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ur latest CCEEnews issue offers yet another compelling demonstration of the many pride points and positive attention that departmental students, faculty, and alumni have earned in recent months.



These highlighted topics featured in this Summer-2009 edition include 2000-plus student service hours spent with rebuilding flood-ravaged lowan communities, special scholarships and awards in recognition of outstanding academic accomplishments, and several cutting-edge research initiatives (in biorenewable asphalt, fungal bioresiduals conversion, advanced earthworks engineering, and next-generation wind tower design) literally intended to tackle technical challenges for decades to come.

Our department is also quite proud to have had two of our own selected for special recognition at the recent Winter 2008 and Spring 2009 university commencement programs. Graduating environmental engineering senior, Jennifer Ruddy, was chosen as the College of Engineering's Student Marshall for her entire class (see pg. 15), after having earned a nearly perfect grade point average.

Even more recently, though, our long-standing departmental friend, patron, and allaround research mentor in the realm of geotechnical and earthworks engineering, Dwayne McAninch, received an honorary doctoral degree this past May 9th... which by his account qualifies him to claim the title of "Dr. Dirt!"

On behalf of our entire CCEE team, therefore, a tip of the hat is duly warranted for the hard work and academic enthusiasm which generated such notable outcomes!



Department Chair James E. Alleman

Editor/Designer Minna Khounlo-Sithep

Faculty Newsletter Coordinator F. Wayne Klaiber

CCEEnews gratefully accepts articles, story ideas, photos, "What's New with You" contributions, comments, inquiries, and address changes at this address: Minna Khounlo-Sithep, Communications Specialist Department of Civil, Construction, and **Environmental Engineering** Iowa State University 394 Town Engineering Bldg Ames, IA 50011-3232 cceeweb@iastate.edu

Between issues of CCEEnews, visit us online at www.ccee. iastate.edu for current and recent news and events from Iowa State University's Department of Civil, Construction, and Environmental Engineering.

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what's **new**

CCEEnews has now gone digital!

If we do not have your email, please email your email address to minnaks@iastate. **edu** to get on the CCEEnews alumni newsletter email list.

In Loving Memory of Tom Maze

ith great sadness, friends and colleagues of Professor Tom Maze mourned his passing on Monday afternoon, June 8, at University of Minnesota Hospitals of heart failure. His presence and contributions to the transportation and education communities in Iowa and around the nation will be greatly missed.

Dr. Maze began his engineering career at lowa State University, earning a B.S. in civil engineering from ISU in 1975. He went on to receive a master's degree in engineering from the University of California, Berkeley, in 1977 and a PhD in civil engineering from Michigan State University in 1982. He joined the faculty in the School of Civil Engineering and Environmental Science at the University of Oklahoma in Norman, where he was director of the Oklahoma Highway and Transportation Engineering Center. In 1988, he returned to lowa State as an associate professor in the transportation division of the Department of Civil and Construction Engineering and as director of Iowa's Local Technical Assistance Program (LTAP).

In 1990, after also becoming co-director of lowa State/University of Iowa's Midwest Transportation Center (MTC) (the U.S. DOT's university transportation research program for region 7), Dr. Maze initiated the Iowa Transportation Center as an umbrella organization for transportation-related research (MTC) and outreach (LTAP) at Iowa State. Through the ITC (later the Center for Transportation Research and Education and now the Institute for Transportation), Dr. Maze grew a robust program that has become one of the leading university transportation-related research programs in the United States with a solid reputation for research, academic excellence, and outreach.

Dr. Maze's vision regarding advanced transportation technologies led to demonstrations and innovations in intelligent vehicle systems for commercial vehicles, transportation-related applications of geographic information systems, and traffic and safety engineering innovations. He also led

significant efforts in transportation planning and in statewide management systems for transportation infrastructure that have been models for other states. In recent years, he has focused on weather-related issues

through a final program he initiated in 2003, the Center for Weather Impacts on Mobility and Safety (C-WIMS).

In 1996, on behalf of Iowa State University, Dr. Maze helped forge a progressive transportation research management agreement between the university and the Iowa Department of Transportation. This efficient administrative tool continues to facilitate the center's quick response to identified transportationrelated research and technology needs in lowa and reflects a level of university-agency partnering that is the envy of many states.

Dr. Maze has taught more than 70 courses covering some 30 topics. As a demanding but generous academic mentor, he was the major advisor for 30 graduate students at Iowa State, nine of whom were doctoral students in civil engineering/transportation. He also took a keen interest in nurturing new faculty members and guided them in developing successful careers. He developed a graduate-level academic enrichment and learning community program at lowa State called Transportation Scholars, the heart of which is a semester-long series of multidisciplinary seminars that Iowa State shares with other universities through distance technologies. To date, more than 200 Transportation Scholars have participated in the seminars, received stipends to work on research problems, met visiting experts and leaders in the transportation community, presented papers for student peers and local professionals, and participated in special events like the annual meeting of the Transportation Research Board. All of them have benefitted from Dr. Maze's progressive approach to transportation education.



In addition to research, teaching, and mentoring, Dr. Maze was intensely involved in enhancing transportation technology transfer through professional training and outreach activities. One of his legacies is the Midwest Transportation Research Symposium, a conference he initiated in 1996 in partnership with the lowa DOT. This biennial event provides a Midwest venue for disseminating national research in a format similar to the Transportation Research Board's annual meeting. Through ongoing activities like the symposium, as well as the extensive body of work he leaves behind, Dr. Maze's accomplishments will continue to have an impact across lowa, the country, and beyond for a very long time.

memorialscholarship

A memorial student scholarship is being established in Dr. Maze's name. If you or someone you know would like to contribute, you may contribute online at www.foundation.iastate.edu/maze or make your check payable to Iowa State University Foundation (with the memo "Maze Scholarship Fund") and send it to the following address:

Chris Knight Civil, Construction, and Environmental Engineering 394 Town Engineering Iowa State University Ames, IA 50011



Tom Maze, Reg Souleyrette, and David Plazak

memoriesshared

Excerpt from CCEE Professor Reginald Souleyrette's remembrance of Tom Maze. Read more from Reg and many others at: http://www.intrans.iastate.edu/ news/2009/mazeremembered.htm.

"Tom was the most ethical person I know. His highest goal was to serve the public, students and the future of our profession ... He was genuinely happy for you if something good happened and genuinely concerned if something was wrong.

Tom led by example when developing the lowa Transportation Center (later called CTRE)—he built the program on his back. He provided many of us with great jobs and an opportunity to serve as he was. He brought us the CTRE family which we all value so much, both professionally and personally. He had some trouble relating to a few folks, and could be intimidating if you didn't know him. But if you did know him you knew he was shy, caring, and a person you could trust to help you. He had vision and was funny. Tom had a gift of writing and teaching—he was the best teacher I knew. Yet despite his gifts he overcame many personal problems with brute force and determination. I am only sad that we, no, I could not help him more these last few years when he was so sick. Let us all work hard to continue what Tom started, and also pay attention to those around us and realize what opportunity we have. Thank you Tom."















Burns and McDonnell Classroom Dedication



[need to create blurb for this].

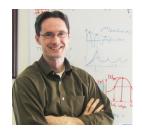
asce**awards**

The following are awards received by Iowa State University students and faculty:



- ➤ ISU Outstanding Civil Engineering Senior student: **Doug Hartwell**
- ➤ Outstanding Government Civil Engineer: Tom Maze, accepted by Neal Hawkins
- ➤ Outstanding Civil Engineer: **Steve Jones**
- ➤ Iowa Section Award: Ken Dunker, former faculty member in CCEE. This award carries special relevance in that a winner is identified only every third year.
- ➤ Past President Plaque: **Marlee Walton**
- ➤ ASCE student scholarship winners : Katelyn Weiler and Timothy Sheets
- ➤ Carl Ekberg Scholarship : Karen Gray
- ➤ ASCE "Life Member" certificates: Tom Stout and Ed Kannel

grantawarded



Jeramy Ashlock, CCEE assistant professor was awarded \$99.913 from the National Science Foundation to develop methods to describe how the piles of building foundations interact with soil

under dynamic loads and earthquakes, and to increase the accuracy of computer simulations of the interactions. The grant was among those worth a total of \$7.7 million from federal agencies awarding money from the American Recovery and Reinvestment Act.

CCEE ranked in the Top 20



ur CCEE department was ranked in the Top 20 for US News and World Report Undergraduate 2009 Rankings for national universities with the best Civil Engineering programs that offer up a doctoral degree in engineering. Of 162 national programs, this places us in the top 12% level! Other programs included:

- University of California Berkeley
- University of Illinois Urbana-Champaign
- Georgia Institute of Technology
- University of Texas Austin
- Massachusetts Institute of Technology
- Purdue University West Lafayette
- Stanford University
- Cornell University
- University of Michigan Ann Arbor
- Virginia Tech
- Carnegie Mellon University
- Texas A&M University College Station
- University of Wisconsin Madison
- Northwestern University
- North Carolina State University Raleigh
- Pennsylvania State Univ. University Park
- Princeton University
- Lehigh University
- University of Florida
- Clemson University
- Iowa State University

The U.S. News rankings of undergraduate engineering programs accredited by the Accreditation Board for Engineering and Technology are based solely on the peer judgments of deans and senior faculty who rated each program they are familiar with on a scale from 1 (marginal) to 5 (distinguished). Engineering school deans and faculty members (two at each engineering program) were surveyed for this ranking in spring 2009.

CCEEnews

CCEE Professor Ed Kannel was the 2009 recipient of the Patrick T. McCoy award



CCEE Professor **Ed Kannel** was the 2009 recipient of the Patrick T. McCov Transportation Education Professional of the Year Award from the Missouri Valley Section of the Institute of Transportation Engineers (MOVITE). Ed received his BSCE in 1966 from the University of Wisconsin -Madison, his MSCE from the University of Wisconsin - Madison in 1967 and his PhD

from Purdue University in 1972.

Ed has been a Civil Engineering faculty member at Iowa State University for 35 years. Although his primary teaching and research interests have been in transportation planning and safety, he has had the privilege of teaching undergraduate classes from freshman level surveying and orientation classes, to nearly every graduate class in the transportation division.

At one stage in his ISU career he simultaneously held the titles of Transportation Division Leader, Associate Chair of Civil, Construction and Environmental Engineering, Coordinator of Undergraduate Programs, and Director of Graduate Education.

Professional society contributions have included chairing national committees within ITE and ASCE, but he is most proud of the accomplishments of the Iowa State students in their community and professional programs that have earned them MOVITE and regional awards within ITE. Professor Kannel has served approximately 20 years as advisor to the Iowa State University Transportation Student Association (TSA) bringing engineering, planning and logistic students together to broaden their interest and understanding of the opportunities in transportation.

"Dr. Kannel's contributions to the profession and the MOVITE organization over the past decades include educating and fostering interest in the traffic and transportation engineering field through his role as a Professor of Engineering at Iowa State University. Dr. Kannel deserves to be recognized by our organization for his long term investment in the transportation industry as an educator and advisor," says Doug Ripley of MOVITE.

Ed received the award on September 21 at the Fall MOVITE meeting in Springfield, Missouri.

visitinaprofessor

Professor **Satva** Kalidindi was a visiting Professor in the CCEE Department and at InTrans from mid-July - Dec 15, 2009. He comes to ISU from the



Indian Institute of Technology, Madras (IITM), Chennai, India, where he is a professor and the immediate-past head of the their Construction Engineering / Management program / lab.

Satya's visit to ISU was based on an existing Memorandum of Understanding between ISU and IITM (signed in 1998). While at ISU during the fall 2009 semester, he handled a course on Construction Estimating, and he worked with faculty and students not only in the Construction Engineering area, but also with others in CCEE and across the College of Engineering to further develop collaborative activities between IITM and ISU. Given the major expansion of civil infrastructure currently underway in India and the infrastructure related activities in the US, these efforts are timely and they offer immense potential for joint initiatives.

engaward



Kelly Strong, CCEE professor was awarded the 2009 College of **Engineering Superior** Engineering Advising Award. The award is given to an ISU

engineering college faculty or staff member who has advised undergraduate engineering students for at least three years. The award recognizes academic advising, professional/career advising, work with student groups, etc.

New Faces at CCEE

Beth Lin Hartmann joined the CCE Faculty as a Lecturer in Construction Engineering. A two-time lowa State graduate (BA ARCH '89, MS ConE '96), she was commissioned in the United States Navy's Civil Engineer Corps through the NROTC program in 1989.



Beth retired from the Navy with over 20 years of service in June 2009 while serving as is the Executive Officer of Naval Facilities Engineering Command (NAVFAC) Midwest, headquartered at Naval Station Great Lakes, Illinois. During that tour she also served as the Deputy Regional Engineer for Navy Region Midwest. Her other tours included Project Engineering, Construction, Public Works, and Naval Construction Force positions in Florida, Greece, Illinois, California, Tennessee, and Washington,

Beth is a registered Professional Engineer in the State of Florida and a LEED Accredited Professional. She is a member of the Society of American Military Engineers, the Design-Build Institute of America, the American Society of Civil Engineers and the National Electrical Contractors Association. She is the also the owner and Chief Executive Officer of exxo consulting, Ilc, a Service Disabled Veteran Owned Small Business specializing in government Architect-Engineering and construction contracting opportunities.

Beth and her husband, Tim, have two children: Hannah (age 10) and Nate (age 7).

[waiting on bio from Katy Rice]

university**awards**







IOWA STATE UNIVERSITY

Three CCEE faculty received university awards at the Iowa State University Convocation and Awards Ceremony on September 21.

Charles T. Jahren, CCEE associate professor received the ISU Award for Outstanding Achievement in Teaching, Edward J. Kannel, CCEE Professor received the ISU Award for Academic Advising Impact, and Hans van Leeuwen, CCEE Professor, received the ISU Award for Outstanding Achievement in Research.

Fund established in honor of ConE program founder, Tom Jellinger, to build new lab



acknowledge contributions of Tom Jellinger began as an idea from an alumnus of the construction engineering program, and permeated to a group of Denver-area

alumni who were impacted greatly by the support of Mr. Jellinger and his late wife, Ro. Once the initial gift of \$100,000 was realized, the department set into action several steps to create a fund to honor the Jellingers, to coincide with the 50th anniversary celebration of the Construction Engineering Program. Shortly thereafter, a volunteer committee was established and an impact goal set.

As a result of this effort, the program in Construction Engineering, and the Department of Civil, Construction, and Environmental Engineering will enhance the Construction Engineering program with the goal of creating the Tom and Ro Jellinger Advanced Construction Management Capstone Laboratory. If the goals for the "Jellinger Lab" are met, this laboratory will benefit undergraduate students and industry by providing virtual site tours, BIM modeling, and a central and flexible learning environment for the senior-level design course.

If you have comments or suggestions, please contact us at questions@foundation.iastate.edu or by phone at 515.294.4607. To make a donation, go to: https://secure2.convio.net/isuf/site/Donation2?df id=3440&3440.donation=form1.

Tom Jellinger's Impact on the Construction **Engineering Program**

After final approval from Master Builders of Iowa and the Iowa State College of Agriculture and Mechanic Arts, the official program to support education, research, and extension work in the field of construction began in the fall of 1960. Leonard

Wolf, head of the Department of Architecture and Architectural Engineering in the College of Engineering at the time, invited Thomas C. Jellinger, a registered engineer and architect from Ohio, to interview in what was then the Engineering Annex

on Campus. Tom and his wife. Ro. made the trip to Ames, and it was Ro that recognized the grand challenge of starting a program that Tom would enjoy and would be successful in growing.



Jellinger (right) at the 2004 ConE Golf Reunion

Tom, with five years of experience in industry

and part owner of a contracting firm that built churches, schools, and office buildings, joined the faculty on September 1, 1960 with an appointment as Assistant Professor of Architecture and Architectural Engineering.

After re-evaluating the construction curriculum, Tom helped evolve it into an Engineering Operations degree with emphases in Building Construction and later Mechanical Construction. Ultimately the program developed into the undergraduate major in Construction Engineering and the graduate program in Construction Engineering and Management as we know them today.

Under the creation of Tom's leadership, the first Industry Advisory Council was established mostly comprised of MBI contractors. Over the years, the Engineering program has matured into one of the strongest programs in the country because of Tom Jellinger's brilliance and Ro Jellinger's foresight. Thomas C. Jellinger relinquished the position of Professor-in-Charge effective September 1, 1978. He continued to serve on the faculty until June 1, 1981, at which time he retired. At the time of his retirement, emeritus status was conferred upon Tom as a full professor of Construction Engineering.







Distance Learning for Construction Engineering professionals

owa State University's 100% online Construction Engineering and Management Masters Degree provides a unique blend of technical and managerial education that will help you solve problems and compete in the ever-changing construction environment. Iowa State's Construction Engineering and Management program has been recognized by The Associated General Contractors of America; one of only four schools in the U.S. to receive such an honor and be promoted by the AGC.

The program focuses on three components that represent the three functional areas of construction engineering and management: 1.) Management Techniques, 2.) Construction Operations, and 3.) Construction Methods.

Students may join the program at the beginning of any semester and may take graduate courses in any order at a pace that suits their needs. Classes are delivered online by digital video streaming. Students may choose the day, time and location to observe the class lectures allowing for maximum flexibility.

Please contact Charles Jahren at cjahren@iastate. edu or 515-294-3829. Also visit Engineering Distance Education at http://www.ede.iastate.edu/ or http://www.ccee.iastate.edu/students/distanceeducation-graduate-programs.html.

- ConE 380 Engineering Law, Cr. 3. Introduction to law and judicial procedure as they relate to the practicing engineer. Contracts, professional liability, professional ethics, licensing, bidding procedures, intellectual property, products liability. Emphasis on development of critical thinking process, abstract problem analysis and evaluation. Non-major graduate credit.
- **CE 326 Environmental Engineering**, Cr. 3. An introductory course in environmental engineering

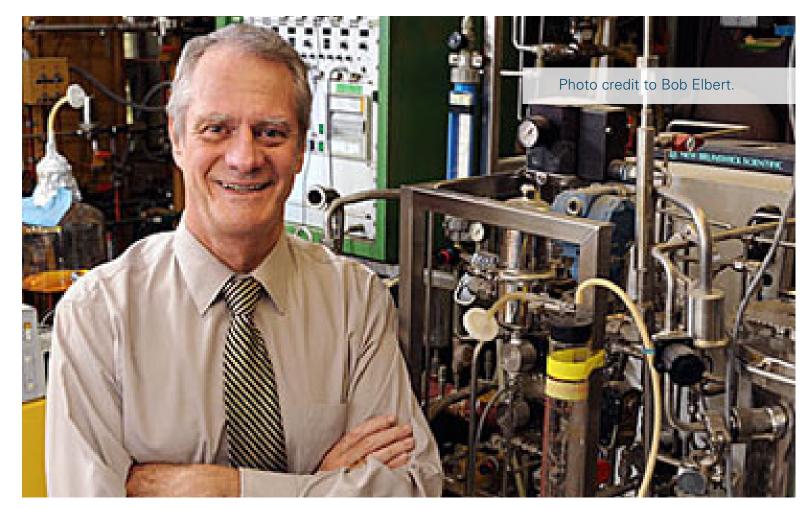
and covers the general topics of air pollution, solid wastes, hazardous wastes, and water and wastewater treatment. In addition to the lecture series, the class take you on a video journey of field trips to area environmental installations including the ISU power plant, Ames Water Pollution Control Facility, Ames Resource Recovery Plant, and the Boone County Landfill.

- CE 421/521 Environmental Biotechnology. An emerging field within environmental engineering. It encompasses the use of natural and genetically engineered microorganisms to provide benefit to mankind and the environment. The course will focus on the physiology of microorganisms, biochemical reactions of microbes, the environmental conditions that favor their growth, and the protection of public health from pathogens. Current literature articles will be discussed in a group setting.
- CE 505 Design of Construction Systems, Cr. 3. Advanced design of formwork and falsework systems. Design for excavation and marine construction including temporary retaining structures, cofferdams and dewatering. Aggregate production operations, including blasting, crushing and conveying. Rigging system design.

Additional online courses:

- CE 522 Water Pollution Control Processes, Cr. 3
- CE 541. Dynamic Analysis of Structures. Cr. 3
- CE 542 Dynamic Analysis of Structures. Cr. 3
- CE 571 Surface Water Hydrology
- CE 576 Environmental Flows Cr. 3
- CE 594E Overview of GPS Automatic Grade Control
- CE 594F Computer Applications for GPS and Automatic Grade Control Cr. 1
- CE 594M Design Build Construction Cr. 3
- CE 622A Water Pollution Control Cr. 2

research**news** research**news**



CCEE Professor Hans van Leeuwen named R&D Magazine's 2009 Innovator of the Year

Article by Mike Krapfl, News Service, (515) 294-4917, mkrapfl@iastate.edu.

owa State University's CCEE Professor Hans van Leeuwen, who has led research teams awarded back-to-back R&D 100 awards for biofuels developments, has also been named R&D Magazine's 2009 Innovator of the Year.

Lindsay Hock, the magazine's managing editor, wrote that the magazine's awards honor "the people behind some of the greatest innovations and discoveries in science." And the Chicago Tribune once called the magazine's awards the "Oscars of Invention."

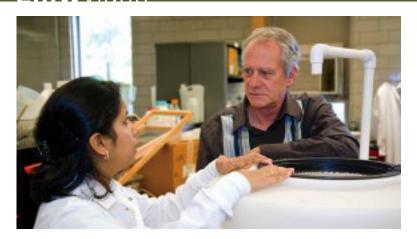
Van Leeuwen, an Iowa State professor in the department of civil, construction and environmental

engineering, is being recognized for his work to use microscopic fungi to improve the production of biofuels and for other innovations to protect the environment and improve water quality.

"This is great," van Leeuwen said. "I feel more than a little bit humbled by people who have won this before."

Previous winners include Larry Page, co-founder of Google; Elon Musk, a leader of PayPal, SpaceX, Tesla Motors and SolarCity; Burt Rutan, developer of SpaceShipOne; and Dean Kaman, the inventor of the Segway Personal Transporter and founder of the FIRST organization that works to inspire children to study science and technology.

2mwvideo





Watch College of Engineering's 2-minute video with Hans at http://video.engineering.iastate.edu/?p=412.

acceptance speech



Hans accepted his award on November 12, 2009 at the R&D 100's 47th Annual Awards ceremony in Orlando, Florida. Watch is acceptance speech video at: http://www.ccee.jastate.edu/fileadmin/www. ccee.iastate.edu/videos/Innovator.mov.



"I do appreciate that by presenting this award, R&D Magazine is recognizing the importance of the environment and finding ways to create new products from wastes and ultimately feed a hungry Third World," van Leeuwen said.

Earlier this year, a research team led by van Leeuwen won one of the magazine's R&D 100 awards for using a fungus to convert wastes from biomass processing into biodiesel.

In 2008, van Leeuwen led another research team that won an R&D 100 Award for its work to grow microscopic fungi in leftovers from ethanol production. The researchers' goal was to improve the efficiency of the corn-to-ethanol conversion

process while producing a food-grade, high-protein fungus for human or animal consumption.

"This is something that could feed a lot of people," van Leeuwen said. "It could supplement diets and help people live healthier lives."

Van Leeuwen's innovator award was presented Nov. 12, 2009 at the Renaissance Orlando Hotel at SeaWorld in Florida.

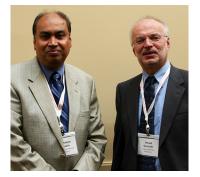
"I'm not necessarily the most deserving of this award," van Leeuwen said. "There are lots of people who could aspire to this. But I guess it's the right idea at the right time and I've had lots of excellent contributions from my research collaborators."

research news alumni**news**













Mid-Continent Transportation Research Symposium draws big numbers



Nearly 400 professionals from 17 states attended the Mid-Continent Transportation Research Symposium on Aug. 20–21, 2009, an event co-sponsored by the Midwest Transportation Consortium. Held at the Gateway Hotel in Ames, Iowa, there was a rich and diverse program with over 140 presentations scheduled in 29 sessions including a poster session. Thank you to the presenters, special speakers, and attendees, all of whom helped make this one of our most successful symposia to date.

newappointment

CCEE Associate Professor **Shauna Hallmark** became MTC Director after the passing of Tom Maze. Hallmark's research focuses on traffic safety, traffic operations, and transportation air quality. She is an associate professor in Iowa State University's Department of Civil, Construction, and Environmental Engineering, and an associate director of the Center for Transportation Research and Education. She received her PhD in 1999 in civil engineering from the Georgia Institute of Technology, her MS in 1996 in civil engineering from Utah State University, and her BS in 1991 in civil engineering from Brigham Young University. A list of Hallmark's current/recent research projects includes the following:



- Integration of Analysis Methods and Development of Analysis Plan
- Pavement Markings and Safety
- Low-Cost Strategies to Reduce Speed and Crashes on Curves
- Evaluation of Rumble Stripes on Low-Volume Rural Roads in Iowa
- Evaluation of Electronic Speed Limit Signs for Unified Consolidated School on US 30, Eastbound and Westbound.

callout

N.I.

CALL FOR ALUMNI AWARDS

Please submit your awards to be listed in this year's CCEE Annual Report/Update. The deadline is Friday, February 26, 2010. The guickest response is via email to minnaks@iastate.edu.

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394 Town Engineering Building, Ames, IA 50011-3232

or email minnaks@iastate.edu.

in**memoriam**

CCEE would like to recognize alumni who have passed away in the last year between May 2008 and May 2009. The following list is arranged by graduation decade, then alphabetically.

1940s

Alfred Rasmussen (BSCE '40) Gordon Churchill (BSCE '41) John Lieb (BSCE '41) Maurice Albertson (BSCE '41) Magnus Christensen (BSCE '41) Robert Scharnberg (BSCE '42) **Everett Ormsby (BSCE '42)** Marion Wilson (BSCE '43) James Cobb (BSCE '43) Warren Zitzman (BSCE '45) Neil Carpenter (BSCE '47, MenCE '66) John Cota (BSCE '47) Russell Helms (BSCE '48)

1950s Glen Brand (BSCE '50) Kenneth McLaughlin (BSCE '50) Quentin Wildman (BSCE '50) Dale Hawn (BSCE '50) Mark Looschen (BSCE '51) J. Roger Miller (BSCE '51) Denis Kelleher (BSCE '52) Clyde Titusn (BSCE '54) Dennis Van Liew (BSCE '54) **Bob Sandy** (BSCE '57) Robert Johnson (BSCE '57, MSCE '63,

Roger Miller (PrfCE '57, BSCE '58)

Harold Steinbrecher (BSCE '58)

1960s

PhDCE '69)

Robert Bacon (MSCE '62) George Glenn (PhDCE '63)

1970s

Walter Stottmann (MSCE '70)

alumni**news** <u>alumni**news**</u>

he Des Moines Fall 2009 ISU-CCEE Alumni Reception was held on November 17, 2009 at the EFCO Corp. in Des Moines, Iowa. Sponsors were EFCO Corp., Howard R. Green Company and Raker, Rhodes Engineering LLC. Over fifty people attended and among the highlights was a demonstration of the ASCE Steel Bridge competition team in action!

















alumnivisitors

The College of Engineering awarded two CCEE alumni with Professional Achievement in Engineering (PACE) awards at the 2009 Iowa State University Alumni Association Honors and Awards Ceremony. The ceremony was held as part of the annual lowa State homecoming festivities on Friday, October 16 at the Scheman building.





IOWA STATE UNIVERSITY

College of Engineering

CELEBRATION

SAVE THE DATE

SEPTEMBER 23 - 25, 2010

AGENDA

THURSDAY SEPTEMBER 23, 2010 6 PM

ISU Alumni Center Casual dinner

Catered by Hickory Park Restaurant

FRIDAY SEPTEMBER 24, 2010

10 AM - 4 PM Veenker Memorial Golf Course

Golf tournament Lunch provided

Campus buildings: Jack Trice Stadium, C-6

Reiman Gardens

6 PM

Memorial Union Banquet

Optional black tie event

Nationally recognized keynote speakers to be announced at a later date

Kick-off time will be announced a few weeks prior to game SATURDAY SEPTEMBER 25, 2010

> ConE tent Tailgate

Jack Trice Stadium Football game

ISU vs. UNI

Please reserve your hotel room TODAY HOTEL RESERVATIONS

Promotional rates have been arranged at the following hotels. Space is limited so book

early and ask for the 'ConE' rate.

(515) 232-8363 Grandstay Residential Suites (515) 292-8600 Gateway Hotel & Conference Center (515) 233-6060 Heartland Inn (515) 232-9260 Quality Inn & Suites (515) 233-4444 Microtel Inn & Suites

EVENT REGISTRATION

SPONSORSHIP

Registration for the ConE 50th Celebration will go live on May 1, 2010 If you are interested in sponsoring this event, please visit

www.ucs.iastate.edu/mnet/ConE/home.html

State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Diversity, 3680 Beardshear Hall, [515] 294-7612.

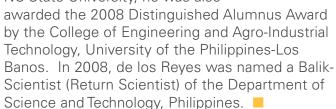
SP 354a October 2009

alumni**news** alumni**news**

alumnushonored

Francis L. de los Reves III (MSCE, 1994) was chosen as a TED Fellow and attended TEDIndia in November 2009.



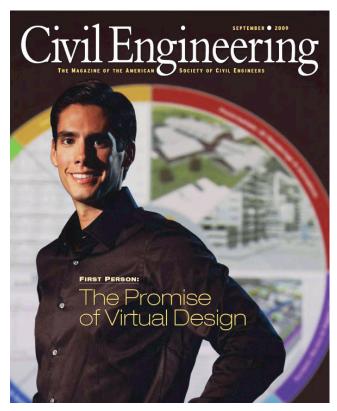




James Fountain, P.E. (BSCE, 1996) In February 2009, Fountain was promoted to Manager Bridge Quality - US for CN Railway in Homewood. IL. He is responsible for ensuring that the more than 4,000 CN track carrying bridges within the US are inspected annually and the bridge condition system (BCS) is up to date

per FRA requirements. He currently lives in Orland Park, IL with his wife Melissa (also a CN Railway employee), daughter Carleigh and son Logan.

alumnusfeatured

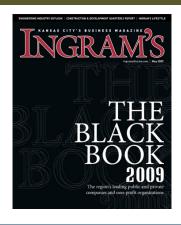


Dimitri Mitchell (BSCF, 2002) was featured on the cover of ASCE September 2009 Civil Engineering magazine. He gave mention to his experiences at ISU and the university's Virtual Reality Applications Center. Mitchell is currently an Engineering Manager at Black & Veatch in Kansas City, Missouri. View his article at http://pubs.asce.org/magazines/CEMag/2009/ Issue 09-09/article1.htm.

alumnus**selection**



William E. Quick (BSCE, 1993) was selected by Ingram's Magazine as one of its "40 Under Forty" recipients for 2009. Quick is currently the Vice President/Shareholder of the law firm Polsinelli Shughart PC. The "40 Under Forty" recognizes the achievements and promise of young executives, professionals and community leaders in the nine bi-state counties and 120 cities that comprise the Kansas City region. While at Iowa State, Quick also received the Outstanding Senior in Civil Engineering award.



Pochop named vice president of Hanson Alaska, LLC



Michael A. Pochop, **P.E.,** (BSCE, 1991) was named vice president of Hanson Alaska, LLC at the beginning of 2009. Pochop previously served as a senior transportation engineer with Hanson Professional Services

Inc., and he was appointed an officer of its wholly owned subsidiary, Hanson Alaska, LLC, based in Anchorage. In his new role, Pochop will manage business opportunities throughout Alaska, partnering with various municipal, borough, state and federal agencies as well as corporate business

Pochop's current focus is the Alaska Railroad Corp.'s (ARRC) Port MacKenzie Rail Extension project, managing engineering services in support of the ARRC's application to construct and operate a new branch line from the existing ARRC mainline between Wasilla and Willow to Port MacKenzie. He also is working on other ARRC projects, including the Northern Rail Extension project, the Ship Creek Intermodal Transportation Center in Anchorage, and both the Fort Wainwright and Fairbanks-area railroad realignment studies.

Pochop has 17 years of experience in the engineering industry, working on a variety of transportation-related projects. He is a member of the National Society of Professional Engineers, the Alaska Society of Professional Engineers, American Society of Civil Engineers, Alaska Professional Design Council, and the American Railway Engineering and Maintenance-of-Way Association.

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Minna Khounlo-Sithep, Communications Specialist CCEE Department, Iowa State University 394 Town Engineering Building, Ames, IA 50011-3232 or email minnaks@iastate.edu Or fill out the online form at: http://www.ccee.iastate.edu/alumni/news-from-you-form. html

student**news** student**news**

bigbeam**undate**





The CCEE/ISU team participated in the 2009 Engineering Design (Big Beam) Competition sponsored by the Precast/ Prestressed Concrete Institute (PCI). The team won the regional big beam

contest and received 3rd place in the overall national championship.

Organized by PCI's Student Education Committee, chaired by Pat Hynes of Knife River Corp. in Harrisburg, Ore., and sponsored by Lyndhurst, N.J.based Sika Corp., the competition offers \$25,000 in prize money to university student teams that excel in designing, fabricating, and testing a precast, prestressed concrete beam under the guidance of local producer members.

learning**competition**



The Freshman CE Keystone Learning Community students enjoyed a paper bridge building challenge/ competition, where the winning model was able to carry an astounding 6 kilogram load spread across a 150 gram bridge!

essaywinner



Bo Wang, a senior in Civil Engineering, was one of the the five winners of the 2009 International Road Federation (IRF) annual student essay competition. Students from more than 20 universities

submitted essays to this year's competition. An international panel of expert judges graded each paper based on content, clarity, style and creativity. Wang was awarded for his paper entitled "Evaluation of Low-Cost countermeasures for Pedestrians" in the Road Safety category. Assistant Professor Nadia Gkritza was Wang's sponsoring professor.

aolfouting



The ISU chapter of Chi Epsilon, the national civil engineering honor society, hosted its annual Fall Golf Outing. The event is a social and fundraising event with profit that goes to a \$500 scholarship fund for a CE undergraduate student. The event was held at Veenker Memorial Golf Course on October 10, 2009 and sponsored by Fox Engineering. There were 12 participants including Chapter president, **Steve Lavrenz,** third from the left in the front row who organized the event.





AGC students help build new Story County boat ramp

Bv: Todd Burras. Outdoors Editor. Ames Tribune. Published: Friday, September 25, 2009

Local canoeists and kayakers who want to slip away for a bit of river paddling can now do so with ease.

A team of Story County Conservation staff, Iowa State University engineering students and local paddling enthusiasts constructed a concrete boat ramp at Sleepy Hollow Park on Riverside Road near U.S. Highway 69 just north of Ames. The 160-foot-long-by-10foot-wide ramp will allow a growing number of residents who own canoes and kayaks, and even anglers with small motor boats, easy access to the Skunk River.

"It's not as much of a typical boat ramp as it is a way to provide access for people who have mobility limitations," said Rick Dietz, a member of the Skunk River Paddlers who also helped write the federal grant that provided funding

for the project. "When we wrote the original federal Recreational Trails Grant back in 2003, we had just met a wheelchair-bound kayaker and had helped him learn to self-rescue, so we proposed two 'handicapped-accessible' hard-surfaced accesses in the grant application — one at Sleepy Hollow and the other at River Valley

Due to having to work around a gas pipeline, the slope for the ramp is slightly more than 11 percent, more than the 5 to 8.3 percent slope required to meet Americans with Disabilities Act specifications. Still, the ramp makes access to the river much more accessible for those with disabilities and the elderly.

"It was a natural place to put a ramp," Dietz said. "And it will make it much easier for people who want to float that stretch of the river to get in and get out." The cost of materials and site preparation was about \$6,000, Dietz said. The money came from a \$29,000 grant Story County Conservation received after applying for it in 2003. Some of that money will be used for signage and a kiosk with information about the natural history of the area that will be added to the park in the future. About a dozen students from Iowa State University's Associated General Contractors group provided much of the labor.

"The AGC group did a really nice job — some appeared to be very experienced," Dietz said. "They may help us rework the River Valley access, too." Dietz said a portion of the remaining grant money may be used this fall to replace a gravel access point with a concrete ramp at North River Valley Park in Ames.

tsawin

Transportation Student Association (TSA) wins 2009 **MOVITE** award

Iowa State University Transportation Student Association won first place in the Missouri Valley Section of the Institute of Transportation Engineers (ITE) MOVITE Student Chapter competition for their submittal of their Institute of Transportation Engineers (ITE) Student Chapter Annual Report.

The award is offered annually to the student chapter whose annual report of activities is selected as the most outstanding. MOVITE extended their congratulations to the following people for their continued involvement in the chapter through their activities and outreach programs:

- Michael Baird, President
- Charlotte Richter, Vice President
- Bradley Grefe, Secretary
- Chris Pross, Treasurer
- Members of the Iowa State University Student Chapter

The award was presented at the 2009 Fall MOVITE meeting held in Springfield, Missouri on September 20-22, 2009. The student chapter received a plague and a \$300 cash award.



student**news** student**news**

Iowa State teams sweep construction engineering competition

Scott Hoskins, senior in construction engineering (left) and

Cole Van Ryswyk, sophomore in construction engineering

present the heavy-civil proposal.

Written by Mary Jo Glanville, College of Engineering

Four teams of construction engineering students from Iowa State University placed first in the 17th Annual Associated Schools of Construction (ASC) Region IV Student Competition held October 28-31 in Nebraska City, Nebraska. This was the first sweep

ever of all four divisions (commercial, design-build, heavy-civil, and residential) by one university. Twentynine teams (six students per team) representing 13 universities from Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota competed. Over the past 8 years, Iowa State teams have placed first 17 times.

Each team had 18 hours and the use of 6 computers and 4 printers

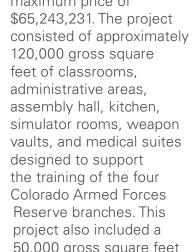
to develop a comprehensive proposal in response to a mock request for proposals. In addition the designbuild team produced 10 architectural design computer drawings and built a computer generated threedimensional model of the project. Upon completion of their proposals, each team gave 20-minute presentations in support of their proposal to a group of industry judges who were involved in construction of the actual projects. Ten minutes of questions and answers followed each presentation.

The commercial team responded to a mock request for proposals for a \$5.7 million project for the AKSARBEN VILLAGE Office Building 5 Core and Shell. The 37,011 square foot building is the future home office for the DLR Group in Omaha, Nebraska, which is also the design architect for the project. Project requirements included a LEED gold certification. The winning commercial team members are seniors Matt Karns (team captain), Austin Davis, Nate Stevenson, and Luke Daugherty; and

sophomores Tyler Kumm and Kathryn Kern.

The design-build team responded to a mock request for the Armed Forces Reserve Training Facility and Field Equipment Shop in Colorado Springs, Colorado,

> with a quaranteed maximum price of \$65,243,231. The project 120,000 gross square feet of classrooms, administrative areas. assembly hall, kitchen, simulator rooms, weapon vaults, and medical suites designed to support the training of the four Colorado Armed Forces Reserve branches. This project also included a 50,000 gross square feet field equipment shop



with offices and maintenance work bays for military vehicles. The facility and site had to qualify for a LEED silver rating. The winning design/build team members are seniors Angela Rohde (team captain), Peter Kataras, and Jimmy Hilton; juniors Rob Cotan and Anthony Brown; and architecture senior Beau Artist. The design-build team has won the first place award 11 out of the last 12 years.

The heavy/civil team responded to a mock request for proposals for the \$11.1 million Sandy River Conduit Relocation in Portland, Oregon. The project involved the excavation of a tunnel 105 feet below ground level (beneath the Sandy River) for two six-foot in diameter conduits, which carry 80% of Portland's water supply. The project also involved a 30-foot and two nine-foot in diameter vertical shafts for access. Heavy/civil team members are seniors Tanner Wilks (team captain) and Nick Roberts; juniors Scott Hoskins, Ryan Noteboom, and Andrew Trible; and sophomore Cole Van Ryswyk.

student**scholarship**

Peter Holleman, Junior in Civil Engineering, received an AREMA scholarship sponsored by Union Pacific.

The AREMA Educational Foundation provides scholarships to engineering students who are specializing in the railway industry and supports other educational and training endeavors that help to ensure the future of the profession.

Holleman received the William F. Wimmer Scholarship (\$1000) sponsored by Union Pacific. The scholarship winner must be an enrolled student who is in their Sophomore, Junior or Senior academic year located at a U.S. Midwestern, Southwestern or Western University with an accredited* engineering curriculum, pursuing a BS or higher degree in Civil Engineering (all disciplines), Industrial Engineering Electrical Engineering, Mechanical Engineering or Construction Management.

toolniaht







Nov. 2009, Tool Night—AGC students leaders, peer mentors, and – for one session—a dad of one of our peer mentors team up to introduce ConE Learning Community students to the tools of the construction trade. In the fall of 2009, there sessions were provided: power and hand tools, fall protection and concrete finishing tools. Learning community student rotate through all three sessions spending about 20 minutes in each session include the presentation and questions and answers.

industry**niaht**







Sept. 2009, Welcome to Industry Night—Learning community students, industry mentors, peer mentors, faculty and representatives from learning community sponsor organization gather the Thursday before Thanksgiving for the Welcome to Industry Night to celebrate finishing most of the semester for first semester ConE freshmen and transfer students. The recently, the meal is a spaghetti dinner that is cooked by one of the learning community student teams. Usually between 100 and 150 people attend, depending on the size of the learning community for that semester. These pictures are for the Fall 2009 version of this event.

fieldtrip











Nov. 2009, Student from ConE 322 Construction Equipment and Heavy Construction Methods (affectionately nicknamed "Trucks and Tractors") visit the our local Caterpillar dealership Ziegler, Inc at their Altoona, Iowa location. This is a first class, modern facility with training rooms, a huge parts inventory, and state-of-the-art repair facilities. The highlight of the Fall 2009 trip was a chance to climb aboard a GPS Automatic Machine Guidance bulldozer.

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