Two professors named to the National Academy of Engineering

Elizabeth Campell
Institute Communications and Public Affairs

Two Georgia Tech faculty — Biing-Hwang Fred Juang and C.F. Jeff Wu — can now add membership to the select National Academy of Engineering (NAE) to their growing lists of honors. Earlier this month, the NAE elected 76 new members and 11 foreign associates, bringing the membership to 2,174 and the number of foreign associates to 172. The election of Juang and Wu brings Georgia Tech’s number of active NAE members to 25.

Don Giddens, dean of the College of Engineering, said, “A big part of a top-notch engineering program is having the very best professors, and I congratulate Professors Juang and Wu on their accomplishment. We are always looking for ways to become better, but having these two gentlemen acknowledged for their contributions to our discipline demonstrates both the vitality of our programs and our commitment to providing the best possible learning experience for our students.”

Don Giddens

Election to the NAE is among the highest professional distinctions accorded to an engineer. Academy membership honors those who have made “important contributions to engineering theory and practice, including significant contributions to the literature of engineering theory and practice,” and those who have demonstrated accomplishment in “the pioneering of new fields of engineering, making major advancements in traditional fields of engineering, or developing or implementing innovative approaches to engineering education.”

The NAE recognized Juang, a chaired professor in the School of Electrical and Computer Engineering and Georgia Research Alliance Eminent Scholar, for his contributions to speech coding and speech recognition. Juang’s research interest is in developing mathematical methods and engineering practices that make it possible for people to speak with machines naturally and to interact with other people freely even though they are far apart.

“Engineers are advisors to the nation on science, engineering and medicine,” says Juang. “That probably means that I may have an additional duty as a citizen to offer my professional knowledge to help society. Being able to help is a good thing, and always enjoyable.”

Juang came to Georgia Tech in 2002 from Avaya Labs Research, where he served as director of Multimedia Technologies Research. Previously, he was director of Acoustics and Speech Research at Bell Laboratories/Lucent Technologies from 1996-2001. He is the author of more than 165 publications and holds nearly 20 patents. Similarly, the NAE recognized Wu, a chaired professor in the School of Electrical and Computer Engineering.

Why do low numbers persist for women faculty of color?

Jane Sanders
Research News

The numbers of women of color on academic faculties in the United States are very small and not increasing. There are even fewer such professors in the science, technology, engineering and mathematics fields. And the implications of this deficit are far-reaching, researchers suggest.

But some strategies for improvement exist at both the individual and institutional levels, and therein lies the hope that Associate Professor of Public Policy Cheryl Leggon delivered to her audience at the American Association for the Advancement of Science (AAAS) annual meeting in Seattle earlier this month.

“The numbers are grim across the board for males and females of color,” Leggon said. The situation has not improved much in the past decade. There have been only miniscule increases in faculty — especially women — of color in the science, technology, engineering and mathematics (STEM) fields, Leggon notes.

She cites several implications of these statistics. First is the effect of this deficit on students.

“The United States is becoming more diverse, and that is somewhat reflected in the student population in colleges and universities, but nowhere in the faculty population,” explained Leggon, a sociologist. “That is problematic. What kind of message does it send to students? The implicit message is, ‘You can’t do this.’ The absence of these groups does send a message.”

Leggon cites two other important
Monique Gupta has done it again. Winner of the prestigious Goldwater scholarship last spring, Gupta has captured the Churchill scholarship for one year of study at the University of Cambridge. Gupta plans to use her scholarship to get a Master of Philosophy in genetics before going to medical school.

Studying industrial and systems engineering at Georgia Tech, she said, has given her a solid foundation on which to base a career as a physician. “In today’s age of medicine, no physician can go forward without knowing more about the research that’s being conducted,” Gupta said. “By the time I start practicing, all these novel concepts we see today are going to be in use. I need to have a background in them.”

Gene therapy, she believes, is one of the concepts. While at Tech, she participated in two types of research with Joseph LeDoux, professor of biomedical engineering at Georgia Tech and Emory University.

Gene therapy is a novel approach to treating diseases, and most of it is still in the experimental phase, Gupta said. The idea involves scientists identifying genes that cause a certain disease. “A new gene would be created in a lab, and doctors would use it to replace the gene that is causing the problem.”

Diseases that can be helped by gene transfer include rheumatic arthritis and juvenile arthritis, she said. Gupta is Tech’s third student to win the scholarship, given out by the Winston Churchill Foundation of the United States. The award pays for one year of study at the University of Cambridge, plus a living allowance. Only 75 universities are allowed to nominate students for this honor.

Full Name: Monique Gupta
Age: 21

What I find most rewarding about being a student at Tech: The most rewarding thing is the quality of people I get to interact with daily. At Georgia Tech, I am surrounded by an incredible mix of hard workers, geniuses, leadership gurus and selfless givers. I strongly believe that we are shaped to some degree by those around us, and college is a time where most of our development occurs. My association with the amazing people that Tech has to offer has allowed me to grow more into the person that I want to be.

What I find most challenging about being a student at Tech: The biggest challenge is to have good grades and not let my schooling get in the way of my education. There is a huge demand on academic success at Tech, and sometimes it’s easy to let our struggle for academic and leadership excellence interfere in our pursuits to develop into dynamic individuals.

Hobbies: Dancing (any kind — from swing to classical Indian), scrapbooking, and recently I have learned how to play bridge.

The last book I read for pleasure: “Let’s Roll,” by Lisa Beamer

The CD in my stereo: I am a true Tech student in that I only listen to MP3s. I enjoy music uncategorized — it’s not unusual for a classical piano concerto to be followed by a country, pop or Indian song.

Another occupation I’d like to try: Open a scrapbook store, be a philanthropic event planner, be a medical ambassador to educate society about emerging biomechanical practices, be a character at Disney World … this list is endless!

One talent I would most like to have: Singing. Singers possess the incredible ability to inspire and soothe people via their music.

My pet peeve is: My dependency on technology such as cell phones and e-mail. I often rely too much on these items and find myself in a bind when one crashes or is lost.

My most valued possession: Note cards. As all my family and friends can vouch for, I rely on note cards to organize every aspect of my life.

My day would not be complete without: A phone call from my family. I have been blessed with an amazing family that supports, encourages and inspires me in all my endeavors. I aspire to become as giving and even as intelligent as them.

My motto: Think Yellow (or in Tech’s case: Think Gold) and Work Hard. It is imperative to always have a cheerful, optimistic (yellow) outlook on life while I am dedicating all my energy to what I am passionate about.
Student orientation program goes under the microscope

David Terraso
Institute Communications and Public Affairs

Georgia Tech's student orientation program, FASET (Focus on Early Access and the Student Transition), is undergoing a voluntary program review this semester that could result in major changes starting in fall 2005. John Stein, director of Success Programs, said the critique is a continuation of the process that was started during last spring's FASET 2000 review.

"I come from a tradition where various offices and programs expand the pool from which students can choose," Leggon said. "It signifies the amount of time and money that goes into it, I think it's important that we review it and make sure it's meeting the students' needs," said Stalzer. "The hope is that each of these programs will be going to their constituents collecting feedback and ideas.

"They should take into account the reputation of the specific department, program and faculty with whom they would like to work. For junior faculty members, particularly in underrepresented groups, administrators must make clear the criteria for getting tenure," Leggon says. "Committee work is time consuming and does not substitute for publications," she added. "Also, because there are so few women faculty of color, students of color gravitate toward you. As a junior faculty member, you have to be careful it's not all consuming." Sometimes, it's difficult to make that judgment. It's a dilemma because junior women of color are so passionate about mentoring. But to make the greatest impact in the long run, you have to get tenure first so you'll be here later.

Strategies to improve conditions for women in the STEM fields in academia, strategies to be employed at both the individual and institutional levels, Leggon says.

At the undergraduate level, students should be informed about the range of opportunities they might have with a degree in a particular field. "For example, if you have biology majors from an underrepresented group, they are probably only thinking of a career in medicine," Leggon said. "They don't usually think of a research career in acute." If undergraduate students do indicate an interest in a career in academia, it's important they know how to select a graduate school. "They shouldn't apply to an institution just because of its overall reputation," Leggon explained. "They should take into account the reputation of the specific department, program and faculty with whom they would like to work.

Library to measure service quality with survey

Faculty and students will have an opportunity to receive a $100 campus bookstore gift certificate if they participate in an upcoming survey for the Library and Information Center.

The Library, for the second consecutive year, will participate in the LibQUAL+ survey, an important, national initiative to improve Library service. Beginning in mid-March, a random sample of 300 undergraduate students, 600 graduate students and 600 faculty members will be invited via e-mail to participate in the survey.

Its results will help Library administrators gauge the general attitude of students and faculty toward Library service, determining the overall level of satisfaction with the Library's services. Participation in this 10-minute survey is voluntary and responses are completely confidential.

To see the 2003 survey results and the Library's responses and service improvements, go to www.library.gatech.edu/about_us/libqual/.

Library officials will send out invitations to participate in the survey in mid-March; the survey will be available online through late April 2004.

Undergraduate research opportunity

Georgia Tech (through the Microelectronics Research Center) is part of the NSF-sponsored National Nanotechnology Infrastructure Network (NNIN). Among its offerings, the NNIN program provides opportunities for undergraduate students to spend a summer working under a faculty member at one of the NNIN sites. This supplementary Research Experience for Undergraduates (REU) program is offered to students who attend an NNIN member school as well as students attending non-NNIN member schools. The REU is designed to send students for the summer to a school different from that which they are currently attending.

Interested students are encouraged to apply for this program, and faculty are urged to alert them to this opportunity. Applications and further information are available at www.cmf.cornell.edu/REU/homepage.html.

Policy, cont'd from page 1

reasons to increase diversity among STEM faculty/cleggon.htm

For more information...

Cheryl Leggon
www.spp.gatech.edu/people/faculty/leggon.htm

IN BRIEF:

Illegal parking at CRC

Last fall, a message was circulated regarding the parking situation outside the Campus Recreation Center. In effect, it said the Parking Office would not ticket cars on Tech Parkway from 5 p.m. to 9 a.m. during the week and anytime Saturday and Sunday. This plan was to continue until either completion of the CRC or its adjacent parking deck, whichever comes first.

Last week, another message was being circulated via the CRC listserve, noting that the privilege was being revoked — as well as becoming dangerous — by people parking cars in the median and on both sides of Tech Parkway.

The message was sent as a reminder because the Parking Office has said it plans to tow anyone who parking in a no parking area, with recovery at the owner’s expense.

To see previous postings, or to sign up for the CRC listserve, refer to https://lists.gatech.edu/sympa.
CAMPUS EVENTS

Arts & Culture
Feb. 27
The Fert Center for the Arts welcomes Spoleto Festival USA Chamber Music with Charles Wadsworth at 8 p.m. Faculty and staff receive a 10 percent discount. For tickets, call 894-9600.

Brown Bags/Conferences/Lectures
Feb. 26
The School of Aerospace Engineering’s Distinguished Lecture Series welcomes Lt. Col. Richard Clifford, director of space utilization at Boeing, on “The Moon and Beyond, 2004: An Assessment of the New Space Exploration Vision,” at 11 a.m. in the Clary Theater. For more information, e-mail connie.ishard@aerospace.gatech.edu.

Feb. 27
The Center for Paper Business and Industry Studies’ Distinguished Lecture Series welcomes Richard Phillips, senior vice president of technology for International Paper, on “Imperatives for Manufacturing Success in the Paper Industry,” at 11 a.m. in the Institute of Paper Science and Technology’s Kress Auditorium. The lecture will also be broadcast on the Web. For more information, visit www.cpbis.gatech.edu/cls2004.

Mar. 1
The School of Industrial and Systems Engineering’s Natural Systems Speaker Series welcomes Janine Benyus, author of “ Biomimicry: Innovation Inspired by Nature,” at 5:30 p.m. in the LeCraw Auditorium, College of Management Building. For further information, refer to www.sustainable.gatech.edu.

Mar. 3
The School of Psychology’s Colloquium Series welcomes Daniel Schacter, professor of psychology at Harvard University, on “The Seven Sins of Memory: A Cognitive Neuroscience Perspective,” at 3:30 p.m. in room 250, Coon Building. For more information, e-mail ch18psy@gatech.edu.

Mar. 3
The College of Management’s IMPACT Speaker Series welcomes Amy Lance, president of the Chastain Horse Park, at 4:30 p.m. in the LeCraw Auditorium.

Faculty/Staff Development
Mar. 2
The Center for the Enhancement of Teaching and Learning’s IT Tuesday series hosts “Managing and Improving Students’ Writing Assignments: Online Resources and Tools,” at 11 a.m. For more information or to register, visit www.ettl.gatech.edu.

Mar. 3
The Office of Sponsored Programs hosts a brown bag on “Intellectual Property,” at noon in the Research Administration Building. To register, call 894-6945 or e-mail nadia.nitman@osp.gatech.edu.

Miscellaneous
Feb. 24
The Spring meeting of the General Faculty Assembly will be from 3 - 5 p.m. in the Student Center Theater. Agenda posted on the faculty governance Web site: www.gatech.edu. For more information, e-mail said.abeld@me.gatech.edu.

Mar. 3
The Office of Human Resources will hold the second of two pre-retirement meetings, covering Teachers Retirement System benefits and optional/supplemental retirement benefits. These meetings are designed for employees within 10 years of retirement. To register, visit www.trainsweb.gatech.edu.

Mar. 9
Tech21fee offers unique personal enrichment classes in Georgia Tech’s new instructional facility, the Global Learning and Conference Center. The Spring Series examines the relationship between technology, communication, art, business and culture. Classes meet Tuesday nights from 6:30 - 8:30 p.m. for six weeks. Members of the Georgia Tech community receive a special discount. For more information, visit www.pc.gatech.edu or call 385-3542.

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C L A S S I F I E D S

Advertisements will run for a maximum of three issues. The Whistle reserves the right to edit ads longer than 30 words.

Appliances
Refrigerator, $140; range, $140; dish-washer, $90; over-range microwave, $90. All white, GT, excellent condition. Call Jon, 385-2935 or e-mail igetstuff@hotmail.com.

Kenmore electric washer and dryer. Solenoids and heating element 2.5 and 2.8. Kenmore electric washer and dryer. Call 894-2538.

Someone electric dryer. $100; new; negotiable. Call 405-559-8761.

Whirlpool washer and dryer. Still under warranty; both bought in 2002. $75/pair, you pick up. Call 385-6042 or e-mail angelo.bon-giorno@physics.gatech.edu.

Automobiles

1995 Honda Accord EX, Automatic, 4-door, gold, good condition. $4,100. Call 894-2538.


1997 Subaru Legacy L sedan. White, 74K miles, gray interior. AWD, automatic, cassette, new tires. Runs great, fun to drive. $5,000. E-mail roger.nacasan@wse.gatech.edu.

Computers
Dell Axim X5 (500MHz) PDA with Windows Mobile 2003, cradle, charger, extra battery, foldable keyboard, NetGetar 802.11b CR card, 2GB SD CF card and case. $100. E-mail eric.logan@ece.gatech.edu.

Palm m150 with cradle/charger. Palm Bluetooth card, DataViz Desktop To Go software, and USB sync cable, $75. E-mail eric.logan@ece.gatech.edu.

Furniture
Just one year old: maroon couch/loveseat, $570; large glass dining table, 4 matching red chairs, $250; queen bed, headboard, box spring, mattress, $250. Negotiable. Contact Keiko, 770-723-9242.

Dining table w/6 chairs, $175; crib w/mattress, $120; and much more. See photos at http://photos.yahoo.com/ batugunduz. Call 770-951-8186.

Midtown condo for sale, less than 1 mile from Tech Square and 2 blocks from Piedmont Park. Completely rennovated 2-story. 2BR/1.5BA, new appliances, sunroom. $219,500. Call 404-874-8465 or e-mail babsyrew@yahoo.com.

Mountain home 60 miles north of Tech. 3-4BR/2.5BA, private 1 acre of forest. Oak floors, vaulted ceilings, stone and wood accents, decks. Tour at www.estesvt.com/residential/ benttree/3777-lillevillete.htm. Listed at $395K, eager to sell. E-mail messeer@mindspring.com.

Miscellaneous
Hitachi 43-inch HDTV w/stand. Excellent condition, $1,100. Call 678-232-5475 or e-mail david.gifford@grl.gatech.edu.

1994 Honda Shadow, 700cc, 54K miles, well maintained, stored in garage, matching cherry red helmet included. $1,000. Call 770-617-0855.

Gibson RB250 Mastertone 5-string banjo, excellent condition, beautiful tone, $1,500. Call Dave, 770-491-6395.