Switching on the green power

Saed Roodsari, a graduate research assistant, and Dr. Ghasem Shahbazi conduct renewable energy research using an oxygen bomb calorimeter that measures energy potential in wood by-products.

It’s summertime, and though the living should be easy, the breathing hasn’t always been so, with smog confining many urban dwellers to the indoors on ozone-alert days. But what can ordinary people do about it?

Quite a bit, as a matter of fact, due to a coalition of renewable energy advocates who successfully lobbied the General Assembly to approve the new program known as NCGreenPower. As a result, every household and business in North Carolina will soon have the option of purchasing all or part of their electricity from solar, wind, methane, biomass and small-hydro power generators.

“NCGreenPower is the biggest initiative North Carolina has ever undertaken to promote the use of renewable energy. We have to get the word out,” says SAES agricultural engineer Dr. Ghasem Shahbazi.

Shahbazi, who has spent his career researching renewable energy, helped in the lobbying campaign and is now preparing for the next step: education.

As chairman of the North Carolina Sustainable Energy Association, he plans to organize NCGreenPower seminars for the campus and community starting in August. Consumers will also be learning more from Advanced Energy of Raleigh, the nonprofit corporation that administers NCGreenPower.

“What NCGreenPower will mean is less air pollution, less dependence on foreign oil and more economic opportunity for North Carolina as we make better use of the energy resources that exist right here in this state,” Shahbazi says.

Although renewable energy is cleaner than coal, natural gas and nuclear power — the primary sources of energy in North Carolina at present — it costs significantly more to produce. That’s one reason why NCGreenPower will be optional. It will be sold in blocks of 100 kilowatt-hours at $4 per block for residences, or $2.50 to large-volume users starting in mid to late summer.

Shahbazi is pleased to see renewable energy gaining credibility. Among his current research projects is a generator which can run off methane gas produced from animal waste at the University Farm. He is also collaborating with the Department of Architectural Engineering on photovoltaics research, monitoring the output of energy from a solar array mounted on a Greensboro Housing Authority apartment. Meanwhile, his statewide survey of the energy potential of biomass is designed to make more efficient use of agricultural by-products such as corn stalks and cobs, wood waste, cotton and sorghum waste, etc. Such material burns much cleaner than coal, but oftentimes winds up in landfills because there is no alternative use for it.

Education will help consumers weigh the costs versus the benefits of going green. If enough people choose NCGreenPower, he foresees a day when parents can once again feel good about telling their children to, “Turn off the TV, go outside and get some fresh air.”

— Dr. Alton Thompson, Dean
HEFS fashion merchandising & design majors dive into reality

A&T fashion merchandising and design students don’t need MTV to get “The Real World.” They’ve been discovering what the working world has in store for them through a series of events and experiences sponsored by the SAES Department of Human Environment and Family Sciences.

A fashion-and-trade tour of New York, an in-house career fair, internships and the continuing development of a new electronic retail class have all helped prepare students for post-graduation careers.

“The students have idealistic concepts of what they want to do with a degree in fashion merchandising and design, but it takes a lot of work and it also takes a lot of skill,” says Dr. Geraldine Ray, HEFS associate professor. “The people told them exactly how taxing and competitive a career in fashion is.”

Still, students are maintaining enthusiasm for their majors as they prepare for their professions.

Eighteen fashion and design students are employed this summer as industry interns. Internships are open to juniors who have completed at least 15 hours in their major courses, and have taken the prerequisite internship class. The students, who will get three hours credit for their summer on-the-job experience, are working at the Atlanta AmericasMart, in major department and specialty stores, small design companies, advertising agencies, and major apparel marketing companies.

When they return for the fall semester, they’ll find a department another step closer to implementing an electronic retailing — or E-tailing — class. Ray is working on the online-retail course with a professor at the University of Kentucky. Segments of the course were offered in Spring 2002 and evaluated by students and industry professionals. Ray and her Kentucky counterpart are currently using that feedback to tweak the course, which they hope to have ready for Summer 2004.

Meanwhile, fashion majors had job recruiters all to themselves during the Career Exploration Day organized just for them and their UNCG counterparts, in March. Attended by 60 students from both universities, the career day was organized by Dr. Jane Walker, an HEFS associate professor, and supported by the Carolinas chapter of The Fashion Group International, of which Walker is a member.

Representatives from such companies and designers as Unifi, Sara Lee, Tripps Design and Burlington Industries visited with students during the two-hour fair held in the C. H. Moore conference room.

“To have something geared for us offers better opportunities for us to explore our prospective fields,” says Fathia Pinder, 22, an A&T senior majoring in marketing, fashion merchandising and design.

“This fair is wonderful,” A&T senior Aurelia Kennedy said of the expo. “I feel like they’re accommodating our needs.”

Walker, who organized Career Exploration Day in response to industry desires to recruit here, wants to make it an annual event.

The whirlwind expedition included tours, seminars and inside looks at: Bloomingdale’s; the Tom Cody Design Studio; Tobe, a buying office; Cotton Inc., the trade organization; and the Nanette Lepore showroom.

The A&T delegation also sampled New York culture, from the famed Sylvia’s restaurant to the Broadway musical, Aida. Benefactors Wiley and Thelma Harris, who live in nearby Stamford, Conn. and have ties to A&T, treated the fashion delegation to a motor coach tour of historic Harlem, including dinner at Sylvia’s and dancing at the legendary Cotton Club.

The trip, which is the first of its kind in at least 10 years, still continues to have a lingering impact on students.

“Most of the students really don’t have any idea of how much you have to know as well as how fast-paced and what a high energy-level these jobs require,” Ray says. “When we went to New York, we got all that instantly. We can say it over and over and over, but they don’t always believe us. But they saw the real world.”
Two SAES faculty members were presented awards by the campus chapter of Gamma Sigma Delta, the international honor society of agriculture.

**Dr. Marihelen Glass**, professor of horticulture, was presented the Award for Excellence in Teaching. She is also the 2003 recipient of the SAES Teacher of the Year Award which is presented by A&T’s Office of Academic Affairs to one faculty member from each of the university’s six schools and college. In addition to her teaching responsibilities, Glass also serves as director of the Reid Greenhouse, and director of the plant tissue culture laboratory.

**Dr. Salam A. Ibrahim**, assistant professor of food microbiology and safety, was presented the annual Award of Excellence in Research. Ibrahim has published extensively in academic journals on functional foods and probiotics, and has a patent pending on an all-natural food preservative made from spices and beneficial bacteria. His research program uses biochemistry, microbiology and molecular biology to expand knowledge of food safety, as well as the functional properties of naturally-occurring bioactive compounds in foods.

Two food and nutrition students in the School of Agriculture and Environmental Sciences took home first and second place prizes from the recent Association of Research Directors Symposium in Atlanta.

**Kermit Wilson**, a master’s student, won first place in the Environmental Stewardship category for an oral presentation describing research on a new method for converting peanut shells into activated carbon adsorbents for removing copper and lead contamination from water. Another master’s student, **Djaafar Rehrah**, won second place in the Food Safety, Nutrition and Health category for his poster presentation showing that green tea can perhaps benefit people looking for ways to lower cholesterol and ward off heart disease.

Through The Cooperative Extension Program’s **Community Voices for Children**, Hispanic women in Wake County are learning how to better advocate for their children by developing their own leadership skills. During an exercise at the Dominion apartment complex in Raleigh, participants engaged in an exercise that demonstrates how widely perceptions can vary between the person sending a message and the one receiving it. The exercise and the 15-week course are led by Nora Hernandez, a program coordinator for the Wake County Cooperative Extension Center.

Ferndale Middle School student **Dustin Cunningham**, 12, cradles an affectionate lamb as his classmates look on during a field trip on May 29 to the A&T Farm. More than 150 sixth-grade students from Ferndale, in High Point, were able to see their science and math classroom sessions come alive as part of the interactive tour.

**Brandon Thomas**, 12, tries to adjust to the livestock odor.
Four seniors in the Landscape Architecture Program are finalists in a design competition for scholarship money sponsored by Imagineering, the creative, design, and engineering subsidiary of the Walt Disney Company. Michael Feiock, Jameka Kelly, Toney Mooney (pictured right), and Richard Wagner (left) worked as a team on the design for a hypothetical theme park called Mirijato Cultural Gardens. The design for Mirijato Cultural Gardens is based on the topography and physical characteristics of an actual segment of the A&T farm. The students had to consider not only roller coaster rides and other entertainment features, but also how to effectively deal with everything from vehicular traffic to management of storm water and other environmental issues.