

November 2006  
Civil Engineering Department  
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# ***CIVIL ECHOES***

## ***ROSE-HULMAN INSTITUTE OF TECHNOLOGY***

### **Chairman's Perspective**

We are excited about the 2006-07 school year. Dr. Gerald S. Jakubowski begins his tenure as the 13<sup>th</sup> president of our beloved school. Shortly after his arrival to campus this summer, we found out that we were once again rated the top undergraduate engineering school in the country (8<sup>th</sup> year in a row). The Civil Engineering Program was rated the top program for the 7<sup>th</sup> straight year. However, this has not kept us from continuing our "2015" discussions; that is, what will we need to do to prepare our students for fruitful careers in the 21<sup>st</sup> Century. It takes vision and effort to maintain our high standards.

The Civil Engineering Department continues to perform international senior design projects. Last year, a group of our seniors designed a missionary compound in Trinidad. This year, as a follow-up to the work of the Rose-Hulman chapter of Engineers without Borders, another senior group is designing an agricultural education center in Ghana. The senior group includes Joel Anderson, Yaw Aning, Matt Childs, Richard Franko, and Kristin Miller. Special thanks go to Drs. John Aidoo, Kevin Sutterer, and Jim Hanson for their work in obtaining the necessary information to launch the project.

A proposal has already come in for an international project next year. Yaw Aning's father, who is originally from Ghana, has submitted a proposal for the design of a cancer facility during the 2007-08 academic year. These projects provide our students with service learning and international experience, which adds substantially to their education.

The two biggest events this fall included Homecoming 2006 and our accreditation visit. It was a great pleasure to see so many alumni at homecoming in early October; roughly 120 alumni attended the CE Open House prior to the football game. We were not as excited to see the ABET, Inc. accreditation team visit campus in late October. However, everything seemed to go smoothly. The Rose-Hulman Civil Engineering faculty, staff, students, and alumni have many reasons to be proud of the great program you have built in this little school in western Indiana. All I had to do was document the many accomplishments of our students, faculty, and alumni. We will keep you posted on the results of the visit once they become official next year.

### **Help Us Find An Outstanding Educator**

We need your help if we are going to continue to improve the education that we provide to our students. With our growing enrollments, we are once again in the market for a new faculty member. This time, we are seeking expertise that varies somewhat from the backgrounds of our current faculty. We are looking for a Ph.D. with experience in land development. This is partially in response to alumni surveys and senior exit interviews expressing the desire to have a class in this area of civil engineering. It is also in response to the growing number of graduates that are starting their careers in land development. The winning candidate will have additional expertise in another area, like water resources and/or environmental engineering. It is likely that this type of candidate may be working in the consulting industry currently, so we want to broaden our search beyond the academic ads that we normally post. That is why we would like your help in identifying an individual of outstanding character, professional competence, and a commitment to education. As always, women and minorities are particularly encouraged to apply. Email recommendations to [robert.houghtalen@rose-hulman.edu](mailto:robert.houghtalen@rose-hulman.edu).

## Nicoson, Williams Elected Honorary Alumni

By a vote of our alumni, the staff and faculty members selected to be named an Honorary Alumnus of Rose-Hulman were Kathy Nicoson and Julia Williams.

The strength of the Rose-Hulman community is never more evident than in the dedication of the staff to the well being of our students and the support they provide to our faculty.

During her 23 years as the department secretary in civil engineering, Kathy Nicoson has been a vital part of the department's successful operation.

Kathy's excellent work supports many of the department's projects from registering students for the Fundamentals of Engineering exam and as new members of the Order of the Engineer, to helping our number one ranked student chapter of the American Society of Civil Engineers.

Kathy is the creator behind the department's annual Homecoming reception, and she takes pride in her work to inform civil engineering alumni about the news of their fellow graduates through her contributions to the Civil Echoes newsletter. Kathy's a vital reason for the success of the annual Quality Assurance program as her attention to details has helped develop important relationships between the paving industry and the department.

Kathy's concern for our students while they are on campus and after they've graduated is one of the reasons Rose-Hulman is such a special institution.

Julia Williams has been a member of the Rose-Hulman faculty since 1994. Her students describe her as a dynamic, inspiring, and demanding professor. Julia has taught a variety of courses in the humanities and social sciences area. These range from creative writing, science fiction and poetry to freshman composition and Shakespeare. An area where she has become known nationally for her expertise is in her development of Rose-Hulman's course in technical communication.

Julia currently serves as professor of English and Executive Director of the Office of Institutional Research, Planning and



*Kathy Nicoson, center, secretary of the Department of Civil Engineering, was the staff recipient of the Honorary Alumnus Award, and Julia Williams, executive director of Institutional Research Planning and Assessment and professor of English was the faculty recipient. They are pictured with outgoing association president Denis Radecki.*

Assessment. In addition to her teaching, Rose-Hulman called upon Julia in September to direct the assessment of the educational outcomes of our programs.

She has received the Outstanding Teacher Award presented by Triangle Fraternity, and she was honored by her colleagues in the humanities and social sciences department when they presented her in 2004 with the department's Outstanding Scholarship Award.

## Kudos to Dr. Jim Hanson

Congratulations are in order for Dr. Jim Hanson. Dr. Hanson has received two national awards: the Young Member Award for Professional Achievement from the American Concrete Institute, and the Ferdinand P. Beer & E. Russell Johnston, Jr., Outstanding New Mechanics Educator Award from the Mechanics Division of ASEE.

## Greg Henneke Receives Honor Alumni Award



*President Gerald Jakubowski, right, greets Honor Alumni recipients, from left: Joel Magsig '94, Kelly Kozdras '99, Tom Merrill '71 and Greg Henneke '75.*

Greg Henneke, who graduated from Rose in 1975 with a bachelor's of science in Civil Engineering received an Honor Alumni Award during Homecoming weekend. Greg who is Executive Vice President of American Structurepoint (formally American Consulting, Inc.) oversees the Transportation Division, the Survey and Environmental Departments and all aspects of public works and transportation, engineering, science and surveying. He is responsible for American Consulting offices in Terre Haute, South Bend and Gary. Greg is a member of the Department of Civil Engineering Advisory Board, and has organized and contributed to the annual American Structurepoint alumni scholarship fund. He currently serves as the Vice Chairman of the Indianapolis Greenways advisory committee.

## Faculty Spotlight—Dr. Martin J. Thomas

Education: BS – Physics, MS – Nuclear Physics, MS – Env. Engr.,

PhD – Civil Engineering (all degrees are from Notre Dame)

Starting Date at Rose: September 1975

Family: Wife – Jody; 3 Grown Children (Matthew, Lisa, and Michael)

- Matthew—C.E., PE, R.W. Armstrong, Indianapolis, grandchildren Bruce and Lily
- Lisa—high school math teacher, Dekalb High School, Dekalb County, Indiana, grandchild Christina
- Michael—Architect, Merrill & Pastor Architects, Vero Beach, Florida

Hobbies: Forestry, Golf, Model Railroading

Specialty Courses: Environmental Chemistry, Air Pollution

Recent Professional Development Activity: Chairman: Vigo County Air Pollution Control Board. Consultant: University of Virginia – Wise on the launch of a new environmental engineering program.

Chairman Appreciation Comment: “Marty is our utility player. He has taught 22 different classes since he has been at Rose. I can count on him to teach anything!”

## Environmental Engineering Update

Thinking about graduate school but want an environment similar to you experience as an undergraduate at Rose-Hulman? We have the answer - the Master's Degree in Environmental Engineering in your very own Civil Engineering Department. With the opportunity to take both technical courses from the department and management courses from the Engineering Management Department you can enhance your value to current and future employers. With the graduation of two students last year, one is pursuing a Ph.D. while the other has joined an engineering consulting firm, the program is looking for new students. If you are interested please contact Dr. Robinson at 812-877-8286 to discuss the opportunities available at Rose-Hulman. Also, spread the word about the graduate programs at Rose-Hulman to your colleagues.

## Professional Development of the Faculty

Life long learning is one of the goals we establish for our students. To set an example, the Civil Engineering faculty continues to maintain a high level of professional competence through teaching, professional development, and service. Some of the professional activities that our faculty participated in last year include:

- Dr. Aidoo had two journal publications last year, one in the ASCE Journal of Bridge Engineering and one in the ASCE Journal of Composites for Construction Mechanics.
- Dr. Hanson authored a well-received article entitled “Quick Methods for Finding Errors in Structural Analysis and Design Results” that was published in *Structure Magazine* that has a distribution of over 32,000.
- Dr. Robinson is working on a grant entitled, “Proposal for the Establishment of the Ecological Systems Laboratory to Promote Sustainable Development in Education and Research” with two other professors (chemistry and biology) and two students.
- Dr. Sutterer continues as Director of the Engineering Forensics Research Institute; he is seeking NSF funding for another three years of REU undergraduate research.
- Dr. McKinney continues to coordinate the very popular INDOT/RHIT Hot Mix Asphalt Quality Assurance Program and the less popular (campus) FE exam.
- Drs. Robinson and Sutterer serve on a subcommittee of the ASCE Task Committee on Academic Prerequisites for Professional Practice. (The committee is charged with developing the requisite body of knowledge for the 21<sup>st</sup> century civil engineer.)
- Dr. Hanson continues his educational research in metacognition to teach evaluation of results in structural analysis and the use of Covey’s seven habits in freshmen design.
- Dr. McKinney continues to consult with city, county, and state governments about transportation safety, trail designs, and pavement improvements.
- Dr. Aidoo made a presentation on rebuilding after Hurricane Katrina at the National Organization of Minority Architecture Students Symposium, University of Illinois.
- Dr. Sutterer, Dr. Aidoo, and Dr. Hanson worked with eight REU students from around the nation this summer on three different engineering failure studies.
- Drs. Sutterer and Houghtalen had a journal publication on the evaluation of failure critical culverts published with two summer REU students.
- Dr. Houghtalen (and Ned Wang) surpassed the 10,000 sales mark with their hydraulics book “Fundamental’s of Hydraulic Engineering Systems, 3rd Edition” (Prentice Hall, 1996).
- Dr. Sutterer and Dr. Hanson continue their research on monitoring foundation settlement on the new Rose-Hulman apartment residence hall.
- Dr. Thomas continues as chairman of the Vigo County Air Pollution Control Board.
- Dr. Robinson had a journal article published in *Environmental Research*.
- Four of our seven faculty members had papers published in the proceedings of the American Society of Engineering Education (ASEE) annual conference.
- Dr. Houghtalen continues to teach ASCE continuing education courses in hydrologic and hydraulic modeling for practicing engineers around the country.

## Richard Mott Retires

I’m sure some of you remember our Olin Hall housekeeping person Richard Mott. He recently retired from Rose-Hulman after 23 ½ years of service. Richard has been a lifelong care giver and devotes his time to care for his family and dear friend, Professor Al Schmidt (retired Rose math professor). During Richard’s tenure at Rose-Hulman, he became a part of the community, cheerfully serving students, faculty, staff, and friends of Rose. He would always cut out newspaper articles that had anything to do with Rose students. He would then have them laminated and try to deliver them personally to the students. Even after Richard’s initial announcement that he would retire, he volunteered to work part-time to ensure his “customers” were taken care of during the transition period to hire someone to fill his position. Recollections of his most memorable times at Rose included getting to know and interact with our students, faculty and staff.

## Alumni Highlights

**JOHN P. WOODEN (1983)** started with INDOT May 8, 2006 in the Crawfordsville District Office. He is now the INDOT Prequalification Engineer in the Central Office in Indianapolis. He is still living in Terre Haute.

**MIKE CRIST (1991)** was recently promoted to Vice-President of Moffat and Nichol. He was on campus November 7<sup>th</sup> and 8<sup>th</sup> to interview for full time and internship positions.

**TRACY GRUNDEN (1993)** has taken a new job with HDR, Inc. in Phoenix. He and his wife Karin have a new baby; Grant was born on October 4th and joins older brother Lucas.

**BRIAN DESHARNAIS (MS—Env. Engr. 1995)** and his wife Margo now have a beautiful daughter named Alyssa. She is two years old, and she is the joy of their lives. Brian teaches civil and environmental engineering at Tri State University.

**MAJ. JAKOB C. BRUHL, P.E. (1996)** and his family recently moved to West Point, New York for him to begin his assignment as a Civil Engineering Instructor. He finished his M.S. degree in Structural Engineering at the University of Illinois-Urbana/Champaign this past May.

**AMBER (ASHLOCK) TOLLE (1999)** and her husband Jason Tolle (ME 1996) have a new addition to their family. Xander Jason Tolle was born on May 9 weighing in at 8 lbs. and 20 inches long. Amber reports their son is beautiful and perfectly healthy; everything they asked for and more. She continues to work part time at American Consulting, Inc. in Indianapolis.

**MORGAN HAWKER (1999)** received her Masters Degree in Theoretical and Applied Mechanics from the University of Illinois at Urbana-Champaign in December 2005. She is now working as a Structural Engineer for C&I Engineering in Louisville, Kentucky. On September 3, 2006, she married Robert Raque (CO 1999) after dating for nearly 11 years.

**CHRIS BAUER (2001)** is engaged to marry Christa Lau. The wedding will be sometime next spring. Congratulations to Chris and Christa. Chris lives in Sarasota, Florida and works for Boran Craig Barber Engel Construction Co. Inc.

**WALTER FLOOD IV (2003)** has had a very exciting month of October. It included a trip to the top of the highest peak in Africa (19,340'), completion of the Chicago Marathon, and the purchase of a new condo along the lake in Chicago. His new contact information is: 420 E. Waterside Drive, Unit 1207, Chicago, Illinois 60601, phone 773-858-3509.

**SCOTT TOURVILLE (2006)** has been temporarily transferred by American Consulting, Inc. to Terre Haute. He is working on a road construction project until sometime in December.

**MARIA VAN HOUTEN (2006)** is a contract programmer at Moody AFB in Georgia. She is performing cost estimates for base demolition.

### 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](mailto:Kathy.nicoson@rose-hulman.edu) with your current contact information and what you are doing.

## ASCE Student Chapter News

It has been a busy fall for the student chapter. In addition to our regular chapter meetings and a Friday cookout, the chapter attended several field trips, and has been doing service work.

Our meetings have been very good this Fall term. They included speakers on coastal engineering, the engineering of dams, and specialty geotechnical construction. A seminar on preparation for graduate school was also very well attended. Our fall field trips included a visit to the Indianapolis Motor Speedway with alum Kevin Forbes and to Coreslab precast concrete in Indianapolis.

The chapter's service work included hosting a series of three HEC RAS workshops for Indiana area engineers. The chapter also hosted a one day FEMA 154 workshop for Rapid Visual Screening of Buildings for Potential Seismic Hazards. The workshop was sponsored by Central United States Earthquake Consortium.

Chapter Advisor Kevin Sutterer attended the ASCE Practitioner/Faculty Advisors Workshop in Reston, Virginia in August to present on "What Does it Take to have a Vibrant Student Chapter?" and to help mentor new advisors from around the U.S.

## Alums At Work

The ribbon cutting ceremony on the Hulman Street Project Opening in Terre Haute. A two year project done in a little over a year. Major RHIT CE involvement between American Structurepoint and the City of Terre Haute.

*Alums left to right; Cash Canfield, American Structurepoint (formally American Consulting, Inc.); Scott Tourville, American Structurepoint; Larry Robbins, City of Terre Haute; Laura Hemming, American Structurepoint; Pat Goodwin, City of Terre Haute; and Troy Swan, Hannum, Wagle and Cline and formally with the City of Terre Haute.*



## Mark Your Calendar

November 29, 2006—CE Board of Advisors Meeting

November 29, 2006—ASCE Winter Banquet

May 19, 2007—ASCE Golf Tournament (Tentative) Rea Park Course