

March 2005
Civil Engineering Department
5500 Wabash Avenue, CM 58
Terre Haute, IN 47803-3999
www.rose-hulman.edu/ce/

CIVIL ECHOES

ROSE-HULMAN INSTITUTE OF TECHNOLOGY

ASCE Winter Banquet and Tribune Star Christmas Basket

The Civil Engineering Department was honored on December 8-10 with a visit from 1948 Rose Poly CE Alum and world renowned structural engineer, Dr. Alfred Yee. Dr. Yee organized one of the first precast, prestressed concrete facilities in the country, and has designed many tall buildings in Hawaii, Singapore, and China using the material. He also has designed concrete oceangoing vessels and offshore drilling rigs. He holds several patents and has authored over 25 technical articles on precast and prestressed concrete.

In addition to being our guest speaker for the ASCE Winter Banquet, Dr. Yee also spoke to several of our classes and spent a full day visiting our department and the campus. This gave him some time to visit with our students and faculty in a more one-on-one setting. Approximately 75 students and faculty were in attendance at the Winter Banquet to listen to Dr. Yee's presentation on "Innovation in Engineering." Dr. Yee's presentation was a look at his work. In particular, Dr. Yee showed how precasting and prestressing made more efficient use of our world's limited natural resources. He emphasized that young engineers should think about the consequences of everything they design and build, and make sure they do everything they can to protect these resources for the future.

As a part of the Christmas Banquet, ASCE Treasurer and incoming President Michael Reeves kicked off the Tribune Star Christmas Basket Fund Drive, which raised over \$3,500 from the Rose-Hulman community to benefit needy families in the region with Christmas dinner. This total collection exceeded the previous record by nearly \$1,000.

Chairman's Perspective

The winter quarter is a difficult one for our students, at least the seven weeks after the Christmas break. Time seems to move slowly during the gray days of January and February. However, prior to Christmas the department is hopping with activity. The Civil Engineering Board of Advisors and the Board of Associates come to campus during the first week in December. The ASCE Christmas banquet is the second week. Both events are enjoyable and build a sense of community among the Rose civil engineering students, faculty, staff, and alumni.

I want to personally thank the Board members who came to campus to review senior design projects and work on curriculum improvements. Those who came are:

Bruce Carter	Judith Congdon	Pat Goodwin	Greg Henneke
David Maxwell	Jon Stolz	Roger Ward	David Warder
Marty Wessler	John Cross	Chuck Ennis	Pat Martin
Shiela McKinley	David Myers		

The ASCE winter banquet speaker was one of our very own, Alfred Yee (class of '48). Dr. Yee is President of Applied Technology Corporation in Honolulu. After obtaining his bachelor's degree from Rose, he earned a master's degree from Yale. He received numerous awards and patents during a remarkable career in the structural design and construction industry. His banquet talk was about engineering innovations, and he encouraged students to be imaginative as they solve society's complex problems in the 21st century.

Certificates Awarded To Outstanding Certified Hot Mix Asphalt Producers

The Indiana Department of Transportation has recognized Certified Hot Mix Asphalt Producers for their outstanding performance in 2004.

The Indiana Certified Hot Mix Asphalt Program, established in 1996, is a program whereby the producer takes responsibility for all aspects of the production of quality hot mix asphalt in accordance with INDOT contract requirements. The fundamental element of the program is a written quality control plan which is plant specific and the basis of control for the methods of sampling, testing, calibration of lab equipment, and inspection of Hot Mix Asphalt. The producers quality control procedures are verified by INDOT by assuring that the quality control plan is being followed.

The criteria for selection of each plant for this award included the producers general cooperation with INDOT, the quality of the quality control plan, INDOT audits in 2004, timeliness in resolving corrective actions from audits, and overall commitment to quality by doing more than the minimum program requirements.

The overall winner of the award:

The Outstanding Producer for the State in 2004

Wabash Valley Asphalt LLC, Terre Haute

The Chief Materials Engineer and production supervisor for Wabash Valley Asphalt is **John Collett**, Rose-Hulman B.S. Civil Engineering 1988. After a period of service in the US Army, John returned to Terre Haute and was hired by Pat Cahill (RHIT BSCE 1967) as an engineer for Wabash Valley Asphalt. John's commitment to quality work is a major reason why Wabash Valley Asphalt was selected for the Outstanding Producer Award this year. In addition to his academic credentials, John is a Certified HMA QA/QC Technician, having attended and successfully completed the RHIT program for Hot Mix contractors. John has also been instrumental in seeing that all company technicians involved with the production of hot mix asphalt are also trained and certified through the RHIT program.

Congratulations to John on a "Quality" Job!

ASCE Student Chapter News

The new student chapter officers started their terms in January. Once again we would like to recognize the new officers: Michael Reeves, president; Cassidy Sutton, vice president; Michael Krantz, secretary; and Chris Hollen, treasurer. In late January, the officers and Dr. Sutterer traveled for Orlando to attend ASCE's Zone II Workshop for Student Chapter Leaders. The weekend was full of workshop activities, so despite the great weather, the team spent most of their time indoors. The students left the workshop with a lot of good ideas for continued chapter improvement, and also reassured that they are already doing a pretty good job.

Former president Cory Howell and former Vice President Drew Twarek just finished assembly of the chapter's annual report to ASCE. As many of our alumni will attest, assembly of the report is a monumental activity for a few officers every year, leading to an approximately 100 page report upon completion.

The chapter is maintaining a fast pace of winter activities. Work on the concrete canoe continues under the guidance of David Pirnia. The chapter has held a winter cookout and several meetings. Planning for the student chapters regional conference, to be held in Chicago this year, is also under way. Finally, the service committee is busy planning the construction of several wheelchair ramps and managing the transition of last years' project (the Watson residence) into the next stage of work, which involves turning the project over to the local chapter of the National Association of Women in Construction (NAWIC) for electrical work and the Construction Club at Indiana State University for further construction activities.

Senior Design Projects

The seniors are finishing up their designs as the winter quarter comes to a close. We have some great projects for our 29 seniors to work on. Here is the list of projects and clients:

Constructed Wetlands Field Lab

Team: Lance Gassert, Andrea Mailloux, Aaron Roberts, and Cary Wiley

Greencastle Parks and Recreation Department

Contact: Glen E. Morrow, City Engineer

Covered Bridge Gateway Trail

Team: Phillip Griffith, David Honan, Travis McKittrick, David Pirnia, and Andrew Twarek

West Central Indiana Econ. Dev. District

Contact: Pat Martin, Jackie Mitchell

Larrison Pavillion Design - Deming Park

Team: Martin Brenny, Jonathan Hawkins, Sean Smith, and Michael Thompson

Terre Haute Parks & Recreation Department

Contact: Greg Ruark, Executive Director

Hawthorn Park Dam Hazard Classification

Team: Andrew Bolyard, Daniel Conley, Eric Diehl, and Jonathan Keim

Vigo County Park and Recreation Department

Contact: William K. Ruble, Superintendent

Brownfield Remediation and Site Redevelopment

Team: Elisha Dodd, Ty Gremaux, Laura Hemming, and Cory Howell

Terre Haute Department of Redevelopment

Contact: Phil Kesner, Redevelopment Specialist

Office/Studio Design for a Multidisciplinary Firm

Team: Darin Lowe, Andrew Mullis, Eric Munchel, and Scott Tourville

Baker Architects

Contact: Harold Baker

Training Tower & Pump Pit Design

Team: Jason Lange, Jeffrey Poole, Todd Wallace, and Michelle Woodward

City of Greencastle Fire Department

Contact: Glen E. Morrow, City Engineer



Future Stream Crossing for the Covered Bridge Gateway Trail



Greencastle Construction Wetlands Field Lab

2004/2005 Hot Mix Asphalt Quality Assurance/Quality Control Program

This year marked the twentieth anniversary of the Rose-Hulman Civil Engineering (RHIT)/Asphalt Pavement Association of Indiana (APAI)/Indiana Department of Transportation (INDOT) Hot Mix Asphalt Quality Assurance/Quality Control ((HMA QA/QC) Certification Program for hot mix asphalt construction in the State of Indiana. The program came about through the diligent efforts of the former INDOT Chief Engineer- Donald W. Lucas, Rose CE, Class of 1959. Any HMA contractor performing paving operations on state and federal highways in Indiana must have technical personnel certified through the RHIT-INDOT HMA QA/QC Certification Program. Fifty-eight contractors and material testing laboratory personnel took part in the Certification Program this past winter - either a week-long, laboratory session held on the RHIT campus or a multi-day recertification program. Since its inception in 1986, a total of 1932 people have enrolled in the HMA QA/QC Program. The program has been widely accepted by the asphalt paving industry and will be repeated next year.

Hosting the HMA QA/QC Program has also allowed us to acquire specialized laboratory equipment for teaching asphalt technology to our students. The CE Materials class - CE 320 - provides the student with a wide range of asphalt testing exposure including Super-Pave. The equipment acquired through the program includes: the SHRP Gyratory Compactor; the Dynamic Shear Rheometer; the Pressure Aging Vessel; the Rotational Viscometer; the Rolling Thin Film Oven; the Ignition Oven; as well as a special High Temperature Glass Cleaning Oven. A number of other important pieces of lab equipment have been acquired including a number of sophisticated electronic balances.

The HMA QA/QC Program has also allowed us to develop long term relationships with INDOT, APAI, and various hot mix asphalt contractors. This has resulted in a number of students receiving summer internships with government and industry, as well as permanent employment opportunities for graduates. Additionally, APAI has annually sponsored scholarships for two or three of our students.

Mark Your Calendar

May 21, 2005—ASCE Golf Tournament (Rea Park Golf Course)

May 28, 2005—Commencement

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

BILL GAITHER (1956) has completed his second cross-United States bicycle ride on a specially outfitted recumbent. He traveled from Astoria, Oregon and finished in Portsmouth, N.H. At 71, he was the oldest to make the trip.

Bill PERKINS (1960) retired last year after 37 years of teaching at Indiana University in the Kelley School of Business. He received a Distinguished Service Award from Indiana University, and he also was made an honorary I-Man by the Indiana University I-Men's Association.

JIM SCHULZ (1964) left his position as one of two managing principals of the consulting firm of Becher-Hoppe Associates after 34 years. He has formed James Schulz Consulting, a limited liability company that has entered into a two-year contract to serve as the owner's representative for Memorial Health Center in Medford, Wisconsin. His duties include facilitating, coordinating and communicating between the owner and the contractor.

JIM BROWN (1970) has semi-retired to Key Largo, Florida, where he fishes, scuba dives and raises orchids.

MICHAEL MENEGHINI (1995) and his wife, Cindy, celebrated the birth of their second child, Cecilia Rose, in September. The family is in Rochester, Minnesota, where Michael, a medical doctor, is in a one-year fellowship in lower extremity joint replacement at the Mayo Clinic.

KENT ELLIOTT (1998) successfully passed the P.E. exam this past fall.

JEANNE HUDSON (1999) is recruiting engineers for URS Corporation in Oakland, California where she has worked for 5 years in the Hydrology and Hydraulics group.

STEPHANIE (DUNIGAN) ROBERTS (2000) reports to us that she passed the PE exam – congrats go out to Stephanie.

ANDY EFFINGER (2000) was promoted last year to manager of the estimating department at Rogers Group in Bloomington, Indiana.

DAVID KORMAN (2003) and his wife Cindy announce the birth of their first child, Abigail Rose Korman born on September 22, 2004.

KEVIN WALDROUP (2003) has been promoted to 1LT in the 546th Transportation Company (Airborne). He has been in Iraq since the first of the year and expects to be there about a year.

BRIAN KINDINGER (2004) is recruiting engineers for MS Consultants where he is employed. He reports MS Consultants are the lead engineering firm for the I-70/I-71 redesign and the design of a new reservoir for Columbus, Ohio.

BRAD PICKERING (2004) accepted a new position with Yerkes Associates in Philadelphia. He also reports that he and girlfriend Jenny got engaged and are planning their wedding for July 2006 – congratulations Brad and Jenny.

Obituaries

GERALD R. SWIHART (1947) died June 18th at the age of 84. He had been a professor at the University of Nebraska for 41 years. Survivors include a daughter Sally Swihart and two sons, Scott and Tom.