New campus signs help point the way

A uniform system of wayfinding

Michael Hagerty
Institute Communications and Public Affairs

F or those not familiar with its layout, the Georgia Tech campus can be a daunting place. After several years of planning, phase one implementation of the Wayfinding Master Plan is being realized. Wayfinding involves a comprehensive system of signs, landmarks and environmental cues that direct people from where they are to their destination. The new system represents a dramatic departure for the campus environment. The new system represents a dramatic departure for the campus environment. Signs continued, page 2

Professors honored for work in ‘green’ chemistry

John Toon
Research News

T wo Georgia Tech faculty members who have collaborated for more than 15 years on sustainable chemical processes are among the winners of 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Charles Liotta, Tech’s vice provost for research and dean of graduate studies, and Charles Eckert, a professor in the School of Chemical and Biomolecular Engineering, were honored for their development of benign tunable solvents that couple reaction and separation processes. They were honored on June 28 at a ceremony on Washington, D.C.

The awards, which also went to four companies, recognize “creative chemistry that shows promise for improving the environment.” An independent panel of technical experts convened by the American Chemical Society judges the awards on behalf of stakeholders from the government, industry, academia and nonprofit sectors.

“We’re using a systems approach to processing,” explained Eckert, who holds the school’s J. Erskine Love, Jr., Institute Chair. “We have used novel and tunable solvent systems to integrate the reaction and separation processes to facilitate the reduction of waste, allow the recycling of catalysts and use more benign solvents. We are developing methods that not only are more benign, but also have economic advantages in producing better products less expensively.”

For example, they use near-critical water, which when heated to 275 degrees Celsius under pressure, dissolves non-polar organic chemicals that would be insoluble at normal conditions. “You can do a reaction with organic molecules, and when you want to separate the products, you just go back to room temperature.”

Bringing innovation and love of teaching to the classroom

Elizabeth Cothran
Institute Communications and Public Affairs

E ttina Cothran sees learning a foreign language as more than just memorizing vocabulary and grammar rules. She views studying a language as an exciting way to expose students to other cultures and the truly global nature of today’s world.

“Having the language exposure makes students more attuned to differences in different cultures,” said Cothran. “You need to see the others in order to appreciate them as well as your own culture.”

Cothran, an associate professor of German in the School of Modern Languages, brings her enthusiasm and genuine caring for the well-being of her students to the classroom, and her students respond to it. Her work has garnered several teaching awards, including the 2004 E. Roe Stamps Award for excellence in teaching, Tech’s Outstanding Teacher of the Year award (1993), and a two-time recipient of the American Association of Teachers of German (AATG) Georgia Professor of the Year Award.

“I always enjoy how Dr. Cothran keeps the class lively and keeps all students involved. She ties in what we are discussing with current events, bringing the information to life,” said Keri Foster, a senior in computer engineering. “In my European Union class, I met with students who have collaborated for more than 15 years on sustainable chemical processes are among the winners of 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Professors Charles Eckert (left) and Charles Liotta are among the winners of the 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Bringing innovation and love of teaching to the classroom

Elizabeth Cothran
Institute Communications and Public Affairs

E ttina Cothran sees learning a foreign language as more than just memorizing vocabulary and grammar rules. She views studying a language as an exciting way to expose students to other cultures and the truly global nature of today’s world.

“Having the language exposure makes students more attuned to differences in different cultures,” said Cothran. “You need to see the others in order to appreciate them as well as your own culture.”

Cothran, an associate professor of German in the School of Modern Languages, brings her enthusiasm and genuine caring for the well-being of her students to the classroom, and her students respond to it. Her work has garnered several teaching awards, including the 2004 E. Roe Stamps Award for excellence in teaching, Tech’s Outstanding Teacher of the Year award (1993), and a two-time recipient of the American Association of Teachers of German (AATG) Georgia Professor of the Year Award.

“I always enjoy how Dr. Cothran keeps the class lively and keeps all students involved. She ties in what we are discussing with current events, bringing the information to life,” said Keri Foster, a senior in computer engineering. “In my European Union class, I met with students who have collaborated for more than 15 years on sustainable chemical processes are among the winners of 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Professors Charles Eckert (left) and Charles Liotta are among the winners of the 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Bringing innovation and love of teaching to the classroom

Elizabeth Cothran
Institute Communications and Public Affairs

E ttina Cothran sees learning a foreign language as more than just memorizing vocabulary and grammar rules. She views studying a language as an exciting way to expose students to other cultures and the truly global nature of today’s world.

“Having the language exposure makes students more attuned to differences in different cultures,” said Cothran. “You need to see the others in order to appreciate them as well as your own culture.”

Cothran, an associate professor of German in the School of Modern Languages, brings her enthusiasm and genuine caring for the well-being of her students to the classroom, and her students respond to it. Her work has garnered several teaching awards, including the 2004 E. Roe Stamps Award for excellence in teaching, Tech’s Outstanding Teacher of the Year award (1993), and a two-time recipient of the American Association of Teachers of German (AATG) Georgia Professor of the Year Award.

“I always enjoy how Dr. Cothran keeps the class lively and keeps all students involved. She ties in what we are discussing with current events, bringing the information to life,” said Keri Foster, a senior in computer engineering. “In my European Union class, I met with students who have collaborated for more than 15 years on sustainable chemical processes are among the winners of 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Professors Charles Eckert (left) and Charles Liotta are among the winners of the 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Bringing innovation and love of teaching to the classroom

Elizabeth Cothran
Institute Communications and Public Affairs

E ttina Cothran sees learning a foreign language as more than just memorizing vocabulary and grammar rules. She views studying a language as an exciting way to expose students to other cultures and the truly global nature of today’s world.

“Having the language exposure makes students more attuned to differences in different cultures,” said Cothran. “You need to see the others in order to appreciate them as well as your own culture.”

Cothran, an associate professor of German in the School of Modern Languages, brings her enthusiasm and genuine caring for the well-being of her students to the classroom, and her students respond to it. Her work has garnered several teaching awards, including the 2004 E. Roe Stamps Award for excellence in teaching, Tech’s Outstanding Teacher of the Year award (1993), and a two-time recipient of the American Association of Teachers of German (AATG) Georgia Professor of the Year Award.

“I always enjoy how Dr. Cothran keeps the class lively and keeps all students involved. She ties in what we are discussing with current events, bringing the information to life,” said Keri Foster, a senior in computer engineering. “In my European Union class, I met with students who have collaborated for more than 15 years on sustainable chemical processes are among the winners of 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Professors Charles Eckert (left) and Charles Liotta are among the winners of the 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Bringing innovation and love of teaching to the classroom

Elizabeth Cothran
Institute Communications and Public Affairs

E ttina Cothran sees learning a foreign language as more than just memorizing vocabulary and grammar rules. She views studying a language as an exciting way to expose students to other cultures and the truly global nature of today’s world.

“Having the language exposure makes students more attuned to differences in different cultures,” said Cothran. “You need to see the others in order to appreciate them as well as your own culture.”

Cothran, an associate professor of German in the School of Modern Languages, brings her enthusiasm and genuine caring for the well-being of her students to the classroom, and her students respond to it. Her work has garnered several teaching awards, including the 2004 E. Roe Stamps Award for excellence in teaching, Tech’s Outstanding Teacher of the Year award (1993), and a two-time recipient of the American Association of Teachers of German (AATG) Georgia Professor of the Year Award.

“I always enjoy how Dr. Cothran keeps the class lively and keeps all students involved. She ties in what we are discussing with current events, bringing the information to life,” said Keri Foster, a senior in computer engineering. “In my European Union class, I met with students who have collaborated for more than 15 years on sustainable chemical processes are among the winners of 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.

Professors Charles Eckert (left) and Charles Liotta are among the winners of the 2004 Presidential Green Chemistry Challenge Awards from the U.S. Environmental Protection Agency and the American Chemical Society.
The need for such a system was identified in the 1998 Campus Master Plan. Since then, planning committees have worked to develop the concept and design, budget for the cost and prepare for implementation.

The result is a hierarchical system of signs for pedestrian and vehicular traffic to navigate the 400-acre campus. Brad Satterfield, who works in Facilities Design and Construction as manager of architectural services, began implementing the plan last year, completing the first phase — the primary directional signs and map kiosks — earlier this summer.

The next phase, which will continue well into next year, provides identification to more than 100 buildings and facilities on Tech’s campus.

The sign component of the wayfinding system includes trailblazer signs to guide people in neighborhoods surrounding Tech and at the interstate exits to the campus; campus identification signs to define campus edges and announce arrival; vehicular directional signs to guide visitors to parking decks; parking facility signs to identify visitor and other designated parking; pedestrians directional signs and map kiosks to provide guidance to people on foot; building identification signs to create a uniform system of facility ID; and street and campus shuttle signs.

Other components of the Wayfinding Master Plan include environmental landmarks and site development. These components identify landscape architectural features, including paving materials, plant materials, lighting and outdoor furniture in order to develop a thread of continuity unifying the eclectic palette of building architecture on campus. These components are far more costly than signage and will be implemented in conjunction with capital projects, and as individual site development projects like large pedestrian corridors and entire streetscapes.

For Eckert and Liotta, collaboration is much more than a pragmatic partnership to win research contracts. Though administratively part of two different schools, the two professors share laboratory space and house their students together, mixing graduate and undergraduate student chemists and chemical engineers in ways designed to break down traditional barriers.

"The major social and scientific problems we will face in the 21st century are going to require a multi-disciplinary approach," said Liotta, who has spent his entire career at Georgia Tech. "Our students are educated in cooperative and collaborative research with other disciplines."

Liotta and Eckert work in the Ford Environmental Science and Technology Building, which was designed for just that kind of intermingling. Biologists, chemical engineers, atmospheric modelers, chemists, civil engineers and faculty with other backgrounds work in adjacent offices and laboratories, all part of a concerted effort to bring researchers together around environmental issues.

"The fact that Charlie Liotta and I are able to co-occupy lab space and co-direct students in a building devoted to the environment has made it much easier for us to have an impact," Eckert said. "Georgia Tech is very supportive of collaborative work. I think it is very important that this award is being given for a multi-disciplinary collaborative effort."

That collaboration extends beyond the laboratory into the Atlanta community, the state of Georgia and to industrial companies nationally and internationally. Liotta says. It has also benefited from other outside support, including collaborators from institutions outside Georgia and the Georgia Research Alliance, a public-private partnership that fosters economic development by investing in university faculty and instrumentation resources.

"The state has recognized that university research is the intellectual driver for economic development," Liotta said. "We are fortunate to be at Georgia Tech and in the state of Georgia where there is such a forward-looking process."

Liotta and Eckert met more than 20 years ago when both were consultants to DuPont. Liotta had a reputation for work in phase-transfer catalysis, which allows the reaction of molecules that are not soluble in a common solvent. Eckert’s background was in molecular thermodynamics and phase equilibria, and he was a pioneer in the use of supercritical fluids for separations and reactions.

At Georgia Tech, the two professors have not only combined their respective fields, but also merged their careers. "This has evolved into a fantastic relationship," adds Liotta with a grin. "We just had the right chemistry to make it work."

For more information...

Eckert-Liotta Joint Research Group
www.chbe.gatech.edu/ssc/eckert
and covers topics such as appropriate behavior, which is a cooperative program that prepares students for the world market. LBAT is an intensive program that prepares students to negotiate the business world in their foreign language and covers topics such as appropriate behavior, which includes eye contact and body language. Each summer she leads a group of students in an LBAT study abroad program to Germany. “The practical application of a language is so important in addition to the literature and philosophy of that country,” said Cothran. “I think it is important to prepare students with the necessary tools to make this nation successful in a global marketplace. After World War II, the American economy as the single largest economy constituted the largest percentage of the world market, but that is no longer so.” In fact, about 700 German-based firms have operations in the southeast United States. Another novel, collaborative teaching approach developed by Cothran is the Languages Across the Curriculum courses, co-taught in the foreign language and the discipline, to provide students with two perspectives. Cothran began this program with German courses and subjects. After receiving a grant from the U.S. Department of Education, the School expanded the program to courses in French, German, Japanese, Spanish and Chinese. “The co-taught course about The European Union (EU) was probably the most fantastic learning experience that I have ever had,” said Ashley Wood, a senior in International Affairs and Modern Languages. “One teacher focused mainly on our German skills, while the other on our writing and debate skills as well as the content of the course. I felt like I got double out of that class.” For her co-taught course about the EU, Cothran reaches an even wider audience with an online, interactive teaching unit based on the course, which has been published by the Goethe Institute.

I think a good teacher has to awaken curiosity and wonder. The joy in that to me is the core of what my profession is all about. Not to just teach an agenda but to open their minds,” said Cothran.

Cothran has developed two successful, career-oriented programs for students that focus on the “practical application of a language.”
July 20 - 27
Distance Learning and Professional Education offers two courses in defensive driving, using curriculum from the National Safety Council, at the Global Learning & Conference Center in Technology Square. Many insurance companies offer a reduction in the cost of insurance with certification. To register, visit www.pe.gatech.edu or e-mail defaulnder@yahoo.com.

July 22-25
In association with the National Arts Black Festival, the Freddie Hendricks Youth Ensemble of Atlanta presents "Times" at the Fertz Center for the Arts. Showtimes vary. For more information, visit www.freddiehendricks.com/calendar or call 894-9600.

July 16
The Office of Organizational Development hosts a free interactive workshop "How to Organize and Manage Your E-Mail Using Eudora" at 11:30 a.m. in room 308. Savant Building. To register, visit www.trainsweb.gatech.edu/mastercasp.asp.

Miscellaneous

Ongoing

Technology — Tech’s chapter of Toastmasters International for faculty, staff, students, alumni and spouses — meets every Thursday at 7:30 p.m. in room 102IRC. For more information, visit www.toastmasters.gatech.edu or e-mail terry.nolan@business.gatech.edu.

Note: The next issue of the Whistle will be published on July 20.

Classifieds

June 25 - Aug. 15
The Campus Recreation Center will be experiencing changes in service during this time. For more information, visit www.crc.gatech.edu.

July 15
This is the deadline to submit tuition assistance applications for both the STRAP Program and the BOR Tuition Remission Program for Fall semester. Send applications to Kimberly Porter in the Office of Organizational Development, mail code 0206.

July 23
Applications due for those wanting to participate in Mentor Tech. For more information, visit www.mentortech.gatech.edu.

July 30
Summer commencement, with address by Regents’ Professor C.P. Wong, at 9 a.m. in Alexander Memorial Coliseum. Tickets are not required. For more information, visit www.gatech.edu/commencement.

Note: The next issue of the Whistle will be published on July 20.

Classifieds

Automobiles

2002 Mazda Protege 5, 60K miles, clean, white, 4DR, power doors and windows, automatic, AM/FM/CD player, ice blue interior, alloy wheels. Need someone to take over payments. E-mail pecani280@yahoo.com.

Furniture

Simmons BeautyRest Starlight Ewok double-side pillowtop medium firm queen-size mattress/spring box set. Detachable legs, no extra frame needed, cream color, low profile, $529. E-mail hello@emory.edu.

Oak living room furniture complete set w/lamps, $400; oak dining room table w/chairs, $100; glass beveled breakfast table w/chairs, $30; cherry bedroom suite queen size, perfect condition, $2,000. Will deliver. Call 678-222-8547 or e-mail david.gifford@lifii.gatech.edu.

Bunk beds from Rooms to Go. Light wood, excellent condition, quality twin mattresses, $500. Matching chest, 6 deep drawers, $100 OBO for both items. Call 404-636-7215 or e-mail vicki.birchfield@istate.gatech.edu.

Real Estate/Roommates

1BR garden apartment in Inman Park, free of charge in exchange for 20 hours childcare/wk. beginning in August. New kitchen & bath, off-street parking, private deck. Usually rents for $775/month. Call 404-658-1784 or e-mail ruthdusso@mindspring.com.

Bright, large house in secluded wood setting, 20 minutes to campus. Near best elementary school in Cobb County. Go to www.sellcc.com. Click on Featured Properties and then scroll down to 3231 Valley Vista Road.

Sports/Fitness/Recreation

Swimming pool, 24-foot diameter and 48-inch height. Includes structure, filter and pump, needs liner. Brand new in packaging, must pick up. Worth $800; sell for $675. E-mail lynn.rosenberg@arts.gatech.edu.

Proform 585C treadmill, excellent condition. Paid $900, sell for $400. E-mail nicole.pamplin@facilities.gatech.edu.

Miscellaneous

Wanted, housekeeper to clean 1BR apartment by owner. Services needed every two weeks. Will pay $40 per cleaning. Call, after 6 p.m., 770-514-0711.

5BR/3.5BA home for sale by owner. Call 385-2421 or e-mail chris.thompson@csicmc.gatech.edu.

Notices

This is the deadline to submit tuition assistance applications for both the STRAP Program and the BOR Tuition Remission Program for Fall semester. Send applications to Kimberly Porter in the Office of Organizational Development, mail code 0206.

July 15

This is the deadline to submit tuition assistance applications for both the STRAP Program and the BOR Tuition Remission Program for Fall semester. Send applications to Kimberly Porter in the Office of Organizational Development, mail code 0206.

July 23

Applications due for those wanting to participate in Mentor Tech. For more information, visit www.mentortech.gatech.edu.

Note: The next issue of the Whistle will be published on July 20.

Classifieds

Automobiles

2002 Mazda Protege 5, 60K miles, clean, white, 4DR, power doors and windows, automatic, AM/FM/CD player, ice blue interior, alloy wheels. Need someone to take over payments. E-mail pecani280@yahoo.com.

Furniture

Simmons BeautyRest Starlight Ewok double-side pillowtop medium firm queen-size mattress/spring box set. Detachable legs, no extra frame needed, cream color, low profile, $529. E-mail hello@emory.edu.

Oak living room furniture complete set w/lamps, $400; oak dining room table w/chairs, $100; glass beveled breakfast table w/chairs, $30; cherry bedroom suite queen size, perfect condition, $2,000. Will deliver. Call 678-222-8547 or e-mail david.gifford@lifii.gatech.edu.

Bunk beds from Rooms to Go. Light wood, excellent condition, quality twin mattresses, $500. Matching chest, 6 deep drawers, $100 OBO for both items. Call 404-636-7215 or e-mail vicki.birchfield@istate.gatech.edu.

Real Estate/Roommates

1BR garden apartment in Inman Park, free of charge in exchange for 20 hours childcare/wk. beginning in August. New kitchen & bath, off-street parking, private deck. Usually rents for $775/month. Call 404-658-1784 or e-mail ruthdusso@mindspring.com.

Bright, large house in secluded wood setting, 20 minutes to campus. Near best elementary school in Cobb County. Go to www.sellcc.com. Click on Featured Properties and then scroll down to 3231 Valley Vista Road.

Sports/Fitness/Recreation

Swimming pool, 24-foot diameter and 48-inch height. Includes structure, filter and pump, needs liner. Brand new in packaging, must pick up. Worth $800; sell for $675. E-mail lynn.rosenberg@arts.gatech.edu.

Proform 585C treadmill, excellent condition. Paid $900, sell for $400. E-mail nicole.pamplin@facilities.gatech.edu.

Miscellaneous

Wanted, housekeeper to clean 1BR apartment by owner. Services needed every two weeks. Will pay $40 per cleaning. Call, after 6 p.m., 770-514-0711.

5BR/3.5BA home for sale by owner. Call 385-2421 or e-mail chris.thompson@csicmc.gatech.edu.

Notices

This is the deadline to submit tuition assistance applications for both the STRAP Program and the BOR Tuition Remission Program for Fall semester. Send applications to Kimberly Porter in the Office of Organizational Development, mail code 0206.

July 15

This is the deadline to submit tuition assistance applications for both the STRAP Program and the BOR Tuition Remission Program for Fall semester. Send applications to Kimberly Porter in the Office of Organizational Development, mail code 0206.

July 23

Applications due for those wanting to participate in Mentor Tech. For more information, visit www.mentortech.gatech.edu.

Note: The next issue of the Whistle will be published on July 20.