WOW SAYS GOODBYE

[Dr. Winer’s last day as School Chair was November 30, 2007. He sent the following message, which is reprinted here to reach as many alumni and friends of the School as possible.]

Today was my last day as an active faculty member of the Woodruff School after 38.5 years, including 19 years and 11 months as School Chair. It has been a great career and I enjoyed all most all of it.

I want to thank the outstanding faculty who have worked so hard to make this a great school. I also want to thank the excellent staff for the top quality support they have given the faculty and students over the years. The efforts of all of you have helped raise the visibility and reputation of our School. You have made it easy to be the Chair.

I look forward to bigger and better things from the School under a new chair. In the future, I will continue to help to advance the School in any way I can.
George W. Woodruff School of Mechanical Engineering

Bill Wepfer is the New Woodruff School Chair

College of Engineering Dean Don Giddens announced that Professor William Wepfer will be the new the Eugene C. Gwaltney Jr. Chair of the School of Mechanical Engineering (ME), effective January 1, 2008. Wepfer replaces the retired Ward Winer, who started as an associate professor at Georgia Tech in 1969.

“The school chair is responsible for creating an outstanding learning environment. Ward did a great job; words cannot express how much I learned from him,” said Wepfer, who worked with Winer from 1989 to 2002 when he served as the Associate Chair for Graduate Studies in Mechanical Engineering. “I look forward to working with Don Giddens,” Wepfer said. “He’s been a colleague through the years.”

While Wepfer is quick to point out ME’s accolades, he says the School, along with the Institute as a whole, needs to continue creating more opportunities. “While Tech has been a leader, other folks copy what we do, so we can’t stay still.”

Some initial projects on Wepfer’s agenda include growing the graduate programs and focusing on energy initiatives, as well as building a cohesive school identity amid forging new collaborative elements.

“The Woodruff School is doing some great things,” he said. “We’re attracting so many students. We need to focus on quality and not quantity. In the science, engineering and computing arenas, we have to focus on [fostering] a collegial and creative environment.” He says that within the School there is some discussion on more flexibility in the curriculum, allowing for classes outside of the major. “We are supportive of lifelong learning—providing an education that leaves students wanting more.”

With his own research interests consisting of thermal systems, heat transfer and thermodynamics with an emphasis on energy systems, Wepfer seeks to explore how the School can focus on the area of energy research and increase its role in the Institute’s Strategic Energy Initiative.

One example is the nuclear engineering program, which he says is the second largest body of nuclear engineering students in the country. “We [also] have a strong group in ME that’s performing research to improve efficiency in systems,” he said. “I hope to engage and grow our faculty in these areas where we can make a difference.”

Another Woodruff School strength Wepfer identifies is one germane to the Institute’s partnership. Strong collaboration is already prevalent with the Schools of Physics, Chemistry and Biology and the College of Computing. The goal, he says, is for ME to expand on these contributions. “Engineering, science and computing are all starting to blur. [On the research level] we are all starting to ask the same questions.” When asked about any rivalry between engineering programs, Wepfer smiled. “The College is very special,” he said. “There’s always been a unique kinship—you compete, but you’re in the same family. I’m [ready] to work with other school chairs and faculty.”

Another role he’s prepared to assume is that of fundraiser as the Institute nears the public phase of its capital campaign. “Building and growing the endowments for faculty chairs and student scholarships are important. It’s all about relationships and [their] stewardship,” adding that Tech alumni as a whole are loyal and generous. He smiled as he said, “I look forward to working with graduates I had as students.”

Wepfer’s career at Tech began in 1980 as an assistant professor in mechanical engineering. He became a full professor in 1993. Since 2003, he has served as vice provost of Distance Learning and Professional Education (DLPE). In this capacity, Wepfer was responsible for professional education and distance-delivered program, the English as a Second Language program, and operation of the Global Learning Center.

“Coming to DLPE was really challenging,” Wepfer said, referring to the tech market’s downturn after the Sept. 11, 2001, terrorist attacks. “It has given me a deeper understanding of how Georgia Tech operates.”

Wepfer said he doesn’t doubt the department’s capabilities without him. “The future of the DLPE is bright,” he said. “The team I’m leaving is very capable.”

In all, Wepfer says he is glad to be back and involved in the daily interaction with faculty and students. “At the end of the day, I’m a faculty member,” he says. While he would like to teach again, he says he prefers to first gain his bearings as school chair. “When I was associate chair, I taught,” he said. “And I think it’s important for a school chair to maintain a connection with the students. I will be broadly engaged.”
It is great to back “home” in the Woodruff School of Mechanical Engineering after spending five years in the Provost’s Office serving as Vice-Provost for Distance Learning and Professional Education. Since coming to Georgia Tech in 1980 I’ve been fortunate to have witnessed the tremendous growth in quality and size of the Woodruff School. Our accomplishments are attributable to great faculty, staff, students, and alumni working together for the greater good of our academic programs. There is no question that the Woodruff School is a dynamic community that embodies Georgia Tech’s entrepreneurial attitude to improve the lives of our fellow human beings. As school chair, my challenge is to communicate and reinforce those shared values that are at the heart of the Woodruff School’s success.

The Woodruff School faces several important challenges. The most critical challenge is to continue to provide our faculty and students with an environment that gives them “unfair competitive advantages.” We must constantly strive to be leaders—not just “fast followers.” Our educational programs must provide our students with fundamental knowledge and the integrative tools for leadership, creativity, and innovation. Our surging enrollments suggest that we are already highly successful, but we must continue to make curricular innovations and enroll the kinds of students that will elevate the engineering profession to new heights. We hope to grow our endowments for scholarships and fellowships to attract these top students to our programs.

Our faculty continues to excel. Their achievements are all the more remarkable in light of our extremely high enrollments and faculty workload; the Woodruff School has the largest undergraduate program at Georgia Tech. Cutting-edge research requires individuals who are bright, intellectually agile, and fearless in their willingness to take risks. Leadership in research requires that faculty have time to think in an environment that values their contributions. For a number of years, we were successful in recruiting faculty from the pool of newly-minted Ph.D. graduates and mid-career faculty at peer institutions. However, several of our most-successful faculty members are being recruited by peer institutions. We can raise the resources to meet these needs. Beyond that, it is also critical that we develop improved mentoring and faculty development programs, increase support for faculty retention through endowed professorships and chairs, find additional space for our faculty and student needs, and develop a strategic research plan that will guide and inform our growth and future faculty hiring.

In my first few months, I plan to meet and listen to you, the various Woodruff School constituencies, seeking your input and advice as we move forward. During my first month as chair I have been overwhelmed by your show of support and look forward to our partnership.

In closing, I want to mention three special people who passed away recently. Jacek Jarzynski served as professor for fifteen years. He was a world-class scholar in acoustics. Jacek lead by inspiring his students through his unwavering and constant commitment to excellence. Although Jacek was soft-spoken, his advice was always respected and appreciated by students and faculty. On a personal note, I have fond memories of bumping into Jacek at the old Oxford Books store and discussing a wide variety of subjects, including classical literature and history. I know Professor Jarzynski inspired many students and he will be missed.

Charles Ray received the very first Woodruff School Distinguished Alumnus Award and served on the Woodruff School Advisory Board for many years. As a vice-president at Lockheed, Charlie provided the School with critical input and was extremely generous in his financial support of Woodruff School programs.

Professor Bill Sayle of Electrical and Computer Engineering was a strong supporter of our program at Georgia Tech Lorraine and provided important “behind-the-scenes” support of Woodruff School faculty and students at GTL. Jacek, Charles, and Bill each personified the Georgia Tech spirit which continues in the students they inspired.

My door is always open; please be in touch.

WEPFER’S STRATEGIC AND TACTICAL PRIORITIES

Dr. Wepfer outlined the following priorities for the Woodruff School:

- Climate, tone and communication
- Faculty development
- Space utilization and assignment
- Faculty recruiting
- Capital campaign
- Long-term strategic research planning
- ABET preparation
- Policies and structures
NEW ASSOCIATE CHAIRS

After a number of years with no changes in the administration of the Woodruff School, it seemed as if 2007 was a year of rapid change. After four years in the job, Dr. Yogendra Joshi resigned as Associate Chair for Graduate Studies and upon the departure of Dr. Christopher Lynch for UCLA, Dr. Jianmin Qu became Associate Chair for Administration.

ADMINISTRATION

Dr. Jianmin Qu, professor, received his bachelor’s degree from Jilin University in China in 1982, and his M.S. and Ph.D. degrees from Northwestern University in 1984 and 1987, respectively. From 1987 to 1989 he did postdoctoral work at the University of Pennsylvania before joining Georgia Tech in 1989 as an Assistant Professor. He was promoted to Professor in 2000. His research is in the mechanics of materials, especially fractures, composite materials, wave propagation, and microelectronic packaging.

Qu is an Associate Editor for the ASME Journal of Electronic Packaging, was the General Chair of the 11th IEEE International Symposium on Advanced Packaging, and Program Chair and Executive Committee Chair of the ASME Electronic and Photonics Packaging Division. At Georgia Tech, he has been a member of the Institute Graduate Committee as well as an elected member of the Academic Senate. He was President of the Georgia Tech chapter of Sigma Xi and recently was appointed to the Campus Recreation Center Advisory Board. He is a fellow of ASME and was a Woodruff School Faculty Fellow from 1997 to 2002. In 2007, he received a Sigma Xi (Georgia Tech Chapter) Best Paper Award.

GRADUATE STUDIES

David Rosen, professor, is the new Associate Chair for Graduate Studies. He joined the Woodruff School in September 1992 as an Assistant Professor. He received bachelor’s and master’s degrees from the University of Minnesota in 1985 and 1987, respectively. David was promoted to Professor in 2004. He was a visiting professor at the Loughborough University in England in 2005.

Rosen’s research, in the area of computer-aided engineering and design, focuses on virtual and rapid prototyping and intelligent CAD/CAM/CAE. He is a member of the Systems Realization Laboratory and was appointed Director of the Rapid Prototyping and Manufacturing Institute in 1995. Rosen is a fellow of ASME and was a Woodruff School Faculty Fellow from 2002 to 2007.

Upon assuming his new position, Rosen asked the faculty “to let me know if you have concerns or issues with the graduate program. Also, please tell me if you have ideas or suggestions for improvement in any aspect of our graduate activities.”

INTRODUCING OUR NEW FACULTY MEMBERS

In an effort to improve the student/faculty ratio, which is high because of surging enrollment, a number of new faculty members have been hired. Unless otherwise indicated, they came to Georgia Tech for the fall 2007 semester. For more details about their research, please go to our web site at www.me.gatech.edu (Faculty/Staff) and look at the Academic Faculty listing.

Alexander Alexeev joined the Woodruff School as an assistant professor in January 2008. Prior he was a research fellow at the University of Pittsburgh. He received his Ph.D. in 2003 from Technion—Israel Institute of Technology. His research focuses on fluid mechanics.

Antonia Antoniou will start in August 2008 as an assistant professor. Her research interest is the mechanics of materials. Currently, she is a postdoctoral fellow at the Los Alamos National Laboratory.

Nazanin Bassiri-Gharb is an Assistant Professor in MEMS and the mechanics of materials. Prior, she was a Senior Engineer at Qualcomm MEMS Technologies, Inc. She received her Ph.D. in 2005 from Pennsylvania State University.

Sang Cho came to Georgia Tech in January 2007 as an Associate Professor of Medical Physics. Prior, he was an Associate Professor at the University of Texas M. D. Anderson Cancer Center. He received his Ph.D. in 1997 from Texas A&M University.

Suman Das is an Associate Professor with research focusing on the areas of manufacturing and the mechanics of materials. Prior, he was an associate professor at the University of Michigan. He received the Ph.D. in 1998 from the University of Texas.

Chaitanya Deo is an Assistant Professor of Nuclear and Radiological Engineering, who received his Ph.D. in 2003 from the University of Michigan. Prior, he was a Postdoctoral Research Associate at Los Alamos National Laboratories.

Kyriaki Kalaitzidou joined the faculty as an assistant professor in November 2007. Prior she was a postdoctoral fellow at the University of Massachusetts in the Polymer Science and Engineering Department. Her area of research is the mechanics of materials. She received her Ph.D. in chemical engineering and materials science from Michigan State University.
Evan Zamir is an Assistant Professor in the acoustics and dynamics research area. Prior, he was a Research Scientist at MITRE Corporation. He received his Ph.D. from the University of Michigan in 1998.

Bojan Petrovic joined the Woodruff School in summer 2007 as a professor of nuclear and radiological engineering. He received his Ph.D. in 1995 from Pennsylvania State University. His research interest is reactor physics, particularly fuel cycle physics and reactor design. Prior he was a Fellow Scientist and Deputy Director for the International Reactor Innovative and Secure at Westinghouse Electric Company.

Olivier Pierron came to Georgia Tech as an Assistant Professor. His research areas are mechanics of materials and MEMS. Prior, he was a Senior Engineer at Qualcomm MEMS Technologies, Inc. He received his Ph.D. in 2005 from Pennsylvania State University.

Erica Ryherd is an Assistant Professor in the acoustics and dynamics research area. Prior, she was a Hunt Postdoctoral Research Fellow at Gothenburg University in Sweden. She received her Ph.D. from the University of Nebraska in 2006.

Karim Sabra was a Project Scientist at the Scripps Institute of Oceanography in California before coming to Georgia Tech as an assistant professor. He received his Ph.D. from the University of Michigan in 2003. His research area is acoustics and dynamics.

Todd Sulchek will start at Georgia Tech in summer 2008 as an assistant professor. He received his Ph.D. in 2002 from Stanford University. Currently, he is a postdoctoral fellow in the Physical Biosciences Institute at Lawrence Livermore National Laboratory. His area of research is MEMS.

Jun Ueda will start at Georgia Tech in summer 2008. He received a Ph.D. from Kyoto University, Japan in 2002. Currently, he is a visiting scholar at the d’Arbeloff Laboratory for Information Systems and Technology at MIT. His research area is automation and mechatronics.

Evan Zamir began at Georgia Tech in January 2008 as an assistant professor. After receiving a D.Sc. from Washington University in 2003, he worked at the University of Kansas Medical Center. His area of research is bioengineering.

**FACULTY NEWS**

Wayne Book was elected a Fellow of the Society of Manufacturing Engineers.

Nico Declercq received the Early Career Award from the International Commission for Acoustics. The award is given to an individual who is relatively early in their professional career and who has contributed substantially, through published papers, to the advancement of theoretical or applied acoustics. He will receive a Sigma Xi (Georgia Tech Chapter) Young Faculty Award at the 2008 Faculty/Staff Honors Luncheon.


Andrei Fedorov received the 2007 Bergles-Rohsenow Young Investigator Award from the Heat Transfer Division of the ASME. This award is for sustained contributions to heat, mass, and radiation transfer in such diverse areas as materials processing, solid oxide fuel cells and fuel cell materials as well as high-temperature catalytic and microreactors for power generation.

Jerry Ginsberg received the 2007 Per Bruel Gold Medal for Noise Control and Acoustics from the ASME for “significant contributions as a scientist in the areas of sound-structure interactions and vibration of complex systems; and as an educator, for outstanding mentoring and for authoring a series of seminal textbooks on engineering dynamics for both engineering educators and practitioners.”

Ari Glezer was elected to the grade of Fellow in the ASME.

Sam Graham participated in the National Academy of Engineering’s 2007 U.S. Frontiers of Engineering Symposium. Eighty-three engineers aged 20 to 45, from industry, academia, and government, were nominated by fellow engineers or organizations and chosen from more than 260 applicants. The symposium examined trustworthy computer systems, safe water technologies, modeling and simulating human behavior, biotechnology for fuels and chemicals, and the control of protein conformations.

Nolan Hertel was appointed as one of the 29 delegates from the Health Physics Society to the 12th International Congress of the International Radiation Protection Association (IRPA) in Buenos Aires, Argentina in October 2008. IRPA provides a communications outlet to foster radiation protection in many parts of the world.

Larry Jacobs was appointed the Associate Dean for Academic Affairs in the College of Engineering, replacing Ray Vito. Earlier, he received a Faculty Best Paper Award from the Georgia Tech Chapter of Sigma Xi.

Peter Kotke, Research Engineer II, received one of the first NIH Pathway to Independence Awards. In the mentored phase of the award, Peter is working with Andrei Fedorov on developing a nanoscale probe, the Scanning Mass Spectrometry probe, which can capture the biochemical makeup and topography for complex biological objects in their normal environment.

David McDowell was named Co-Editor, Americas of the *International Journal of Fatigue* in December 2007, a leading journal on the subject of fatigue of engineering materials.
Paul Neitzel testified before the U.S. House of Representatives Subcommittee on Space and Aeronautics. He addressed several questions regarding the viability and potential research value of NASA's planned International Space Station (ISS). He said, “What is disconcerting about NASA’s plans for the national laboratory concept is that there is virtually no funding associated with it, either to support in-house or external research or to provide for transportation of experiments to and from the ISS.”

Erica Ryherd was one of five engineers nominated by ASHRAE to receive a New Faces of Engineering Award from the National Engineers Week Foundation. This award recognizes engineers under 30 years of age who have shown outstanding abilities and leadership.

Karin Sabra was elected to the grade of Fellow in the Acoustical Society of America.

Dirk Schaefer was named a Fellow of the Higher Education Academy in the UK and obtained a European Federation of National Engineering Associations European Engineer Professional Registration (Brussels).

Jeff Streator received the Faculty Mentoring Award given by Women in Engineering (WIE) Program students to the one faculty member on campus who had the most significant positive impact through mentoring our women students in engineering.

Naresh Thadhani was named a Fellow of the American Physical Society.

Ray Vito was named Vice Provost for Graduate and Undergraduate Studies.

Xue-Zhan Zhang, research engineer, retired from the Woodruff School in 2007.

Cheng Zhu was elected to the grade of Fellow in The American Institute for Medical and Biological Engineering (AIMBE) in 2008.

**Books By Our Faculty**

A number of our faculty have written books that are used as texts in the classroom and/or as source material. Some of the most recent publications are:


**Seung-Kyum Choi** (and others), Assistant Professor, *Reliability-based Structural Design*, Springer-Verlag Limited, 2007


**PROMOTIONS**

The following Woodruff School faculty members received promotions and/or tenure:

Janet Allen, Levent Degertekin, Andrei Fedorov, Andres Garcia, and Chris Wang were promoted to the rank of full professor. Allen also received tenure. Mohammed Cherkaoui, professor, received tenure. Sam Graham and Chris Paredis were promoted to the rank of associate professor and received tenure.

**NEW FACULTY FELLOWS NAMED**

The Woodruff School Faculty Fellows Program began in June 1991 to retain and recruit outstanding mid-career faculty. The aim of the program is to give the Fellows an incentive to continue to advance their careers and to remain at Georgia Tech, thereby advancing the quality of our programs in the Woodruff School. Fellows receive yearly discretionary support for each of the five years of the appointment. The total number of faculty fellows is limited to no more than one-third of the current associate professors on the faculty. New Woodruff Faculty Fellows are Levent Degertekin and Andrei Fedorov. Sam Graham is the new Joseph H. Anderer Faculty Fellow. Their appointments are from 2008 through 2013. Other faculty fellows are: Andres Garcia, Srinivas Garimella, Robert Guldberg, Shreyes Melkote, Minami Yoda, and Min Zhou.

If you are interested in helping to recognize additional mid-career faculty in the Woodruff School, please contact Tom Lawley, Director of Development, at (404) 385-8345 or tom.lawley@me.gatech.edu.
Matt Allen (MSME 2002, Ph.D. ME 2005) is an Assistant Professor in the Engineering Physics Department at the University of Wisconsin in Madison. Prior, he was a postdoctoral fellow in structural dynamics research at Sandia National Laboratories.

Patrick R. Anderson (BSME 2001) joined Dickinson Wright PLLC in Bloomfield Hills, Michigan as an associate in the area of intellectual property. In addition to his degree in ME, he has a J.D. degree from Michigan State University College of Law, where he was managing editor of the Law Review. He is also a graduate of the Dickinson Wright Intellectual Property Training Academy.

Constantinos A. Balaras (MSME 1985, Ph.D. ME 1998), research director at the Institute for Environmental Research and Sustainable Development at the National Observatory of Athens, Greece was installed as director-at-large of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in 2007. He will serve on the ASHRAE Board of Directors and on Members Council. Balaras established the Hellenic Chapter in 1999 and served as its first president.

Bert Bradley (BSME 2004, MSME 2006) is working as a Mechanical Design Engineer at GE Aviation in Cincinnati, Ohio. He owns external hardware on the F136 engine for the F-35 Lightning II (Joint Strike Fighter), currently under development by Lockheed Martin. He wed Cathlin DeLong (BSID 2005).

Mickey Bly (BME 1990), GM engineering director for hybrid vehicle integration and controls, was recently in Shanghai to show off GMs hybrid technology. The Ecotec engine, which is produced in China, will be used in a hybrid car to be produced in China that will be available for the Beijing Olympics in August. Bly is a member of the Woodruff School's Advisory Board. Photo courtesy of Alysha Webb, Automotive News.

Dan Buan (BME 1987) was named Entrepreneur of the Year by the Annapolis & Anne Arundel County Chamber of Commerce. The award recognizes businesspeople who demonstrate leadership and tenacity, innovative thinking, marketing, selling, and management; and creative, unique, or ingenious products or services. Dan is CEO of Buan Consulting, Inc. in Annapolis, Maryland, which provides knowledge management solutions.

Yong Chen (Ph.D. ME 2001) received a Society of Manufacturing Engineers Outstanding Young Manufacturing Engineer Award for 2008. He worked for 3D Systems as a software engineer and then became an Assistant Professor at the University of South Carolina in fall 2006.

George Fadel (Ph.D. ME 1988) was elected to the grade of Fellow in the ASME. He is a Professor at Clemson University; his research includes the theory, practice, and education of design automation.

Jeff Favorite (MSNE 1994, Ph.D. NE 1998) is a Staff Member at Los Alamos National Laboratory. He won the Young Member Research Achievement Award from the Mathematics and Computations Division of the American Nuclear Society for “development and application of variational methods to space-time kinetics and inverse problems and Monte Carlo perturbation analysis.”

Ben Forget (Ph.D. NE 2006) began a tenure track position as an assistant professor of nuclear engineering at MIT in January 2008. After graduation he was a postdoctoral fellow at LNL. His area of research is reactor physics.

Craig Forest (BSME 2001) and David Moeller (BSME 2001) were filmed as a part of a reality TV program in Los Angeles called “American Inventor,” which is styled after “American Idol.” They won the New York section with an invention called “The Claw” for quickly hanging bicycles in a garage or dorm room. The Claw began as an ME 4182 project from spring 2001.

Brent Darnell (BME 1981) is the author of The People-Profit Connection: How Emotional Intelligence Can Maximize People Skills & Maximize Your Profits. After graduating from Georgia Tech he worked in the construction industry for twenty years as a Senior Project Manager and Mechanical/Electrical Coordinator. He is president of Brent Darnell International, a training and consulting company that teaches people skills to technically trained professionals.

Glenn Gottfried (MSNE 1978) was named CEO of CCS-Adplus LLC, based in Phoenix. The firm provides direct marketing and accounts receivable information services. Glenn will establish a sales, marketing, business development and product development office in north suburban Illinois and other cities.

Amelia Leichliter Henwood (BSME 2002) received a master’s degree in systems engineering from Florida Institute of Technology in 2006. She married Jai Henwood in March 2007. She is employed as a systems engineer for Harris Corporation in Melbourne, Florida. She holds three patents, developed at Harris.

David Kaufman (BME 1985) has spent his career in communications and is currently working with a group of investors at GT to bring new transportation services to market. Dave combined his interests in canoeing, photography, and exploration to create his book, Peachtree Creek, A Natural and Unnatural History of Atlanta’s Watershed, a nontraditional view of Atlanta’s history. This history is represented in the ongoing exhibition at the Atlanta History Center.

Christopher Lapp (BNE 1981, MSNE 1982), head of Lapp Consulting Services in Alexandria, Virginia, is working with the Eagle Alliance and the American Nuclear Society on Congressional briefings about the nuclear industry, especially the composition of the future workforce and the revival of nuclear power in the United States.
Louis B. Long (BSPhys 1966, MSNE 1967) recently retired as Vice President of Technical Support for Southern Nuclear Operating Company, where he was responsible for all engineering, licensing, and fuel support for six nuclear units operated by SNC. He is a member of the COE Academy of Distinguished Engineering Alumni and was a member of the Woodruff School’s Advisory Board.

David M. Longanbach (Ph.D. ME 2001) has spent his career at Caterpillar in Peoria, Illinois. He started in 2001 at the Technical Center and moved to the East Peoria Track-Type Tractor undercarriage manufacturing facility in 2007. He is currently Undercarriage Future Planning Team Leader. He and his wife live in Peoria with their two young daughters.

Pam Norris (MSME 1989, Ph.D. ME 1992) received $7.5 million to study how to cool the smallest components, including electronic chips, transistors and their connecting microscopic pathways, on the next generation of navy warships, in this case destroyers. Systems on ships can overheat and fail without controlled temperatures. Scientists from five universities will study way to cool components, especially very small ones. Pam is a professor at the University of Virginia and this research project takes her to Norfolk Naval Shipyard.

Thomas J. O’Connor (MSME 1986) was appointed the United States Representative to the Generation IV International Forum (GIF) Policy Group, an international partnership of 12 countries and the European Union performing research and development on the next generation of nuclear power plants. He is the Director of the Department of Energy’s Office of Gas Reactor Deployment. This office manages the Department’s Generation IV Nuclear Energy System and Nuclear Hydrogen Initiatives at the Department’s national laboratories and coordinates research activities at 45 universities, including Georgia Tech.

Pradip Saha (Ph.D. ME 1974) was elected to the grade of Fellow in the ASME. His area of research is thermal-hydraulics and nuclear reactor safety. At MIT he works on Generation IV reactor projects and at GE on advanced reactor development.

Steve Schrader (BSME 2000) received an honorable mention in the National Science Foundation Graduate Research Fellowship competition. He is a graduate student at the University of Michigan.

Tim Simpson (MSME 1995, Ph.D. ME 1998), professor of mechanical and industrial engineering and engineering design and director of the college’s product realization minor, was selected the new director of the Learning Factory. This is a hand-on laboratory for design-related courses in six engineering departments at Pennsylvania State University.

Douglas Spearot (MSME 2001, Ph.D. ME 2005) began as an Assistant Professor in the Department of Mechanical Engineering at the University of Arkansas in August 2005. He received the 2007 Ralph E. Powe Junior Faculty Enhancement Award in Engineering and Applied Science from Oak Ridge Associated Universities.

Sathyan Subbiah (Ph.D. ME 2006) is an Assistant Professor in the School of Mechanical and Aerospace Engineering at Nanyang Technological University in Singapore.

David Wootton (Ph.D. ME 1998) is an Associate Professor in the Department of Mechanical Engineering at Cooper Union in New York City.

Eric Zimmerman (Ph.D. ME 1995, PE) is Chief of the Research Division of the U.S. Army Topographic Engineering Center in Alexandria, Virginia. After graduating from GT, he worked at West Point in the Civil and Mechanical Engineering Department until he took his current position in January 2003. The Center’s invention, The BuckEye, was selected as a winner of the Army’s Greatest Inventions Contest for 2006. Here, data are used for detection, intelligence, surveillance, reconnaissance, and creating detailed city maps for deployed soldiers. This invention was voted on and selected by soldiers serving in Iraq.

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**mega tech – ALUMNI NEWS FORM**

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4/2008
**IN MEMORIAM**

Melvin Carter passed away in summer 2007. He joined the Georgia Tech NE/HP program in 1972 and retired in 1998. He received his Ph.D. from the University of Florida in 1960 and was an internationally recognized consultant in radiation protection. He was elected to the National Academy of Engineering in 1999 for “leadership and teaching in radiation protection, health physics, and public health standards and practices.”

Jacek Jarzynski died suddenly in January 2008. He was born in Warsaw, Poland in 1935, obtained a B.S. in 1956 and a Ph.D. in 1961, both from Imperial College in London, and came to the United States in 1963. Before coming to Georgia Tech in 1986 as a Professor, he was Chief Scientist in the Acoustics Division at the Physical Acoustics Branch of the Naval Research Laboratory and at American University. After retiring from Georgia Tech in 2001, he returned to Bethesda, Maryland and spent time at Catholic University. His academic work involved various areas of acoustics, ranging from ultrasonics to underwater acoustics and some areas of optics. He was a fellow of the Acoustical Society of America and held two U.S. Patents.

Charles Logan Ray, Jr. (BME 1950) died on December 28, 2007. Charlie, as he was known, was a fourth generation Atlantan. He graduated from Tech High School and Georgia Tech, served in the U.S. Air Force during the Korean War, and then joined Lockheed as a production engineer. He retired as Vice President of Marketing and Product Support. He was a member of the first Woodruff School Advisory Board and served as its chair for a number of years. In 1989, he was the first recipient of the Annual Woodruff School Distinguished Alumnus Award and was elected to the College of Engineering’s Academy of Distinguished Engineering Alumni in 1994.

Arturo U. Rodriguez-Ulloa (BME 1933) passed away at the beginning of 2008. He was the retired principal at Rodriguez Ulloa y Asociados, A. P. in Mexico City. From 1938 to 1949 he was test and operations engineer with Impulsora on a large electrical system. Over the years, he worked with the Federal Power Commission, on a Kraft paper mill, the design or construction of various newsprint mills, the rehabilitation of a mill in Costa Rica for the United Nations, for the Development Bank, and Electricite de France in Paris. He was inducted into the College of Engineering Hall of Fame in 1999.

Roy Whisenhunt (BME 1934) was born in Shreveport, Louisiana in 1913 and died in Littleton, Colorado in December 2007. He received a B.S. and a commission in the Army Reserve from Georgia Tech. He served for 39 years in the military reserve and was on active duty during all of World War II and the Korean War; he retired from the U.S. Air Force as a Colonel. He worked for Texaco from 1938 until his retirement in 1978.

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**COLLEGE OF ENGINEERING**

**AWARDS**

John C. Cerny (BME 1951) was inducted into the Engineering Hall of Fame of the College of Engineering. He is Retired President and Board Chairman of Cerny and Ivey Engineers, Inc. He is also a member of the Academy of Distinguished Engineering Alumni.

Jarrett Datcher (MSME 2002) was inducted into the Council of Outstanding Engineering Alumni in the College of Engineering. He is a Specialist Engineer at Phantom Works Systems/Subsystems Technology Team, The Boeing Company. In 2007 he was named Black Engineer of the Year in Modern Day Technology Leadership.

J. Kurt Jacobus (BME 1993), President and Chief Executive Officer of MedShape Solutions, Inc., was inducted into the College of Engineering’s Council of Outstanding Young Engineering Alumni.

William R. McCollum Jr. (BSEE 1973, MSNE 1974) was inducted into the Academy of Distinguished Engineering Alumni in the College of Engineering. He is Chief Operating Officer of the Tennessee Valley Authority.

Huibert Mees (MSME 1989) is the North American C-Car Basic Design Project Leader for the Ford Motor Company. He was inducted into the Academy of Distinguished Engineering Alumni in the College of Engineering.

Robert K. Morse (BME 1982) was inducted into the Academy of Distinguished Engineering Alumni. He is Director, Environmental Controls Systems Engineering for Honeywell Aerospace. He manages undergraduate recruiting for Honeywell at Georgia Tech.

Henry B. Ward, III (BME 1993) was inducted into the College of Engineering’s Council of Outstanding Young Engineering Alumni. He is a Partner, Intellectual Property Group at Moore & Van Allen, PLLC. He received his law degree from Emory University in 1996. He has been a member of the Woodruff School Advisory Board since 2005.

Glenn R. Wienkoop, President and Chief Operating Officer of MSC Software, became a member of the Academy of Distinguished Engineering Alumni.

Ward O. Winer, Eugene C. Gwaltney, Jr. School Chair Emeritus, received a Dean’s Appreciation Award from the College of Engineering. He was chair of the Woodruff School for 19 years and is an honorary Georgia Tech alumnus.
**ALUMNUS GIVES SPECIAL GIFT**

**David Wang** (MSME 1953) gave a substantial commitment to the Ward O. Winer Professional Faculty Development Fund. His commitment was in response to an article in a previous issue of *mega tech* discussing the establishment of a faculty development endowment for the School. Mr. Wang’s gift will be spread over four years.

Mr. Wang spent his career in the paper industry, retiring in 1993 as Executive Vice President of International Paper Company. While at International Paper, he served on the board of the School of Chemical Engineering, to which he has been very generous. Mr. Wang serves on a number of boards ranging from business to public policy.

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**PI TAU SIGMA**

The installation of the Georgia Tech Nu Chapter of Pi Tau Sigma, the national honor society in mechanical engineering, was completed on November 29, 1932. In fall 2007, the following students were initiated into the chapter: John Andrews, Joshua Bailey, Phares Carroll, Christine Clayton, Jonathan Felts, Michael Fox, David Gay, Mohamed Ghanem, Jessica Goldstain, Mathew Grisham, Brandon Kearse, Joshua Knapp, Nicole Miller, Victoria Murawski, Shelley Nation, Marc-Antoine Pare, Diego Torres, John Ward, and Justin Yoo.

This current academic year, 2007-2008, Pi Tau Sigma celebrates its 75th anniversary at Georgia Tech. The National Convention was held on campus in February 2008 (see picture). Janet Allen is the group’s faculty advisor.

**ARCS SCHOLARS**

The Woodruff School has five ARCS scholars for the current academic year, 2007-2008. The ARCS Foundation provides scholarships to academically outstanding United States citizens studying to complete their degrees in science, medicine and engineering, thereby contributing to the worldwide advancement of science and technology. The Woodruff School selects senior Ph.D. students who have high GPAs, are making good progress toward their degree, and have good recommendations from their faculty advisors. Returning scholars are: **Donavan Gerty** (Ari Glezer, advisor), **Shelby Highsmith** (Steven Johnson, advisor) and **Charlotte Kotas** (Minami Yoda and Peter Rogers, advisors). New scholars are **Janine Johnson** (Jianmin Qu, advisor) and **Khalid Sorensen** (William Singhose, advisor).

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**Student News**

The **Georgia Tech chapter of ANS** received a certificate of distinction for the 2006-2007 school year.

**Luqman Abdur-Rahman**, graduate student, was named Mr. Georgia Tech during Homecoming Festivities. He graduated with a B.S.M.E. in spring 2005 and is scheduled to receive his master’s in December; he is also working on his MBA. He serves on the Presidents Council Governing Board; he coaches youth soccer and works with after-school and summer school programs.

**Kimberly A. Burns**, graduate student, won the 2008 Professional Development School Scholarship from the Health Physics Society. Nolan Hertel is her advisor. Her research is in the area of shielding materials and efficiencies.

**Shaheen Dewji**, graduate student, won the Richard J. Burk, Jr. Fellowship from the Health Physics Society. Nolan Hertel is his advisor.

**Mike Haberman**, graduate student, was awarded one of seven R. W. S. Stephen’s Prizes for Outstanding Student Contributions at the ICU Conference.

**Steve Hamilton**, graduate student, won a Computational Science Graduate Fellowship to pursue a doctoral degree in nuclear engineering. The award is from the Department of Energy.

**Roderick Jackson**, graduate student, was featured in *U.S. News & World Report’s* special issue on America's Best Graduate Schools in an article about students returning to graduate school after working in industry: *How To Do It, Conquer Graduate School*. He said, "the key is to weather the first semester back in school. You have to constantly remember why you came.” He said it was very important to go after fellowships. Roderick returned to graduate school in 2004 after working in industry for a number of years upon the completion of his BS degree. He plans to teach engineering to boost minority interest in the field.

**Charlotte Kotas**, graduate student, received the GE Faculty of the Future Fellowship. This fellowship is given to outstanding graduate students who express a strong desire for a career in academia.

**Sara Rahnema**, undergraduate student, received an American Nuclear Society Undergraduate Scholarship.

**Kyle Reno**, undergraduate student, received a Henry Ford II Scholar Award from the College of Engineering. This award comes from the income from a restricted endowment fund provided by the Ford Motor Company and is given annually to the engineering students with the best academic record at the end of the third year of undergraduate study.

**Michael P. Shannon**, graduate student, won a 2007-2008 fellowship from the Health Physics Society. Nolan Hertel is his advisor.

**Amy Varallo** received an incoming freshman scholarship in Nuclear and Radiological Engineering. Last summer Amy was a contestant on *Jeopardy*.

**Lisandro Vazquez II** received a Decommissioning, Decontamination and Reutilization Division Scholarship from the American Nuclear Society.
FIRST-EVER ICE CREAM SOCIAL HELD FOR UNDERGRADUATES
The Woodruff School held its first-ever ice cream social for undergraduate mechanical engineering and nuclear engineering students on Burdell Plaza at the end of the first week of classes for fall semester 2007. Mayfield ice cream was served by Woodruff School faculty members; Dr. Dr. Mr. MD, a group headed by Professor Paul Neitzel, provided the entertainment; and a special tee-shirt was handed out to welcome new and returning students. Student groups, including gt motorsports, Wreck Racing, GT Off-Road, and Robojackets displayed their wares. Fixings for sundaes and cold water were available. More than 1000 people attend the event.

ANOTHER SUCCESSFUL COOKOUT
A recurring event at the beginning of each fall semester is the Graduate Cookout to welcome returning students and to introduce new graduate students to other students, the faculty, and staff. The theme of this year's tee-shirt was Engineering the World. More than 500 people attended the event held on the lawn between the MARC and MRDC buildings the week after Labor Day.

AN ANIMATED GEGENHEIMER LECTURE
Chris Miller, Director of Shrek The Third (DreamWorks Animation) gave the Gegenheimer Lecture on Innovation in December 2007. In An Ogre's Tale: How to Make An Animated Feature In 1000 Easy Steps…. Miller took the audience through all the phases of creating a story and filming it: from preproduction (story and editorial) to the work of the art and layout departments, to production (animation and actors; voices), and finally, to the lighting department, all working to create the world of Shrek.

MEET AND GREET THE NEW SCHOOL CHAIR
A welcome luncheon was held for new School Chair Bill Weper to meet faculty and staff of the Woodruff School.

A RARE SIGHT IN ATLANTA
This photo of the Love Building was taken by Christopher Simpson, a sophomore ME student, on a Saturday in January 2008. Not only is the snow rare, but we had two “snow storms” in one week.
MEET THE NEW DIRECTOR OF DEVELOPMENT

“Development continues to provide the vital margins to allow the Woodruff School to do an even better job in educating students and advancing the knowledge base of Mechanical Engineering. I feel very fortunate to be able to work with some of the great minds in ME to make the Woodruff School even better,” said Tom Lawley, who came to the Woodruff School in July 2007 as the new Director of Development. Tom relocated from Chicago, where he was a Major Gifts Officer with the Children’s Memorial Foundation. He had worked closely with the Children’s Memorial Research Center to raise extramural funding for the physicians and researchers engaged in studying treatments and cures for several debilitating pediatric diseases. He also played an active role in the $400 million capital campaign for the construction of a new hospital in downtown Chicago. Before that, Tom was a Major Gifts Officer with the Atlanta Union Mission, where he helped in the completion of a successful capital campaign. Tom graduated from St. Andrews Presbiterian College in 1995 with a B.A. in History.

Tom’s goals for the Woodruff School include raising funds in support of students and faculty, program enrichment facilities and equipment, and current operational capital as part of the anticipated Capital Campaign. Contact Tom by phone at (404) 385-8345 or by e-mail at tom.lawley@me.gatech.edu.

CONTRIBUTORS

This list includes donors who have designated gifts to the Woodruff School of Mechanical Engineering between July 1, 2006 and June 30, 2007.

Alumni, Friends, Parents, and Students

K Annamalai, ME 1975
David A. Bauer, CMPE 2003
Maxwell D. Berman, CE 1957
James R. Borders, ME 1983
Milan A. Borkar, EE 2002
Arthur D. Brook, ME 1956
Debra J. Brook, Friend
William B. Crane, PE, ME 1950
John C. Cerny, PE, ME 1951
Debra J. Brook, Friend
Miland A. Borkar, EE 2002
Maxwell D. Berman, CE 1957
David A. Bauer, CMPE 2003
K. Annamalai, ME 1975
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