CIVIL REMARKS

CIVIL AND ENVIRONMENTAL ENGINEERING

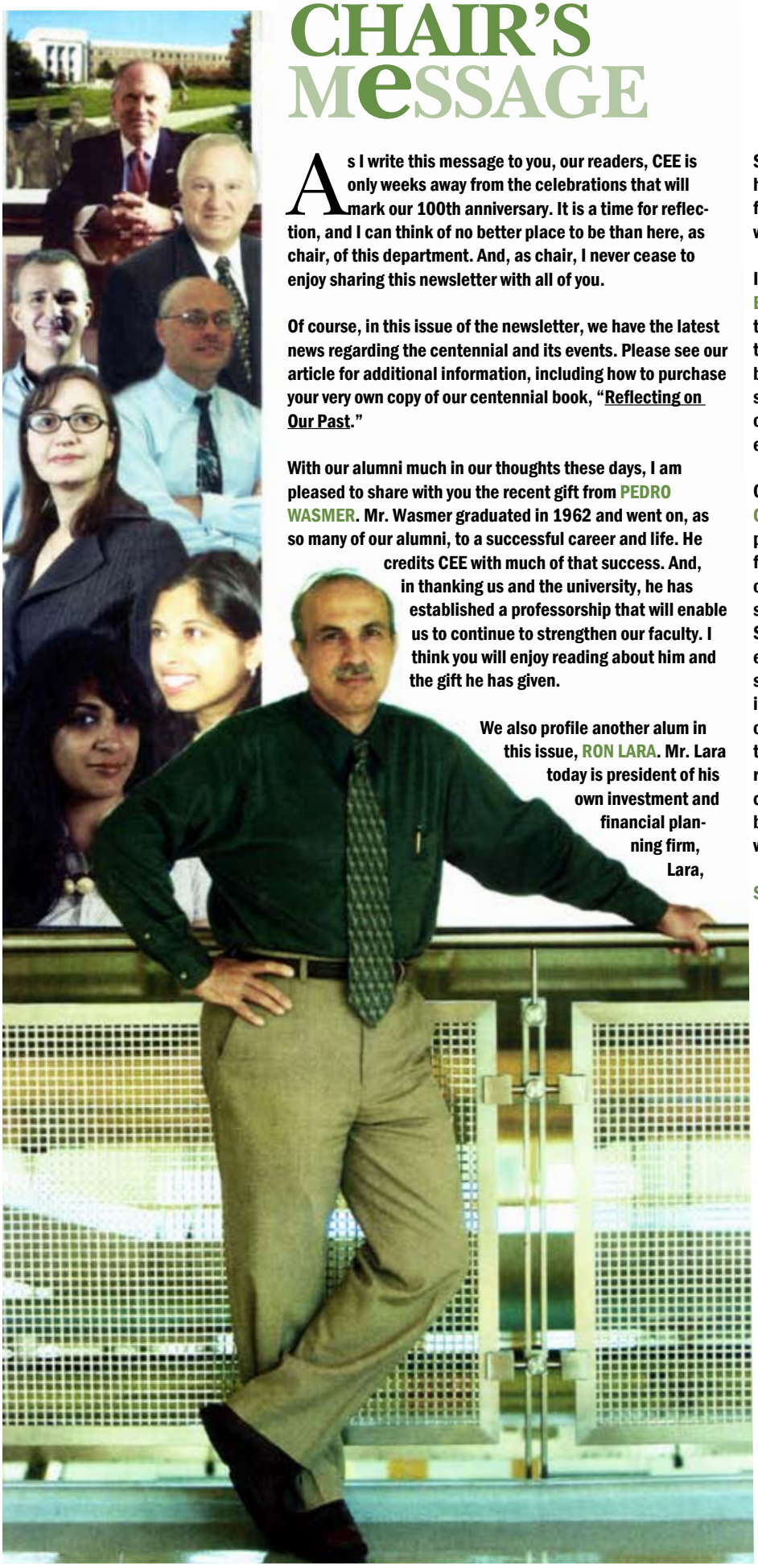
A NEWSLETTER FOR THE ALUMNI AND FRIENDS OF THE DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING

SPRING 2008
VOL. 7, NO. 2

INSIDE

ALUMNUS
PEDRO WASMER
ESTABLISHES PROFESSORSHIP WITH RECENT GIFT

STORY ON PAGE 3



CHAIR'S MESSAGE

As I write this message to you, our readers, CEE is only weeks away from the celebrations that will mark our 100th anniversary. It is a time for reflection, and I can think of no better place to be than here, as chair, of this department. And, as chair, I never cease to enjoy sharing this newsletter with all of you.

Of course, in this issue of the newsletter, we have the latest news regarding the centennial and its events. Please see our article for additional information, including how to purchase your very own copy of our centennial book, "Reflecting on Our Past."

With our alumni much in our thoughts these days, I am pleased to share with you the recent gift from PEDRO WASMER. Mr. Wasmer graduated in 1962 and went on, as so many of our alumni, to a successful career and life. He credits CEE with much of that success. And, in thanking us and the university, he has established a professorship that will enable us to continue to strengthen our faculty. I think you will enjoy reading about him and the gift he has given.

We also profile another alum in this issue, RON LARA. Mr. Lara today is president of his own investment and financial planning firm, Lara, Shull & May, and he, too, looks back fondly on his years here. While Mr. Lara did not remain in the civil engineering field, he credits a large part of his success in the financial world with what he learned as an engineering student.

In other news, we profile ENCE 300: FUNDAMENTALS OF ENGINEERING MATERIALS. Professor Dimitrios Goulias has taught this course at CEE for the last nine years. He admits that it is a continually changing field and works hard to bring those changes and how they impact the industry to his students. As one of those students says, "You get a real idea of how things are done in the real world." That is what a solid education in engineering should be all about.

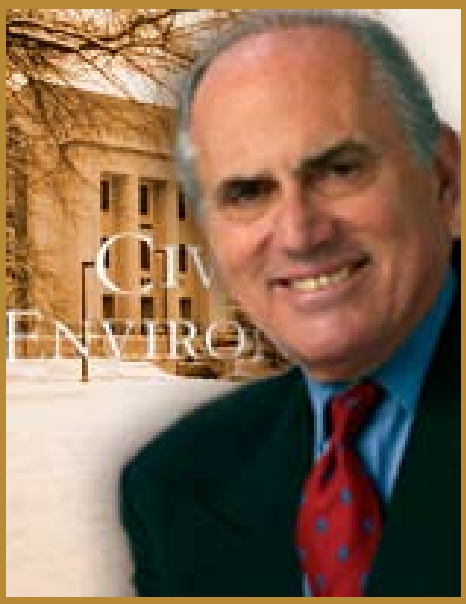
Other faculty members included in this issue are CINZIA CIRILLO and ALLEN DAVIS. Professor Cirillo is our faculty profile. She joined the department last year, having come from Europe, where she has extensive experience in the field of transportation. The recipient of the Marie Curie Fellowship, she is among an elite group of researchers in her field. She is enabling CEE to offer new courses in her areas of expertise, including courses in discrete choice analysis and survey methods in transportation. Professor Davis' research in bioretention and novel stormwater management technology is our research profile. Professor Davis is responding to a real and immediate environmental concern with his research and shows a compassion and commitment that is common within our faculty for not only conducting research but applying that research in making a real difference in our world.

SWAPNA SHARMA is our student profile. She is preparing to graduate in the spring. Ms. Sharma is an outstanding student who has been committed to experiencing all that CEE and the university have to offer. She provides our readers with a glimpse inside the life of a very busy and promising young woman as she prepares to take the next steps into the field of engineering. We look forward to watching her as she leaves us as an undergrad and continues her education as a graduate student and on.

If you are reading this message, then you are in some ways already familiar with the individual chosen for our staff profile. Her name is SANGEETA KAUL and she is our graphic designer and public relations coordinator. She designs this newsletter and many other publications for our office. Since joining our staff a couple of years ago, she has given CEE a new look and a new image. She is a talented young woman who embraces challenges with creative flair, always producing top-notch publications for us, including the centennial book I mentioned earlier. With individuals such as Ms. Kaul, and the countless others who make CEE a success, the future is bright indeed as we begin counting down the next 100 years.

Ali Haghani

Alumnus Pedro Wasmer Establishes Professorship with Recent Gift



Pedro Wasmer has always relished learning for learning's sake. And, when he recalls his days as a civil engineering student at Maryland, he remains grateful for the opportunity he was given to step outside the confines of a traditional engineering education.

"The university and civil engineering department went out of their way to help accommodate my variety of interests," says Wasmer, who graduated in 1962 and recently retired as CEO and president of Somerset Capital Group, Ltd., which leases computer systems and networking equipment, among other items. "Civil engineering afforded me a very civil education. I was able to learn about architecture, history, economics and politics. To this day, I feel this is one of the greatest places to study."

With that very idea in mind, Wasmer recently made a gift of $500,000 to CEE to establish an endowed professorship in the department. "This professorship will help the department tremendously in recruiting young faculty scholars," says Ali Haghani, department chair. "It will provide resources for supporting these new faculty members in building a strong research program in the early years of their careers."

> "THIS PROFESSORSHIP WILL HELP THE DEPARTMENT TREMENDOUSLY IN RECRUITING YOUNG FACULTY SCHOLARS," SAYS ALI HAGHANI, DEPARTMENT CHAIR.

Adds Wasmer, "It's always important to have strong faculty to help students learn."

Wasmer came to the United States from Cuba at the age of 11, settling with his family in Baltimore. After graduating from the Baltimore Polytechnic Institute, he continued his education at Maryland, where he was class president and president of the Student Government Association.

Professionally, Wasmer became involved with information technology in 1964 by joining IBM, later Honeywell, and then DPF, Inc., a Fortune 500 company which leased high-technology equipment. In the 1980's he went into business for himself, leasing high-tech assets. In 1984, Wasmer formed Somerset Investment Services, Ltd., and in 1989, St. James Leasing, Ltd. Somerset Capital Group, Ltd., was founded in 1996 to operate as the parent of the other two companies.

Besides his recent gift, Wasmer has remained involved with his alma mater, giving of himself not only financially but personally. He serves on the A. James Clark School of Engineering's Board of Visitors. He has also has made other gifts to the university and Clark School, including one to the Engineers Without Borders program.

"I feel that Maryland is very consequential in my doing what I have with my life," he says.

New Associate Professor Yunfeng Zhang Joins CE Faculty

Yunfeng Zhang, an associate professor, has joined the Department of Civil and Environmental Engineering. Zhang's primary research interest is in the integrated engineering field of smart structures technology, "which will have a far-reaching impact on the way future civil engineering structures are to be designed, constructed, maintained and retrofitted," he explains.

More specifically, Zhang is studying sensor and structural health monitoring technologies to enhance the operating condition and reliability of civil infrastructures in order to prevent catastrophic failure events, such as a bridge collapse. Zhang is also working on innovative damping technology for cold region applications, using a copper-based super elastic alloy to restrain bridge motion during strong earthquakes, and also has done work in fatigue assessment using advanced sensor technology.

"I decided to join the University of Maryland because its engineering program emphasizes crossdisciplinary research and education," says Zhang. "This program is one of the best civil engineering programs in the nation for covering all aspects of civil infrastructure - construction, structures, transportation, hydrology. Civil engineering research and education requires knowledge and collaborative work from different fields, and I believe this program provides a great opportunity to do this."

Zhang, who is the recipient of an 2006 NSF CAREER Award, has been the lead organizer of the NSF-sponsored U.S.-Korea Workshop on Smart Structures Technology for Steel Structures in 2006 and the U.S-Korea Workshop on Bio-inspired Sensor Technology and Infrastructure Monitoring in 2008. He has also received the best paper award from the *ASCE Journal of Computing in Civil Engineering* for his paper on a wavelet-based sensor data compression method for civil infrastructure monitoring use.

Zhang holds a bachelor's degree and master's degree in civil engineering from Tsinghua University and Tongji University, China, respectively. He earned his Ph.D. degree in applied mechanics from Caltech in 2001.

STUDENT NEWS

A recent gift of stock valued at more than $85,000 has supplemented the **Dan Waldo Scholarship Fund**, more than doubling the size of the fund. The scholarship was established in 1985 by Dale and Elizabeth Waldo in memory of their son, Dan, to support outstanding juniors and seniors in civil engineering. Sadly, Dale Waldo passed away in December. Over the history of the scholarship, more than $22,000 has been awarded to 17 students. This past year, Alexander Le and John Thornton, both sophomores in civil engineering, received the scholarship.

CEE is now offering three specialized graduate programs in **Water Resources/Hydrology: Hydrology and Water Quality Modeling**, **Hydrology and Urban Land Development**, and **GIS-Based Hydrologic Analysis and Modeling**. More information about the department's graduate program in water resources can be found at: http://www.civil.umd.edu/grad/waterresources. html

The **A. James Clark School of Engineering**'s fall commencement ceremonies took place on December 20 in the Cole Student Activities Building. Tom Scholl, a technology entrepreneur and Clark School Board of Visitors director, served as commencement speaker. Scholl encouraged the graduates to find mentors, to learn about finances and to think big.

The University of Maryland's (UMD) **Solar Decathlon** team was awarded second place in the 2007 Solar Decathlon. The event, organized by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy, was held in Washington, D.C., last October. The team was also honored with the People's Choice Award for the second time in a row. The UMD house or "LEAFHouse," took its design inspiration from the facets of a leaf. **Kaye Brubaker**, associate professor with CEE, together with architecture professors Amy Gardner and Julie Gabrielli, advised the team.

William McGill, a Ph.D. candidate, was awarded a 2007 travel scholarship from the Society for Risk Analysis to attend its annual meeting last December in San Antonio, Texas. McGill was asked to present a paper at the annual meeting. McGill is working on risk analysis for the protection of critical infrastructure funded by the Maryland Emergency Management Agency and city of Baltimore under the advisement of Professor **Bilal M. Ayyub**.

The University of Maryland chapter of **Engineers Without Borders** visited the West African country of Burkina Faso in early January to install 11 solar panels and lighting systems in village schools surrounding the town of Dissin. The installation of the sustainable energy sources will enable evening classroom activities, community meetings and other gatherings for the Burkinabé citizens. This tour follows up on a project evaluation trip conducted a year ago.

Jungho Kim, an associate professor of mechanical engineering, accompanied the team as a faculty advisor to the student volunteers, most of whom were from the A. James Clark School of Engineering.

Other students were from the physics department and the Robert H. Smith School of Business. CEE's **David Lovell**, an associate professor, also joined the tour to assess future projects that will automate the public water pumping process for storage in a tank.

To show their gratitude for the efforts of the team, village elders presented them with six live chickens, a live pheasant, one bag of onions and lot of memories for their efforts. (PHOTO: DR. DAVID LOVELL)

Megan Filo, a research assistant and M.S. candidate under the supervision of Professor **Dimitrios Goulias**, was invited and sponsored by NSSGA to present a paper at the 15th Annual ICAR Symposium in Austin Texas, on April 9 - 12, 2007. The paper and presentation entitled, "*Effects on Mortar Properties of Fine Aggregates Failing to Meet ASTM C133 Requirements*," included an assessment of a major problem that the construction industry is facing today since a staggering 90% of the fine aggregates for cement-based mortars do not meet the current ASTM specifications.

Sushant Upadhyaya, a research assistant and Ph.D. candidate under the supervision of Professor Dimitrios Goulias, received a Highly Commendable Paper Award at the **1st International Conference on Recent Advances in Concrete Technology**, in Washington, D.C., on Sept. 19-21, 2007. The paper and presentation entitled "*Evaluation of in Place Strength of High-Volume Fly Ash Concrete*," addressed a critical issue on concrete strength prediction that the concrete community is phased with when using high volume cementitious replacement materials such as fly ash.

Light the fire, burn the marshmallows and have fun! As the fall semester got underway, CEE's transportation graduate program went camping at Cunningham Falls State Park in Maryland. The camping trip was organized by **Elise Miller-Hooks**, associate professor and the transportation program coordinator. Graduate students joined the fun together with some faculty members and their families. The group

STUDENT NEWS CONTINUES ON PAGE 10

STUDENT PROFILE

‘SOARING STRUCTURES AND SPANNING BRIDGES’

MEET UNDERGRADUATE STUDENT SWAPNA SHARMA

As she prepares to graduate this spring, specializing in infrastructure engineering with a minor in project management, Swapna Sharma has made the most of her time as an undergraduate student. She is the recipient of numerous scholarships and was recently named the department’s outstanding senior. She has served as the president of the Chi Epsilon Honor Society and has been a participant in the Engineering Honors Program, working with former faculty member Ricardo Medina and conducting research on fire-related structural failures. Sharma is also an active member of the ASCE student chapter and is a Clark School Ambassador. And, outside of the classroom, she has participated in several internships.

Recently, Sharma took time out of her hectic schedule as a graduating senior to answer questions about her time at CEE and what it has meant to her – personally and professionally.

Where are you from originally?
I am originally from Canada. I moved with my family to Maryland when I was in eighth grade. Both of my parents are originally from India and they are the first and only of their families to settle outside of India.

How did you become interested in studying engineering?
When I was younger, I was always drawn to science and math, but I also loved to draw and do crafty projects. Engineering seemed like the ideal fusion of the subjects that best suited me, and I loved the idea of creating something original and innovative to solve a problem. Civil engineering in particular was my first choice because I always admired tall, soaring structures and vastly spanning bridges. Moreover, civil engineers have a tremendous impact on the world around us, ranging from the water we drink, to the roads we travel on, to the buildings we work and live in.

And, why did you decide to attend the University of Maryland?
I chose to attend the University of Maryland because of its reputation as a prominent research institution.

What did you know about the university’s engineering school coming into the program?
Before coming to the Clark School, I knew that engineering was a limited enrollment program, meaning that it was both competitive and selective. In addition, I had learned about the variety of programs available to students, including Gemstone, Hinman CEOs, Quest, Inventis and more. I had heard about the opportunities students had to apply their skills outside of the classroom, as in study abroad programs as well as special team projects like the Solar Decathlon, the Concrete Canoe, Engineers Without Borders projects and much more.

How would you describe your experience as a student here?
As I enter into my final year at the University of Maryland, I can say with certainty that my experience here will be truly unforgettable. When I first began at the Clark School, I had set my sights on designing tall structures and endless bridges. With the help of my coursework in the past years — along with excellent internship experiences — that goal no longer seems so implausible or far-fetched. As a student, I believe that the experiences and support the Clark School has provided me with will guide me well toward my goal of becoming a structural engineer.

What have been the most rewarding and most challenging experiences you’ve had as a student?
My most rewarding and challenging experience as a student was organizing the fall career fair sponsored by Chi Epsilon, the National Civil Engineering Honor Society. When I first began as the chapter’s president in fall 2006, I had just been initiated and had little-to-no clue about what was involved in coordinating a career fair. This experience proved to be quite challenging, as there were numerous details that had to be considered far in advance, not to mention the dozens of daily e-mails from employers. Through this experience, I learned firsthand the necessity of delegation, effective leadership and continual communication. In the end, the fair was a success and served as an excellent career resource for civil engineering students.

How beneficial have your internships been to your learning process and why?
My first internship was at a land development firm that does everything from site engineering to urban design to natural resource management. The internship was useful in that I became adept in AutoCAD and I gained a better understanding of how to plan, draw and revise site/utility plans. However, after drafting what seemed to be half the curb and gutter plans for all of Urbana, Md., I realized land development might not be the best career option for me. My next internship was in the shop drawing and field services department at a structural

design and repair firm. Here, I learned mainly how to review shop drawings and spot common errors. I also got the chance to assist in inspecting a steel-framed structure as well as a wood-frame building.

How beneficial did you feel your research with faculty member Ricardo Medina was in preparing you as a professional engineer?
Working with Dr. Medina taught me to think more creatively as well as more logically as an engineer. Under his direction, I performed a literature review on existing publications in the field of fire-based structural failures. I reviewed papers ranging from the notable Cardington tests to recent papers on state-of-the-art Finite Element Modeling techniques and computerbased fire simulation. This literature review was an imperative step in the research process as it provided me with valuable insight of what was already known and what is yet to be determined in this field. Dr. Medina stressed the importance of thinking of a problem and its solution through various perspectives, and to consider how logical the solution was in terms of its viability and effectiveness.

STUDENT PROFILE CONTINUES ON PAGE 11

ALUMNI NEWS

Richard N. Reed, B.S. '50, is supporting undergraduate students through the establishment of the **Richard N. Reed, Jr. Scholarship Fund**. The fund was created with an initial gift of $100,000. "I wanted to make a difference and leave my permanent mark on the university, so I created an endowed scholarship for deserving students," says Reed. The first student recipient of this scholarship will be selected in 2008.

"Mr. Reed is one of our most loyal alumni," says **Ali Haghani**, department chair. "We are grateful for his generosity that will bring great benefits to our students for years to come."

David D. Dee, **Jr.** was elected governor of Region 4 of the American Society of Civil Engineers. He received his master's degree in civil engineering from the university. Dee has been actively involved in the engineering community for years and has been honored with many awards.

The China Post online recently featured an article on an exciting new invention by CEE alum, **James Whang**. The invention, which is called an autonomous swimming cargo container, has been granted a U.S. patent. Whang is a 1971 graduate who obtained his Ph.D. in environmental engineering from the university. This invention is the latest product developed by Whang's company Advanced Engineering & Planning Corporation, Inc., which is based in Gaithersburg, Md.

David G. Mongan, B.S. '71, and M.S. '76, has been elected president of the American Society of Civil Engineers (ASCE). He was installed as ASCE president earlier this month and will hold the organization's highest elected office until the fall of 2008. Mongan is president of Whitney, Bailey, Cox & Magnani, LLC, in Baltimore, an architectural, engineering and construction firm. Mongan previously served as project manager for the $80 million design/build project extending Baltimore's Light Rail to Hunt Valley, Penn Station and Baltimore-Washington International Thurgood Marshall Airport. Additional projects under his guidance include the I-97 interchange with U.S. Route 50 and I-195 to Baltimore-Washington International Thurgood Marshall Airport. Mongan is a recipient of the ASCE Maryland Section's Civil Engineer of the Year Award, the Engineering Society of Baltimore's *Engineer of the Year Award* and the *William H. Wisely American Civil Engineer Award*.

J. David Foster is a senior urban advisor for the Administrative Staff College of India. He writes, "I work with an outstanding team of Indian professionals where we jointly work with state and municipal water systems throughout the country, assisting them to convert from traditional intermittent (one to four hours per day) water supply systems to financially sustainable continuously pressurized (24/7) sustainable water supply systems. Early pilot demonstrations reveal that this approach, when properly managed, not only reduces contamination but reduces total cost and loss of water." Prior to his current work, Foster had "rewarding" careers with both the U.S. Environmental Protection Agency and the U.S. Agency for International Development.

Mark J. Glaudemans, who received a bachelor's degree in 1984 and a master's degree in 1994 with a concentration in water resources, has been working as a hydrologist for the Office of Hydrologic Development for the National Weather Service (NWS) in Silver Spring, Md., since 1989. He serves as the executive leader of projects supporting the NWS mission to forecast our nation's rivers and to provide flood and flash flood warning services. Glaudemans has twice been the recipient of the Department of Commerce Bronze Medal award. He received the first one in 1998 for primary development of the operational hydrologic forecast system used at 122 National Weather Service Weather Forecast Offices. And, in 2003, he was honored for the co-development of a major system for monitoring and predicting danger flash flood events using radar, soil moisture and GIS data.

Nicole Ferran, who received her bachelor's degree in 1996 from CEE, is a senior engineer and project manager with Robert Silman Associates, PLLC. A registered professional engineer in the states of Maryland and California, Ferran has worked on various projects, such as the Swiss ambassador's residence in Washington, D.C., as well as numerous renovations, including the Virginia state capitol and the Patrick Henry Building in Richmond, Va. More recently, Ferran has been working on the renovation of the U.S. Supreme Court and is the project manager for the Arts Center at the University of Virginia in Wise, among other projects.

Michelle Neukirchen, the second student president of the university's chapter of Engineers Without Borders (2004-2005) and a 2005 BSCE graduate, took a two-year assignment in 2005 with Catholic Relief Services (CRS), working to supply water and sanitation to 100 villages in the areas of northern Pakistan devastated by the 2005 earthquake. She is now in charge of the CRS operations for all Pakistan. (PHOTO: (HTTP://CRS.ORG/)

The National Transportation Safety Board recently announced that a serious design flaw was found in some of the gusset plates on the I-35W bridge in Minneapolis which collapsed last summer. The information came from the *FHwA Turner-Fairbank Highway Research Center Interim Report*, which was co-authored by two CEE alums, **Reggie Holt** and **Joey Hartmann**. Holt is a senior structural engineer with the Federal Highway Administration's Resource Center and Hartmann is a senior research structural engineer with the Federal Highway Administration's Turner-Fairbank Highway Research Center. Holt received his bachelor's degree in 1989 and his master's degree in 1993. Hartmann received his bachelor's degree in 1990, his master's degree in 1995 and his Ph.D. in 2005.

CEE alums **Andrew Radcliffe**, **Jr.** and **Amanda Gable** were married on July 14, 2007, at Calvary United Methodist Church in Frederick, Md., followed with a reception in Musket Ridge Golf Club in Myersville.

Andrew is a 2003 graduate with a B.S. in civil engineering. He is employed as an engineer with Loiederman Soltesz Associates in Frederick.

Amanda also received her B.S. in civil engineering in 2003. She is an engineer with the Frederick County Division of Public Works, Office of Transportation Engineering. Congratulations to both of them!

ALUMNI NEWS CONTINUES ON PAGE 10

A GOOD INVESTMENT

ALUM CREDITS ENGINEERING EDUCATION IN HELPING HIM FIND SUCESS IN HIGH FINANCE

As a successful financial planner, Ron Lara knows a good investment when he sees it. And, he feels that his education as a civil engineering student was just that. "The time I spent at Maryland has been invaluable to my career and my life," says Lara, who today is president of his own investment and financial planning firm, Lara, Shull & May with offices in both Virginia and Colorado. "I loved my time at Maryland."

While the destination was worthwhile, Lara, who is originally from the Washington, D.C., area and received his bachelor's degree in civil engineering in 1968, does admit that the getting there was a bit bumpy. Only recently informed that he has a form of Attention Deficit Disorder, Lara struggled throughout much of his education, from elementary school and on.

"I had difficulty focusing, " he says.

But at the university Lara found faculty members who took extra time and effort with him. "The teachers there helped me so much," he says. Despite "flunking out "as he puts it twice early on he finished his junior year with a grade point average of 3.0. "That was phenomenal for me," says Lara, who has remained faithful to his alma mater with such activities as serving on the department's board of visitors. "I remember a real change happening when a particular professor took me aside and showed me how to solve engineering problems. The way he explained it, it just clicked for me."

With his academics on target, he plunged into the other opportunities the university offered. He was president of the student chapter of ASCE and president of the campus ski club. "I not only got a good education," he says, "I polished my social skills."

And, the engineering student was also learning about an engineering process called the critical path method, which would prove to be significant in his future business success.

After receiving his degree, Lara focused on becoming a professional engineer. He had developed an interest in "exploring for oil." "I had this great soils teacher at Maryland," he explains. And, he was determined to get hired.

"I had a plan," he says, grinning. "I decided that before I went on an interview that I would study up on what research that particular company was doing. When I first walked into the door, I'd immediately ask about the research. That impressed them."

It certainly must have impressed Humble Oil and Refining Company in New York which hired Lara and made him an assistant district engineer. His career in the oil business was short-lived, however. He was drafted into the Army in 1969. Lara was stationed at nearby Fort Meyer and with his engineering skills and computer programming skills went to work at the Pentagon for the next two years.

It was during this time that he found his true calling. "While I was in the military I met a couple of guys who were starting a securities brokerage firm," he says. "I joined them. I worked at the Pentagon from four in the afternoon until midnight. And, in the morning hours I would sell mutual funds door to door."

He also decided during this time to return to his alma mater for a master's degree in computer science. His uniform though was not well received on campus by those students opposed to the Vietnam War. "I got all kinds of grief," he says. "I resented it. This was my school."

Lara eventually chose not to return to finish his master's degree "I just decided it really wasn't what I was suited for," he says.

But the knowledge he had gained, much like what he had learned in engineering, would prove very useful. "When the first Apple computer came out, I got one," says Lara. "I began to write programs to solve financial problems, especially for retirement planning. I would calculate the growth rate the client needed to earn, based on the assets they had, to achieve their lifetime and retirement goals for whatever age they wanted to retire at." Adding, "All these programs I had written, no one else had them."

In 1981, Lara, who had already become one of the first designated certified financial planners in the Washington, D.C., area founded Lara, Shull & May. "From the beginning I used the critical path method I had learned at Maryland as an engineering student," he says. "This is where when a client walks in our door we don't just invest their money, but take the client through a process from A to Z – identifying goals and concerns in their life."

Lara is responsible for developing two investment strategy tools: The Lifetime Success Solution and the Retirement Success Solution. In 2006 he also authored a book on *The Retirement Success Solution*, which details the steps necessary to achieve retirement goals. The company has thrived so that in 2007 Lara, Shull & May partnered with Focus Financial Partners, LLC, creating a leading partnership of independent fiduciary wealth management firms. Lara also manages the U.S. Treasury Bond Management Program as a co-founder of The Lara Group, Ltd., which was formed in 1991 and provides clients with a system strategy for buying and selling U.S. Treasury bonds.

His success has even followed him on vacation. He and his wife enjoyed a vacation home in Colorado. But word soon spread about his investment expertise and he began getting business there. "My wife said, 'Why don't we live here and you can commute back to Virginia?" he says. "So, I opened an office here six years ago."

By helping guide others, Lara has found his own place. "I get a lot of satisfaction from helping people," he says. "Recently when the market took a big hit, our people were okay. We'd taken the steps to make sure of that. I can't tell you how good that makes me feel. That's why I'm here, and I love it."

Adding, "And the University of Maryland helped me achieve it."

FACULTY NEWS

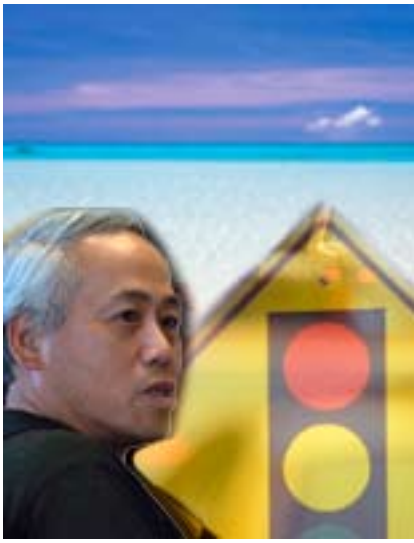
PROFESOR GREGORY BAECHER APPOINTED TO NASA'S PLANETARY PROTECTION SUBCOMMITTEE

Gregory Baecher, Glenn L. Martin Institute Professor of Engineering, has been appointed to the Planetary Protection Subcommittee of NASA's Science Mission Directorate. The committee, which includes representatives of industry, academe and government, assesses issues and risks of biological contamination for planetary missions, and for biological contamination associated with the launch and return of spacecraft in interplanetary missions and their potential failure modes.

Professors **Gregory Baecher** and **Bilal Ayyub** have each been awarded the Army Commander's Award for Public Service by Lieutenant General Robert L. Van Antwerp, chief of engineers, U.S. Army Corps of Engineers. Baecher and Ayyub were recognized for their contributions to the Interagency Performance Evaluation Taskforce (IPET). IPET was established by the chief of engineers in Oct. 2005, with the objective of understanding the behavior of the New Orleans Hurricane Protection System in response to Hurricane Katrina and of assisting in applying that knowledge to the reconstitution of a more resilient and capable system. Both Baecher and Ayyub served as members of the IPET Risk Analysis Team.

Gerald Galloway, research professor and Glenn L. Martin Institute Professor of Engineering, is the recipient of the *2008 ASCE Outstanding Projects and Leaders (OPAL) Lifetime Achievement Award*. ASCE established the OPAL awards in 1999 to celebrate the achievements and recognize the contributions of civil engineers worldwide. Galloway also delivered the second annual Gilbert F. White Lecture in the Geographical Sciences in Washington, D.C., in February. The lecture is organized by the Geographical Sciences Committee of the National Academy of Sciences. His lecture was entitled "*Managing American Water Resources: Recognizing the Realities of Geography*." And, Galloway recently spoke at a forum entitled "*A New Sustainability for the Future of the Gulf Coast*," which was the first gathering of America's Energy Coast Leadership. The goal of the new program is to ensure a stronger voice for the region through dialogue among representatives of government, industry and non-governmental organizations. National leaders also discussed dramatic wetland loss in the Gulf Coast region and the need for national recognition of linkages between coastal sustainability and domestic energy security. Finally, Galloway spoke on a civil engineer's duty during the CEO Forum on November 1 in Orlando, Fla. The event was on "*Every Engineer's Duty — What Tragedy Has Taught Us about Professionalism, Ethics, Leadership and Public Safety*."

Professor **Gang-Len Chang**'s Traffic Safety and Operations Laboratory recently received an extension phase of $300,000 to enhance its Ocean City traffic monitoring and emergency evacuation systems. The primary task of this phase is to deploy 30 traffic sensors between Salisbury and Ocean City, Md., and provide estimated travel times via the roadside variable message sign. The proposed system will also enable Chang's research team to investigate the impact of provided travel time information on the route choice behavior of motorists, and monitor the day-to-day evolution of traffic patterns on U.S. 50 and I-90 between Salisbury and Ocean City. Chang's lab has operated the ocean traffic monitoring and evacuation system over the past three years and conducted various evacuation and traffic control strategies for the Eastern Shore region. The total research funding, including this extension of six months, has amounted to $1.2 million.



Stuart Milner, research professor, recently gave a keynote talk on "Autonomous Configurability and Control in Dynamic Wireless Networks" at the Georgia Institute of Technology. Milner is the director of the Center for Networking of Infrastructure Sensors and the associate director of the Maryland Optics Group.

Steven Gabriel, associate professor, was a keynote speaker at the Infraday conference on applied infrastructure research in Berlin, Germany, at the Technische Universität Berlin. He spoke on "*Modeling Infrastructure and Network Industries: Theory and Applications*."

NEXTOR, the National Center of Excellence for Aviation Operations Research, has received a two-year, $1.04 million grant from NASA to evaluate methods of relieving the nation's overburdened aviation system through improvements to its air traffic control system. "*Advanced Stochastic Network Queuing Models of the Impact of 4D Trajectory Precision on Aviation System Performance*" will build FACULTY

FACULTY NEWS CONTINUES ON PAGE 10

FACULTY PROFILE

‘BOTH SIDES OF THE OCEAN’

CINZIA CIRILLO BRINGS INTERNATIONAL EXPERTISE TO TRANSPORTATION ENGINEERING PROGRAM

Having already established an impressive career in Europe, Cinzia Cirillo recently joined CEE as an assistant professor in the area of transportation. “I thought it would be interesting to have experience working in both Europe and the United States and to know both sides of the ocean,” she says with a smile.

Cirillo’s area of expertise is in transportation demand analysis. “Essentially using mathematic and econometric models to study travel demand,” explains Cirillo, who joined CEE in 2006. She brings her knowledge and experience to CEE as the department offers courses in this area for the first time. “That’s one of the main reasons why I’m here,” she says. As such, she is teaching new courses in discrete choice analysis and survey methods in transportation.

Although, she is adjusting well to life as a faculty member in a different country, Cirillo admits to not initially setting her sights on a career in academics. Her plan as a young student in her native Italy was to work for the national railway system. In pursuit of that goal, she attended the University of Naples, receiving a bachelor’s degree and a master’s degree in civil engineering in 1994. She also earned the university’s highest academic honor at the end of her master’s degree.

Cirillo continued her education by receiving her Ph.D. in transportation engineering in 1998 from the Polytechnic School of Engineering in Torino, Italy. In fact, Cirillo stood out once again, receiving the highest score at the national examination for Ph.D. access. “In Italy you must pass a national examination in order to access a Ph.D. program,” explains Cirillo.

In 2000, Cirillo was awarded the prestigious two-year Marie Curie Fellowship, while also joining the University of Namur in Belgium as an associate researcher, where she remained until joining CEE. Her work as a Marie Curie Fellow would result in her receiving the best research report award for her paper on “*Developing Research Activity Chain Methodologies for Application in Transport Policy Assessment.*’

“That was a turning point for me,” she says of the fellowship “This was really the beginning of my academic career. I realized this was my future.”

From there, Cirillo received a post-doc position from the Belgian National Science Foundation, where she spent several months in the United States at Northwestern University and conducted research in collaboration with ETHZurich, a science and technology university in Switzerland.

Today, besides her research on transportation demand analysis, Cirillo is also involved in research on transport modeling techniques and survey techniques, including travel diary and stated preference methods and activity-based models.

More specifically, “I’m looking at how model travel behavior can respond to issues, such as concern for the environment,” says Cirillo. “The concern about the impact on the environment of new infrastructures and greenhouse gas emissions, these are problems we deal with every day.”

She has conducted research on stochastic programming to solve complex discrete choice models with simulations. And, along with a former Ph.D. student from the University of Namur, is the co-author of a new software package called *AMLET*, written to estimate mixed logit models.

However, Cirillo has not confined her skills and abilities to the academic environment alone, but has worked with numerous companies and agencies. Work she finds especially gratifying. “It’s rewarding to present results to people who don’t work in the field, but who will say to you, ‘This is what we thought, but we didn’t have the tools to measure it.’ And, you can supply them with that information.”

Her consulting experience is extensive. “It’s a good way to keep in contact with the real world,” she says.

In particular, she has been the main modeler for the city of Sydney travel model and the academic advisor for the estimation of the model system for the city of Brussels. She has participated in various stages in a number of Danish models, including the national travel model, the Fehmarn Belt and the planning study of the light rail metro system in Ørestad.

She has also designed four waves of stated preference surveys in Belgium, where she studied the effects of the introduction of high-occupancy-vehicle and high-occupancy/toll lanes on the ring. And, as part of the European Union’s project, *STARDUST*, Cirillo assessed the extent to which advanced driver assistance systems and automated vehicle guidance systems can contribute to a sustainable urban development.

“Not only in terms of direct impacts on traffic conditions and environment but also in terms of impacts on social life, economic viability, safety, etc,” explains Cirillo. The survey she designed has been successfully applied in three European cities – Brussels, Oslo and Southampton in the UK.

As a result of her research and work, she has been awarded a Leonardo Fellowship for the best exchange program between a university and small and medium enterprise. Cirillo is also a member of the Innovative Methods Programme Committee European Transport Conference in London and is an elected a member of the Council of the Association of European Transport, which organizes the most prestigious conference in transport modeling and practice in Europe.

Now, she is bringing all of that knowledge and experience to share with students at CEE. And, she is glad to do so. “Students here seem very motivated to learn,” she says. “I’m enjoying that.”

FACULTY NEWS FROM PAGE 8

large-scale stochastic queuing model of the national airspace system that will allow the Federal Aviation Administration to estimate improvements in performance metrics and reliability afforded by individual technological enhancements to the air traffic control system. Such enhancements could include time-based metering, performance-based services and paired operations on closely spaced parallel runways.

The principal investigator for the grant is Mark Hansen, professor of civil and environmental engineering with the Institute for Transportation Studies at the University of California, Berkeley. The University of Maryland, MIT and Intelligent Automation, Inc. (IAI) of Rockville, Md., are the subcontractors. **David Lovell**, an associate professor with CEE and the Institute for Systems Research (ISR), is the principal investigator for the Maryland portion. Several ISR alumni hold senior positions at IAI.

Rhyneta Gumbs, a manager with CEE, has been chosen to receive the *President's Commission on Women's Issues 2008 Staff Award*. The award honors outstanding women on campus for their exemplary contributions and positive impact on the university and its community. Gumbs has been employed at the university since 1997 and is described as a "cornerstone and a great resource for faculty, staff and students."

Professor **Miroslaw Skibniewski**, professor and A. James Clark Chair in Construction Engineering and Management, received the Richard L. Tucker-Yukio Hasegawa Award from the International Association for Automation and Robotics in Construction (IAARC). The Tucker-Hasegawa Award is IAARC's highest distinction granted to academic, government and industry leaders worldwide for outstanding contributions to research and development in automation and information technologies for the construction industry. The award was presented during the 24th annual International Symposium on Automation and Robotics in Construction held in September in Cochin, India.

Professor **Dimitrios Goulias** and Professor **Charles Schwartz** were awarded a new Maryland State Highway Administration (MSHA) study on "*Increasing Durability of Hot Mix Asphalt Pavements Designed with the Superpave System*" and the development of a quality assurance program. Goulias and Schwartz were awarded this new research study to address two critical issues confronting the asphalt paving industry in Maryland. The first objective of the investigation is to explore methods for improving the durability of Superpave hot mix asphalt (HMA) mixtures for Maryland conditions. The second objective is the development of quality assurance program procedures that account for the differences in HMA properties between "plant" (QC) and "behind the paver" (QA) samples. The ultimate outcome of this study will be improved HMA mix designs for Maryland highways and a more equitable quality assurance program for HMA that assigns risk fairly to MSHA and its contractors.

Goulias was also awarded a new Maryland Industrial Partnerships (MIPS) study on the development of a passive wireless concrete maturity monitor system. The study is undertaken in cooperation with the Applied Sensor Research & Development Corporation (ASR&D) and is a feasibility assessment investigation of an existing ASR&D passive wireless multi-sensor temperature sensing system (developed for NASA) for its potential use in monitoring concrete maturity. The study will develop an innovative wireless maturity meter prototype utilizing spread spectrum communication, and having superior performance of existing alternative systems. Furthermore it is expected that this type of maturity meter will overcome several of the limitations of existing alternatives by providing the maximum flexibility in data handling and maturity modeling so as to be attractive to both researchers and industry.

The Transportation Research Board (TRB) Executive Committee, selected the paper, "*Widearea, Four-dimensional, Real-time Interactive Transportation System Visualization*," by **Michael L. Pack**, **Sujal Bista** and **Phillip B. Weisberg** from the Center for Advanced Transportation Technology lab as a co-winner of the **Charley V. Wootan Award**. This award is given each year for the best paper in the area of transportation policy and organization.

STUDENT NEWS FROM PAGE 4

enjoyed hiking and boating and roasting marshmallows. As one student summed it up, "With the great engineering spirit of teamwork, we were happy to go adventuring together, get lost together, burn marshmallows together and have fun together." The goal of the trip, according to Miller-Hooks, was to "build enthusiasm and excitement for our graduate program and a feeling of community. I love to camp, and I thought this would be an excellent adventure for all." Adding, "I hope to do something like it at least biannually in coming years."

ALUMNI NEWS FROM PAGE 6

Robert George Krebs, a 1955 graduate with a B.S. in civil engineering, passed away on January 25, 2008, at his home in Ocean Pines, Md. The 76-year old Krebs worked for George W. Stephens Jr. & Associates as a design engineer in Towson, Md., and was a principal and officer at Gaudreau Architects, Inc. He also worked for T. Rowe Price. Krebs was a past president of the Maryland Society of Professional Engineers, National Society of Professional Engineers and the American Society of Civil Engineers. Memorial contributions may be made to Atlantic General Hospital, 9733 Healthway Drive, Berlin, Md. 21811. Our deepest condolences go out to his family and friends.

USING WHAT WE HAVE

RESEARCH FOCUSES ON BIORETENTION AND NOVEL STORMWATER MANAGEMENT TECHNOLOGY

Bioretention involves working with "what Mother Nature gives you," says Professor Allen Davis. And as an environmental engineer, Davis can imagine no better challenge. "This is a way to make a real difference, to have a real impact on the environment," he says.

Davis, who has been at CEE for nearly two decades, has spent half of that time focused on the study of bioretention and stormwater research. Bioretention is a soil and plant-based stormwater management best management practice employed to filter runoff from developed lands. As such, bioretention is a critical component of low impact development, a philosophy in which steps are taken to maintain predevelopment hydrology, as near as possible. "Ideally, all green space is made functional to keep storm water onsite, to minimize runoff by maximizing infiltration, and to employ natural processes for pollutant control," explains Davis, who is also director of the Maryland Water Resources Research Center on campus.

Davis first became involved with bioretention research when he was approached by Prince George's County about the county government's interest in developing bioretention and low impact development technologies. "They were looking for better ways to do things," he says. He undertook a two-year study to quantify the effectiveness of bioretention in terms of pollutant removal.

Davis saw the potential of the research immediately. "This was an area of research that was needed," he says. "The way we developed and continued to develop land is not environmentally friendly. But, almost nothing had been done in this area. It was pretty much wide open."

That was 1996. Davis admits he anticipated a decade's worth of work. Now, "There's a lifetime of work here to be done, to better understand these processes and to exploit them for environmental benefits," he says. That initial research with Prince George's County would eventually result in many other funded projects from various sources. This included the establishment in 2002 of two parallel bioretention cells on the university's campus. "Each cell has a different design," explains Davis of the project which was funded by the Prince George's County Department of Environmental Resources. "The cells are being used for student and public education on low impact development. They have also been monitored for input and output water quality to investigate long-term performance characteristics."

Adding, "This was an opportunity to put fullscale facilities in the ground for research. And, the data we've taken from both of them has shown that they do work at full scale."

More recently, Davis, along with colleagues at Villanova and North Carolina State, received a grant from the Cooperative Institute for Coastal and Estuarine Environmental Technology. "Each one of us brings a different area of expertise, from environmental engineering to hydrology," says Davis. "But, we're all interested in bioretention and related technology. We want to push this research as far as we can."

> "THERE'S A LIFETIME OF WORK HERE TO BE DONE, TO BETTER UNDERSTAND THESE PROCESSES AND TO EXPLOIT THEM FOR ENVIRONMENTAL BENEFITS,"
>
> – PROFESSOR ALLEN DAVIS

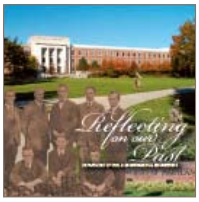
This includes taking a "more holistic" approach, says Davis. "The best answer is not a single answer or a single technology. But if you can develop land using a green roof, grass swales and bioretention and carefully link them all together, you can have a big impact."

For Davis, it really means changing the mindset one person at a time. "What we need to do as engineers is make it as simple as possible, nothing more than a second thought. You can compare it to the idea of recycling and how we now take it out to the curb once a week. Just think 30 or 40 years ago there was no such thing. Now, it's second nature. That's the goal."

STUDENT PROFILE FROM PAGE 5

You intend to go on to graduate school. After that, though, where would you like to see yourself in 10, 20 years from now?

In 10 years from now, I will hopefully have gotten my graduate degrees and will not be facing financial ruin from all my years in school! In 20 years, I aim to be settled in a career path of either research/academia or professional practice. If I choose to pursue academia, I hope to inspire future generations of engineers to undertake new challenges and think creatively about possible solutions. In tandem, as an engineer, I would use my expertise and experiences in the field of structural engineering to solve novel problems facing designers and engineers. Ultimately, success for me is looking back 50 years from now and realizing that I have made a significant contribution to both my field and my community.



PICTURE PROFILe

1908 CENTENNIAL CELEBRATION 2008

CELEBRATING THE CIVIL CENTENNIAL - 100 YEARS AND COUNTING

The centennial celebration is fast-approaching. In honor of CE's 100th anniversary several activities have been scheduled for April. The activities begin with a welcome reception on April 4 from 7 to 9 p.m. at the Riggs Alumni Center. Then, on April 5 a symposium on "Building Our Future: 21st Century Construction" will be held from 9 a.m. to 3:30 p.m. at the Riggs Alumni Center. This will be followed by the Centennial Gala later that same evening and beginning at 6:30 pm. at the Inn and Conference Center at the UMUC Marriott. Among those attending the gala will be Lt. Gen. Robert Van Antwerp, commander of the U.S. Army Corps of Engineers.

The panel for the symposium, with CE faculty member Miroslaw Skibniewski as moderator, will include William Calhoun, executive vice president of Clark Construction; David Forrester, president and CEO of Forrester Construction; Robert L. Mitchell, chairman and CEO of Mitchell & Best Homebuilders; and Richard L. Vogel, senior vice president of Whiting-Turner Contracting Co. Special guest speakers for the event include Donald Boesch, president of the University of Maryland Center for Environmental Studies, who will be speaking on "*Building in the Future: Living with the Environment*;" Richard Lawrie of Lawrie and Associates, who will be speaking on "*21st Century Design Challenges*;" Lewis Link, director of the Katrina Interagency Performance Evaluation Task Force and a CE faculty member, speaking on "*Learning Lessons from Hurricane Katrina*;" David Mongan, PE, CE '72, president of ASCE, speaking on "*Civil Engineering 2025*;" Priscilla Nelson, provost of the New Jersey Institute of Technology, who will speak on "*Educating the Civil Engineer of the Future*;" and John D. Porcari, secretary of the Maryland Department of Transportation, speaking on "Maryland Transportation Challenges."

Also, as part of the celebration the department has produced a centennial book, "*Reflecting On Our Past*," with only limited copies available. The picture-laden book will provide readers with a glimpse of the people and events that have made CE's 100 years so remarkable and memorable.

"This is an important moment in our department's history," says Ali Haghani, department chair. "We are looking forward to sharing this milestone with our alums, faculty, staff, students and friends of the department. It should be quite a celebration."

(FOR FURTHER DETAILS , PLEASE SEE THE CENTENNIAL AGENDA ON PAGE 15)

SUBSTANCE AND STYLE

DESIGNER AND PUBLIC RELATIONS COORDINATOR SANGEETA KAUL CREATES A NEW LOOK FOR CEE

As a little girl growing up in India, Sangeeta Kaul was a great admirer of her father's artistic abilities. "My father was a fine artist and painter," she recalls. "And, ever since I can remember, I enjoyed being around him while he painted and created. It was his hobby. And, at a very young age, I began imitating him."

That interest in art, coupled with her own natural abilities, would propel Kaul into the career she has today. Since joining CEE in 2005, Kaul, a fine artist and graphic designer and the department's public relations coordinator, has helped create a new image for CEE.

"She consistently produces quality work that has helped spread the word about our department and its activities," says Ali Haghani, department chair. "There is hardly a conference I go to in which someone does not rave about our publications."

In her role with CEE, Kaul is in charge of the development of the overall design style, marketing vision and branding goals of the department. This includes producing the department's newsletter, biennial reports and countless other publications, including those affiliated with CEE's upcoming 100th anniversary.

"I am constantly pushing the idea of branding cohesion in our department," she says. "I want people to see us as a whole rather than in bits and pieces. A strong image helps us retain better faculty and staff, encourages funding from donors and grants, and assists us in attracting better students in terms of recruitment. If I can help with all of that, I'm doing my job."

"We are delighted to have her here," says Haghani.

However, this is not the first time Kaul has worked at the university, having held various jobs while still a student here. "I'm rather fond of the place," she says.

After leaving India for the United States just before her 16th birthday, Kaul struggled with "culture shock." But, by the time she had decided to attend the University of Maryland, she was finding her own way.

"I had this diverse group of friends," says Kaul, who received a bachelor's degree in fine arts in 1994. "I ended up doing so many different things."

That's an understatement. Kaul became president of the Indian Student Association and assisted foreign students when they arrived on campus, helping them locate housing and jobs.

And, she worked. A lot. She taught foreign language classes in Hindi with FOLA and became a member of the public relations team for the Department of Campus Parking. "We were trying to improve the image of campus parking by setting up booths at events and answering questions for people," she says. "People really seemed to appreciate it."

During this time she was presented with the UM Department of Campus Parking's (now Transportation) Best Student Employee of the Year Award and as part of the campus parking Pit Crew team, won the Best Public Relations Award in a nationwide competition.

She was also honing her artistic skills. Having come from a family of people who worked in the medical field, Kaul's career choice was a bit unusual. But, "We were not the traditional Indian family," she says.

Kaul laughing tells the story of her and her sisters' names and how adequately those choices reflected her parents' spirits and personalities. "My father was raised in a very traditional Hindu family. My mother was Protestant. They decided when they had children that they would pick a name from a different religion for each child. My name is Hindu, my sister's name, Salma, is Islamic, and my younger sister's name is Angelina, which is a nod to Christianity. My dad always said he had other names lined up. He was quite a character."

She credits her parents with encouraging her to make her own choices and realize her own dreams. In fact, her mom's administrative position at UM's College of Arts and Humanities, and the subsequent financial help paved the way for Kaul to pursue a fine arts degree. Without this tremendous help, she would not have had an easy time financing her career.

After graduating from the university, Kaul, who had met her husband-to-be, Ajay, on campus by that time, and went to live in Michigan and then later Illinois. Kaul, who also received an associate's degree in graphic design from the Illinois Institute of Art in 1999, worked as an independent artist and has her own design firm, Spicyseed Design Studio, to this day. While in Michigan and later Illinois, she also worked for such companies as Sprint, Deloitte & Touche, and Ernst & Young, among others, before returning home to be near family.

It was at that time that she rediscovered her alma mater. She says that she missed the academic environment and applied to CEE, a part-time position, for that reason. "I had worked in the corporate environment, and I was missing that passion you have for what you do and it not always being about the dollar," she says.

At CEE, she was given a clean creative slate. And she relished it. "What I love about what I do now is that I have control over it," she says. "There's no limit to what I can create, no preconceived template or notions. I was able to set the style for the department."

And the department is more than pleased. Kaul has been nominated more than once by her colleagues for various campus honors. "We realized very soon after hiring her how lucky we were," says Haghani.

STAFF PROFILE CONTINUES ON PAGE 14

COURSE PROFILE

ENCE 300: FUNDAMENTALS OF ENGINEERING MATERIALS

MAKING THE MOST OF ENGINEERING MATERIALS

Although he completed the course last spring, Daniel Miller is keeping the textbook from ENCE 300: Fundamentals of Engineering Materials for future reference. "This is the sort of class and textbook that you will refer back to as you go on into your career," says the junior who is focusing on transportation engineering and project management.

A wise choice. And, one that Dimitrios Goulias, who has taught the course at CEE since 1999, can appreciate.

"We want the course to prepare students with the background, knowledge, tools and experience that they need once in the profession," explains Goulias. "We want them to be well-equipped to properly address any issues related to the selection, evaluation and/or assessment of materials used in the construction of infrastructure components."

ENCE 300 focuses on the broad spectrum of civil and environmental engineering materials, including such specific areas as the relationship between physical, mechanical and chemical properties and microstructure characteristics to durability and performance.

"The course is teaching them the fundamental principles of material behavior, design and performance," says Goulias. "We're exposing them to the testing standards of practice that are currently used in the process as well as exposing them to the state-of-the art development in CEE materials."

A process that, according to Goulias, is constantly changing.

"The world of CEE materials is a dynamic and fast-evolving field, requiring continuous upgrade of the course content and the laboratory experience and equipment," he says. Adding, "There is a need for improved, long-lasting and innovative materials for CEE infrastructures while addressing environmental concerns and recycling mandates."

However, "At the same time this is rewarding from the intellectual point of view," says Goulias. In fact, Goulias admits that his own research and professional development over recent yeas has focused more and more on this area. He brings that knowledge into the classroom, not just teaching from the textbook but sharing his own experiences in the field with his students. "You get a real idea of how things are done in the real world," says Miller.

That goes for the time spent in the lab as part of the course as well.

"It gave me a chance to experience firsthand what we were learning in the classroom," says Miller. "You have a better understanding of the engineering strengths of different concrete and asphalts and the different types of mixtures that exist. It made a real impression on me."

Goulias also encourages students to step outside the classroom and lab and use what they have learned on such projects as the Concrete Canoe and Concrete Toboggan national and international competitions. "They clearly use their learning experience from ENCE 300 in preparing these projects," says Goulias. Adding, "The same can be said for students involved in the Engineers Without Borders projects where they often have to deal with the selection and design of CEE materials for completing their projects abroad."

It all comes down to working in the real world with real materials, says Goulias. And, ENCE 300 students are well prepared. "It is very rewarding to hear the feedback I typically get from employers on how well our CEE students are prepared in this area once they are involved in the profession," says Goulias.

STAFF PROFILE FROM PAGE 13

More recently, Kaul has turned her talents towards the 100th anniversary. She feels honored to be working at CEE during such a significant milestone. She worked closely with faculty member Richard McCuen on the centennial book "Reflecting on Our Past," which covers the past 100 years with photos and text. And, in typical public relations fashion, Kaul sees great potential for it. "This is going to be a valuable tool to use to market our department in the future," she says.

As for her own future, "I don't know if I want to move on," she says. "I really enjoy it here. But when I do, I want to leave behind a legacy of arming everyone with design power! And with the knowledge that one does not have to pay through the nose for good and effective design. Finally, I hope that I am able to create a feeling of distinction and pride for the members of the CEE family in the marketing products we produce, and in the image we set forth for ourselves."

Adding with a grin, "Who knows, I might just retire from here."

Department of Civil and Environmental Engineering

CENTENNIAL CELEBRATION

April 4-5, 2008

Celebrating the Past - Defining the Future

IN ACKNOWLEDGMENT OF OUR CENTENNIAL PARTNERS

We would like to acknowledge the following friends of the Civil and Environmental Engineering Department for their generous support of our **CENTENNIAL CELEBRATION**. *We deeply appreciate their partnership in commemorating this historical milestone.*

A. JAMES CLARK
PLATINUM SPONSORSHIP

WHITING-TURNER
PLATINUM SPONSORSHIP

CLARK CONSTRUCTION
GOLD SPONSORSHIP

FORRESTER CONSTRUCTION
SPECIAL STUDENT SPONSORSHIP

GREENHORNE & O'MARA
SPECIAL STUDENT SPONSORSHIP

VIKA
SPECIAL STUDENT SPONSORSHIP

WHITNEY, BAILEY, COX & MAGNANI, LLC
SPECIAL STUDENT SPONSORSHIP

SIGMA
BRONZE SPONSORSHIP

CENTENIAL RECEPTION

Friday, April 4: Samuel Riggs IV Alumni Center

7:00 PM – 8:00 PM Registration
7:00 PM – 9:00 PM Reception
Welcoming Remarks
Admin. Announcements

SYMPOSIUM: The Future of Civil Engineering

Saturday, April 5: Samuel Riggs IV Alumni Center

8:30 AM – 9:00 AM Continental Breakfast
9:00 AM – 9:10 AM Welcome
(Dr. Richard McCuen)
9:10 AM – 9:40 AM CIVIL ENGINEERING 2025
(David Mongan, CE '71, President ASCE, Presentation and Discussion)
9:40 AM – 10:20 AM LEARNING FROM THE PAST: LESSONS FROM HURRICANE KATRINA
(Dr. Lewis Link, Director Interagency Performance Evaluation Task Force, Research Professor, Civil and Environmental Engineering Department)
10:20 AM – 10:50 AM EDUCATING THE CIVIL ENGINEER OF THE FUTURE
(Dr. Priscilla Nelson, Provost and Senior Vice President for Academic Affairs, New Jersey Institute of Technology)
10:50 AM – 11:10 AM Break
11:10 AM – 11:40 AM BUILDING IN THE FUTURE: LIVING WITH THE ENVIRONMENT
(Dr. Donald Boesch, President, University of Maryland Center for Environmental Studies)
11:40 PM – 1:15 PM Lunch
(Guest Speaker: Honorable John D. Porcari, Secretary, Maryland Department of Transportation)
1:15 PM -1:45 PM 21ST CENTURY DESIGN CHALLENGES
(Richard Lawrie, Lawrie and Associates)
1:45 PM – 3:15 PM PANEL - BUILDING OUR FUTURE: 21ST CENTURY CONSTRUCTION
(Moderator: Miroslaw Skibniewski, CEE Department
William Calhoun, Executive Vice President, Clark Construction
David Forrester, President and CEO, Forrester Construction
Robert L. Mitchell, Chairman and Chief Executive Officer, Mitchell & Best Homebuilders
Richard L. Vogel, Senior Vice President, Whiting-Turner Contracting Company)
3:15 PM Closing Remarks and Adjournment

CENTENIAL GALA & DINER

Saturday, April 5: The Inn & Conference Center (UMUC Marriott)
(Black Tie or Business Suit)

7:00 PM – 7:45 PM Cocktails and Light Hors d'oeuvres
8:00 PM – 11:00 PM Centennial Dinner
Remarks and Introduction of Distinguished Guests and Alumni (Dr. Gregory Baecher)
Welcoming Remarks (Provost Nariman Farvardin)
Dinner (Background Music)
Introduction of Guest Speaker (Dr. Ali Haghani)
MAINTAINING AMERICA'S INFRASTRUCTURE
(General Robert Van Antwerp, Chief Engineer, Army Corps of Engineers)
Presentation of Centennial Awards (Provost Nariman Farvardin)
Closing Remarks (Dr. Ali Haghani)
Social Hour

To register for the Centennial Celebration, please visit us at http://www.civil.umd.edu/centennial/ or call us for more information at 301 405 7768. We are looking forward to seeing you.

We'd Like To Hear From You!

We want to know where life has taken you since you left the University of Maryland. Please complete the form below, including any additional comments. Also, send the address of any Civil & Environmental Engineering Alumni you know who are not receiving the newsletter *Civil Remarks*.

FIRST NAME | MIDDLE INITIAL | LAST NAME

DEGREE(S) | GRADUATION YEAR(S)

HOME ADDRESS

CITY | STATE | ZIP+4

POSITION TITLE

FIRM ADDRESS

CITY | STATE | ZIP+4

BUSINESS PHONE | FAX NO. | E-MAIL

Alumni News:

Department of CIVIL & ENVIRONMENTAL ENGINEERING
www.civil.umd.edu

Please send to:
Sangeeta Kaul,
Civil Remarks
Civil & Environmental Engineering Dept.
University of Maryland
College Park, MD 20742-3021
E-mail: skaul@umd.edu
301 405 4195

For further information, please visit us at http://www.cee.umd.edu/

CIVIL REMARKS

DEPARTMENT DIRECTORY

DR. ALI HAGHANI Department Chair
301.405.1963 — haghani@umd.edu

LISA SCHUETZ Director of Administrative Services
301.405.5193 — lschuetz@glue.umd.edu

AL SANTOS Director of Undergraduate Student Services
301.405.1977 — asantos@umd.edu

ELYSE BEAULIEU Assistant Director of Graduate Student Services
301.405.8944 — beaulieu@umd.edu

STEPHANIE PETERS Business Manager
301.405.5193 — speters@umd.edu

RHYNETA GUMBS Manager
301.405.1971 — rgumbs@umd.edu

GLORIA SPINDLER Research Coordinator
301.405.1973 — gspindle@umd.edu

N'KOLA MORRIS Account Clerk III
301.405.6261 — nkola@umd.edu

CHARITY MCGEE Administrative Assistant I
301.405.7768 — crmcgee@umd.edu

ALFRED BITUIN Lab Technician
301.405.1982 — fbituin@umd.edu

DAVID LEWIS IT Coordinator
301.405.3221 — dblewis@umd.edu

JANET ALESSANDRINI Coordinator
301.405.1974 — jalessan@umd.edu

MASOUD HAMEDI Faculty Research Assistant
301.405.2350 — masoud@eng.umd.edu

SANGEETA KAUL Coordinator of Design and Public Relations
301.405.4195 — skaul@umd.edu

WILLIAM MAYAH Student Employee

JUSTIN SANTIANO Student Employee

MARIE LESTINA Student Employee

DINA SMITHER Student Employee

Civil Remarks is published twice yearly for alumni and friends of the Department of Civil & Environmental Engineering at the A. James Clark School of Engineering. Your alumni news and comments are welcome.

Please send them to:
Attn: Sangeeta Kaul
Department of Civil and Environmental Engineering
University of Maryland
1173 Glenn L. Martin Hall
College Park, MD, 20742-3021
301.405.4195 [Phone]
301.405.2585 [Fax]
skaul@umd.edu [E-mail]

You are also invited to visit our web site at www.cee.umd.edu

CIVIL REMARKS PRODUCTION TEAM

DR. ALI HAGHANI Department Chair
LISA GREGORY Editor
AL SANTOS Photographer
SANGEETA KAUL Graphic DESIGNER

A. JAMES CLARK
SCHOOL OF ENGINEERING

Department of Civil & Environmental Engineering
University of Maryland
1173 Glenn L. Martin Hall
College Park, MD 20742-3021

Nonprofit Org.
U.S. Postage
PAID
Permit No. 10
College Park, MD