purdue Sullivan County Extension Office Design, Sullivan, IN
Client: Lori Ballslaugh, Sullivan County Purdue Extension

Project: Scott Pet Products, Rockville, IN
Client: Tracey Lyons, Scott Pet Products

Project: Shelburne First Baptist Church, Shelburne, IN
Client: Mike Fry, Fry Excavating Co.

Project: Clay County Intersection Redesign, Clay County
Client: Aron Royer

Project: Private Roadway Redesign, Vigo County, IN
Client: Shannon Sexton, RHIT IRPA office

Project: Clinton, Indiana Streets, Clinton, IN
Client: Eric Smith, Hannum Wagle and Cline

Project: Green Design of Single Family Residence
Client: Donna Adams

ASCE Student Chapter News By President Andrew Pinkstaff

The Cecil T. Lobo ASCE Student Chapter returns to school after a very rewarding Spring and Summer. Members of the student chapter were able to complete many beneficial activities before the end of school last year. The continued involvement of students and support of the faculty has enabled us to take part in these activities.

On May 10th, the student chapter hosted its annual Habitat for Humanity Golf Tournament. Students, faculty, alumni, and other supporters of the cause joined in for a friendly round of golf at Rea Park here in Terre Haute. The event was highly successful, and enjoyment and camaraderie was had by all. The chapter will be pleased to make a \$2,000 donation to Habitat for Humanity on Monday, September 15th.

Another event that we continued for a second year is our Indianapolis Indians game social outing. On May 13th, 11 students made the short trip to Indianapolis to enjoy a minor league baseball game with a few Rose-Hulman alums in the Indianapolis area. This event has been highly successful in connecting current students with students of the past, and we hope to continue holding this outing year after year.

Aside from activities, our chapter's success was graciously rewarded by ASCE Nationals. For the third time in the past four years, our chapter was selected as the Robert Ridgway Award winner. This award is given to the nation's best student chapter, based on outstanding community service, professional activities, campus service, and chapter performance reports. We are humbly honored to be recognized in this breadth once again.

Another noteworthy award received by the chapter was an honorable mention for the inaugural Walter Lefevre Award. The Walter Lefevre award recognizes actions in promoting licensure, ethics and professionalism. Our honorable mention for this award can be attributed to the percentage of our civil students that pass the FE exam and the number of faculty we have licensed in a U.S. jurisdiction. Thank you to our seniors in the past for taking the exam and doing well in the process!

A final award to be recognized is Matt Trowbridge's receipt of the inaugural ASCE Student Chapter Leadership Award. This award is granted to a student who has demonstrated outstanding leadership in a student chapter through various service, activities, and interactions with sections/branches of ASCE. As the President of the 2008 Ridgway Award student chapter, Matt was very deserving of this honor. Matt graduated this past spring and is now employed by Moffatt & Nichol in Tampa, FL. The civil department and student chapter wish Matt all the best in his future endeavors.

This fall looks to be another busy time for the student chapter. We already have several monthly meetings and community service activities lined up, and we look forward to the opportunities to us and others that upcoming ASCE events will bring. Thank you to all of the participating students in the chapter and for the ongoing support from our CE faculty. Let's make this another great year for the Cecil T. Lobo Student Chapter.

Calendar of Events

October 4, 2008—Homecoming Reception for Civil Alumni hosted by the CE Department

December 3, 2008—CE Board of Advisors Meeting

December 3, 2008—ASCE Winter Banquet

Freshmen Trip



Joel Ericson (CE 2002) and Drew Furry (CE 2004)

The freshman year civil engineering Introduction to Design classes joined Drs. McKinney, Hanson, Aidoo, Sutterer and Keith Royer on the department's 9th spring freshman trip on May 7, 2008. As we did last year, the group again made the short trip to Indianapolis this spring because of the great collection of projects available. The day started with our being treated to an extraordinary tour of the Indianapolis Airport terminal site thanks, to **Joel Ericson (RHIT CE 2002)** and **Drew Furry (RHIT CE 2004)**. This visit was followed by a visit to Storror Kinsella Associates, a landscape architecture, land planning, and urban design studio. The class then toured the White River water treatment plant. Finally, the day was wrapped up with a detailed tour of Lucas Oil Stadium thanks to the efforts of Joel Ericson.

Join Us For Homecoming

The Civil Engineering faculty and staff at Rose would like to extend a heartfelt invitation to you and your family to join us in the 2008 homecoming festivities. Homecoming will be held on October 3-4, 2008. Of particular interest to us is being able to see you at the department open house on Saturday from 11 am until 1 pm in Olin Hall. We will supply the lunch, you supply the conversation. If you are coming to Homecoming please RSVP to Kathy (Kathy.Nicoson@rose-hulman.edu) for planning purposes. One of the greatest joys of teaching is to hear about your career accomplishments and to catch up with you on your personal lives.

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 Highlights

ROBERT CROWELL (1984) joined SUEZ Renewable Energy NA (SRENA) at the beginning of June.

DANIEL RICH (1992) reports he will be teaching two intro to CE type of classes at Prairie View A&M University this fall. He is still planning to finish his dissertation and graduate by December.

MICHAEL HOLM (1998) and his wife Mary would like to announce the birth of their first son. Christopher Michael was born on January 9th. Michael is employed by MACTEC Engineering and Consulting, Inc. in Jacksonville, Florida. Congratulations to the whole family.

SEAN STOUGHTON (1999) has graduated from the University of Denver with an MBA and an MS in Construction Management. He recently started a new job with The Shaw Group as a Project Controls Manager in Denver.

KIRK ALLEN (2001) is currently with the Waterworks Division of the Public Works Department for Los Angeles County.

TIMOTHY CLARK (2002) and his wife are parents of a son, Maxwell Alexander, born on April 14th of this year. Tim has taken a new job with the Corps of Engineers. He was selected to be the Project Engineer on a tier 1 Civil Works Project in the U.S. It's been called the most ambitious cut-off wall project in the world because of the very poor geology in this area and some poor judgment during initial construction of the cut-off trench and handling of existing caves from that time (1940's).

FIONA (HAULTER) KING (2002) passed the PE exam... congratulations Fiona!

ERIK WRIGHT (2002) passed the PE exam... congratulations Erik!

DEREK HUGHES (2003) passed the PE exam... congratulations Derek!

AMY WICKS (2004) passed the PE exam... congratulations Amy!

BRAD OTTO (2007) recently started graduate school at the Xavier University, Williams College of Business, Cincinnati, Ohio.

JEREMY BURCH (2008) and his wife Stacy are the proud parents of Emmalynn Michele Burch. She was born on June 10th. Congratulations to Jeremy and Stacy.

RACHEL HOWSER (2008) helped RHIT win honorable mention in the ASCE Walter LeFevre contest.