

# SPECTRUM



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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**TODAY'S EDITION**  
See page 4 for  
*Electronic Spectrum*  
information.

## Realignments made within university administrative units

Several divisions reporting to Executive Vice President Minnis Ridenour have been reorganized. With the recent announcement that Lenwood McCoy, university controller, will retire effective June, 2000, a number of realignments have been made to more adequately reflect financial and administrative operations. "McCoy has, during his 38 years of service at Virginia Tech, continually demonstrated his commitment and dedication to the university. His outstanding leadership and support have helped the university move forward with many initiatives, most recently the implementation of the Banner Finance System," Ridenour said.

As part of the realignments, the University Controller's Office has been moved to M. Dwight Shelton Jr. who serves as the associate vice president for finance and bud-

get. Shelton will also continue to provide leadership to the functions of the Budget Office and will provide oversight for the Hokie Passport Office, now directed by Jean Eversole. Bea Mahan, director of financial planning and analysis, and Tim Hodge, director of budget operations, will handle the daily functions of the Budget Office.

Raymond D. Smoot Jr., vice president for administration and treasurer, will continue to provide oversight for facilities management and will assume responsibility for the departments of Environmental Health and Safety Services, University Police, Records Management, and Transportation. Smoot will also continue his work with the Virginia Tech Foundation and the university's related corporations.

Linda Woodard will serve as assistant vice president for personnel. Woodard will

continue to provide oversight to the offices of Personnel Services, University Leadership Development, and Family Support. Woodard is also active at the state level. She is providing leadership to the job classes and pay structure Technical Advisory Committee, a subcommittee of the Commission on Reform of the Classified Compensation Plan. Woodard was also appointed to the Commonwealth of Virginia Campaign (CVC) Advisory Council which is working to restructure the CVC.

Laurie Coble, director of business management and analysis, will assume responsibility for ensuring sound business practices and internal controls are in place in all areas of the university, with specific attention given to the auxiliary enterprises, ancillary support operations, and centers. She will also be responsible

for coordinating, developing, and analyzing business plans in support of major university initiatives and will ensure that appropriate policies and procedures are implemented for university and faculty-owned businesses.

Lisa Wilkes, assistant to the executive vice president and director of special projects and studies, will continue to provide oversight for the administrative and financial operations of the Office of the Executive Vice President and coordination of special projects for the executive vice president. Additionally, Wilkes will work with the assistant vice president for personnel on matters related to personnel policies, compensation studies, and training and development programs.

## Mobile chemistry lab open house today

By Sally Harris

In a few months, the Virginia Tech Mobile Chemistry Laboratory will be bringing top-level chemistry experiences to students in rural Southwest Virginia where resources for up-to-date chemistry laboratories are insufficient.

The university will hold a press conference and open house for the Mobile Chemistry Lab in front of Burruss Hall today at 2 p.m. The lab will be open throughout the afternoon.

Janice Orr of Chilhowie High School, for example, considers her situation as a chemistry teacher about average for Southwest Virginia. Her chemistry labs were built in 1957 and have never been renovated. If students plug in more than four hot plates, the fuse blows. She has taught nearly 2,000 students in 30 years, and estimates that over the past 10 years about 200 of them have attended college. But she guesses only about six, maybe fewer, majored in chemistry.

Virginia recently mandated that students pass Standards of Learning (SOL) tests, including those in the sciences, before they can graduate. Barbara Bunn, assistant professor of chemistry at Virginia Tech, started thinking about schools like Chilhowie High School, which would have to pass the SOL's, but whose teachers, like Orr, did not have the laboratories to do the same type experiments that more affluent schools had. Bunn knew that there were van-style mobile units that took various kinds of educational experiences to rural schools, so she came up with a project.

Bunn called Tom Murphy, vice president of manufacturing for Volvo Trucks North America Inc., and asked if Volvo had a small U-haul type truck available for an outreach program. After all, Bunn reasoned, one of Virginia Tech's three functions was outreach, and the university had a long history of serving the community and state.

Volvo, a global manufacturer of commercial tractors, thought even bigger than a mobile van. The result is the Virginia Tech Mobile Chemistry Laboratory, a 53-foot trailer with a specially designed, top-level



**The Virginia Tech Mobile Chemistry Laboratory is the realization of a dream for chemistry professor Barbara Bunn, who first envisioned a van-type laboratory that would go to rural schools to provide students with chemistry opportunities not available in their own labs. (R. Griffiths)**

chemistry laboratory inside. A premier Volvo 770 tractor built at Volvo's New River Valley plant, with contributions from numerous vendors, pulls the laboratory. Virginia Tech chemists and engineers from Featherlite Manufacturing, the leading producer of custom-engineered trailers, designed the lab to contain the most modern instrumentation. The laboratory will visit public high schools in rural Southwestern Virginia to introduce students and teachers to hands-on chemistry experiments.

Although Volvo and the vendors it recruited provided the tractor to pull the facility, the Virginia Tech Foundation advanced money for the discounted trailer, which was specially built as a laboratory, and for the equipment to furnish it. The university must raise \$150,000 to repay the loan from the foundation.

Between the idea and the existence of this completed rolling laboratory fell a great deal of hard work. Bunn had met with high-school teachers to begin planning experiments for

classes. She and chemistry Department Head Larry Taylor had secured funding for part of the cost of the discounted trailer/laboratory and the equipment inside. They had worked with Volvo and Featherlite to determine what was needed in the mobile laboratory.

The laboratory facility will include the latest in instrumentation such as a Fourier transform infrared spectrometer, four gas chromatographs, UV-VIS spectrometers, and Geiger-Muller Computer systems. Laptop computers have been permanently loaned by Educational Technologies. The lab is furnished with running water, disposal and hazardous-waste tanks, three fume hoods, air conditioning, benches, and work space for up to 30 students, including handicapped access and work areas, and the necessary laboratory safety equipment such as escape doors and a shower.

The project includes experiments designed for various grade levels, but the teacher will

(See MOBILE on 4)

## Wireless center funded for software development

By Susan Trulove

The Center for Wireless Telecommunications (CWT) at Virginia Tech received funding from the National Science Foundation (NSF) this summer to develop a suite of software tools for wireless-network-system design and layout.

The team developing the software calls their tool set *GETWEBS*, for Geographic-Engineering Tool for Wireless: Evaluation of Broadband Systems. "This research is truly unique as it brings together students and faculty members from engineering, business, and the social sciences and involves both undergraduate and graduate students," said Laurence Carstensen, associate professor of geography and director of the project.

The three key components of the wireless center are:

(See WIRELESS on 3)

## Site license enables easier Cuba travel

By Sandy Broughton

Students, faculty members, and researchers who wish to travel to Cuba for academic reasons now will have an easier time gaining official permission. In August, Virginia Tech's Department of Urban Affairs and Planning received a site license by the Department of the Treasury for granting permission for educational travel to Cuba.

Joseph L. Scarpa, professor of urban affairs and planning who has traveled and researched in Cuba extensively, will handle all Virginia Tech requests for licenses to travel to the island, which has been under severe travel restrictions by the United States since 1961.

"It will be similar to a clearinghouse for all Virginia Tech academic activity in Cuba," Scarpa said. Previously, students, staff and faculty members wishing to travel to Cuba

(See SITE LICENSE on 3)

# ACTIVITIES

## EVENTS

### Friday, 15

**Salary and Wage Paydate.**  
**Last Day to Resign.**  
**CPAP Roundtable,** 3-4 p.m., Thomas Conner House.

### Saturday, 16

**Football,** 6 p.m., Lane Stadium: Syracuse.  
**University Chamber Music,** 8 p.m., Squires Recital Salon: Woodwind Chamber Music.

### Sunday, 17

**YMCA Hike,** 1:30 p.m., 403 Washington St.: Falls Ridge.  
**University Chamber Music,** 3 p.m., Squires Recital Salon: Woodwind Chamber Music.

### Monday, 18

**YMCA Open University Registration,** 11 a.m.-7 p.m., University Mall.  
**Faculty Development Workshop,** 3-5 p.m., NMC, Newman Library: Introduction to Streamlining Audio and Video.  
**University Council,** 3-5 p.m., 1045 Pamplin.

### Tuesday, 19

**Bloodmobile,** 10 a.m.-4 p.m., Squires Student Center.  
**Faculty Development Workshop,** 10 a.m.-noon, NMC, Newman Library: Using MacroMedia Director to Create Digital/MultiMedia Content.  
**YMCA Open University Registration,** 11 a.m.-7 p.m., University Mall.  
**Diversity Roundtable,** noon, 140 Squires.  
**Family Support Program,** noon-1 p.m., DBHCC conference room C: Maureen Peters, Better Beginnings.  
**Multicultural Program,** 4 p.m. Squires Multicultural Center: Book Club.  
**Faculty Senate,** 7 p.m., 32 Pamplin.

### Wednesday, 20

**YMCA Open University Registration,** 9 a.m.-6 p.m., YMCA Office.  
**Bloodmobile,** 10 a.m.-4 p.m., Squires Student Center.  
**Family Support Program,** noon-1 p.m., DBHCC conference room C: T.J. Stone, New River Valley Community Service.  
**Faculty Development Workshop,** 3-5 p.m., NMC, Newman Library: Using Adobe Premier 5.0 and Apple QuickTime 3.0.  
**"With Good Reason,"** 7 p.m., WVTF: TBA

### Thursday, 21

**YMCA Open University Registration,** 9 a.m.-6 p.m., YMCA Office.  
**Bloodmobile,** 10 a.m.-4 p.m., Squires Student Center.  
**Faculty Development Workshop,** 10 a.m.-noon, NMC, Newman Library: Introduction to Visualization Tools for Designers.  
**CEUT,** 12:30-2 p.m., Hillcrest dining room: Preparation for Teaching.  
**CSTS Lunch Discussion Series,** 12:30-1:30 p.m., 132 Lane.  
**Faculty Development Workshop,** 3-5 p.m., NMC, Newman Library: Introduction to Visualization Tools for DataSets.  
**Staff Senate,** 5:30 p.m., 1810 Litton-Reaves.

### Friday, 22

**YMCA Open University Registration,** 9 a.m.-6 p.m., YMCA Office.

## SEMINARS

### Friday, 15

**Highlands in Chemistry,** 11 a.m., 3 Davidson: Neil W. Boaz, Eastman Chemical.  
**MCBB,** noon, 102 Fralin: Matthew Nugent, Boston U.  
**Communication Studies,** 3:30-4:30 p.m., Hillcrest Honors

Conference Room: Beth Waggenspack.  
**Economics,** 3:30 p.m., 3008 Pamplin Hall: Rachel Kranton, Maryland.  
**Botany,** 4 p.m., 1076 Derring: Eric Nagy, U.Va.  
**Electrical Computer Engineering,** 4 p.m., 457 Whittemore: S. Sankaran.  
**Geological Sciences,** 4 p.m., 2044 Derring: Mike Bahorich, Apache Corp.

### Monday, 18

**CIS-FA,** noon, 132 Lane: Rosemary Blieszner.  
**Biomedical Engineering,** 3-4 p.m., 114 Holden: Frances Sheehan, Catholic University.  
**Biochemistry,** 4 p.m., 223 Engel: Eugene Mueller, Delaware.  
**CSES,** 4 p.m., 232 Smyth: Shelley Williams.  
**Horticulture,** 4-5 p.m., 409 Saunders: Maurice Ogutu.

### Wednesday, 20

**Water Science,** noon, 108 Seitz: Charlene Brewster.  
**ESM,** 4 p.m., 136 Norris: Harry Dankowicz.  
**PPWS,** 4 p.m., 102 Fralin: Kevin Bradley.  
**Electrical/Computer Engineering,** 5:15 p.m., 300 Whittemore: A.U. Zo Li.

### Thursday, 21

**Entomology,** 4 p.m., 220 Price: Alan Schroeder, USAID.

### Friday, 22

**Highlands in Chemistry,** 11 a.m., 3 Davidson: Mark S. Meier, Kentucky.  
**MCBB,** noon, 102 Fralin: Kim Forsten.  
**Electrical/Computer Engineering,** 1 p.m., 261 NEB: T. Crowe.  
**Materials Science/Engineering,** 3 p.m., 114 Holden: Gary Wnek, VCU.  
**Botany,** 4 p.m., 1076 Derring: Becky Belling.  
**Electrical/Computer Engineering,** 4 p.m., 457 Whittemore: H. Meshref.

### Diversity roundtable discussion set

A Diversity Roundtable discussion will be held Tuesday, Oct. 19 at noon in the Multicultural Center, 140 Squires. This event is open to faculty and staff members interested in participating in serious dialogue about issues pertaining to racial, cultural, physical, and social differences.

Participants set the agenda for discussion. Diversity Roundtable is not a problem-solving or strategic-planning group. The only goal is serious dialogue.

Registration is not required. Call 1-3787 for additional information.

### Hammond Lecture Scheduled

The Religious Studies Program within the Center for Interdisciplinary Studies (CIS) will host the Second Hammond Lecture in Religious Ethics and Society Monday, Oct. 18, at 7:30 p.m., in Squires Colonial Hall.

The Hammond lecturer is Katie Cannon of Temple University. Her public address is titled "Unearthing Ethical Treasures: Womanist Ways of Reading the Inscriptions of Human Archaeology." It concerns the implications of Zora Neale Hurston's newspaper reporting of the 1952 trial of a black woman for the murder of a white man.

Another seminar will be on Tuesday, Oct. 19, 5:30-6:30 p.m., in the Squires Black Cultural Center. The seminar will be based on samples of Cannon's work, an interview, and exercises incorporated into a web site, which is available at <http://jwiecko.campus.vt.edu/cannon>, by Stacey Floyd-Thomas. Terry Kershaw, director of Black Studies, will preside over the seminar. For more information, call Elizabeth Struthers Malbon at 1-6112; e-mail: [malbon@vt.edu](mailto:malbon@vt.edu) (please list Cannon Lecture on the subject line).

## BULLETINS

**ISO network meeting planned**  
 The next quarterly meeting of one of the Southwest Virginia International Organization for Standardization (ISO) networks will be held Friday, Oct. 15 at 7:30 a.m. at the Roanoke office of American Electric Power. The topic will be "4.8 Product (Service) Identification and Trace Ability."

The Southwest Virginia regional ISO networks were established jointly by Virginia Tech's Public Service Programs (a unit of the university's Outreach Division), AEP, Wiley and Wilson Corporation, and the Virginia Department of Business Assistance. These networks, located in Roanoke, Christiansburg, and Abingdon, are made up of quality-assurance professionals from service industries and manufacturers throughout the region.

For more information, contact Chad Miller at 1-8324 or by e-mail at [chadm@vt.edu](mailto:chadm@vt.edu).

### CHRESA sponsoring cancer walk

The College of Human Resources and Education Staff Association is hosting a Cancer Walk for the Virginia Tech

faculty and staff members and their guests on October 30 from 10 a.m. until 1 p.m. on the Virginia Tech track. For liability reasons, all participants must be at least 18 years of age.

All proceeds go to the American Cancer Society. Snacks and beverages will be available for all participants at no cost. The targeted distance is five miles; however, the amount of donations collected is more important than the miles covered. To maintain the surface of the track, tennis shoes are the only acceptable footwear.

Any survivors of cancer will be the first to cross the starting line. For more information, contact Debbie Elkins at 1-6179 or e-mail [elkinsd@vt.edu](mailto:elkinsd@vt.edu).

### Women's Center plans Speak Out

Womanspace and the Women's Center are sponsoring the second annual Speak Out on sexual assault on Wednesday, Oct. 27, at 5:30 p.m. The Speak Out will give individuals a time to voice their experiences with sexual assault and how these experiences have affected their lives through an open microphone and a candlelight vigil. This event will be enclosed by the Clothesline Project in front of the Women's center, providing an intimate setting for sharing, healing and education.

Anyone who wants to share a story anonymously can drop it off in a safe box. All stories are welcome.

The Clothesline Project will be on display October 26 and 27 in front of the Women's center, located behind McBryde.

For more information, contact Kathy Templin at 961-6104 or [ktemplin@vt.edu](mailto:ktemplin@vt.edu).

## Celebration held for master's program in area studies

By Sally Harris

A reception was held recently to celebrate the new masters program in area studies.

Robert Bates, dean of the College of Arts and Sciences, recognized returning students and welcomed new candidates into the program. Offered as an M.A. in history, the program is interdisciplinary in nature, with courses in history, foreign languages and literatures, geography, architecture, urban affairs

and planning, and others.

Fred Baumgartner and Antonio Fernandez, directors, said the program has been fortunate to attract good students from the start, both nationally and internationally. "Over 70 percent of the students in the program are international students," Fernandez said.

# EMPLOYMENT

## CLASSIFIED POSITIONS

The following classified positions are currently available. More details of these positions, specific application procedures and position-closing dates may be found on the Personnel Services web site at <http://www.ps.vt.edu>. Available positions are also listed on the Job Line, a 24-hour recorded message service: Office/Clerical: 1-6196; Technical/Research: 1-6160; Service/Trades: 1-6176; Professional and Managerial: 1-4649; Information Technology: 1-2233. Some of the following positions include state benefits. Positions with numbers beginning with a "W" are hourly and do not include state benefits. Individuals with disabilities desiring assistance or accommodation in the application process should call by the application deadline.

Closing date for advertised positions is 1 p.m. Monday. An EO/AA employer committed to diversity.

### Full Time

**Benefits Analyst (Personnel Practices Analyst Senior)**, 2168T, Grade 12, Personnel Services.

**Building/Grounds Supervisor B**, 0867H, Grade 10, Residential/Dining Programs/Facilities/Services.

**Computer Network Support Technician Senior**, 6777T, Grade 10, Biology.

**Database/Web Designer**, 7510D, Grade 10, CNS.

**Electrician Supervisor**, 1366P, Grade 9, Physical Plant.

**Electronic Technician Sr**, 7516J, Grade 10, Center for Transportation Research.

**Executive Secretary Senior**, 0441J, Grade 7, Graduate School.

**Fire Safety Engineer**, 7488T, Grade 12, Environmental Health/Safety Services.

**Fiscal Assistant**, 2224H, Grade 5, Residential/Dining Programs/Business Services.

**Fiscal Technician Senior**, 4568G, Grade 8, Office of International Research/Development.

**Eight full-time food-operations positions available**; three part-time positions.

**Housekeeping Worker**, 6452S, Grade 1, Physical Plant.

**Housekeeping Worker**, 1023H, Grade 1, Residential/Dining Programs.

**Housekeeping Worker**, 1630G, Grade 1, DBHCC.

**Human Resources Manager (Personnel Practices Manager)**, 2502T, Grade 15, Personnel Services.

**Lab Specialist**, 7507S, Grade 8, Biology.

**Laboratory Specialist**, 7245M, Grade 8, Biochemistry.

**Laboratory Specialist**, 3428M, Grade 8, Veterinary Medicine.

**Office Services Specialist**, 0479T, Grade 5, Undergraduate Admissions.

**Office Services Specialist**, 6693S, Grade 5, University Library/ILL.



VIRGINIA POLYTECHNIC INSTITUTE  
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**Office Services Specialist (Assistant Front Office Manager)**, 1136G, Grade 5, DBHCC.

**Parking Services Manager (Business Manager B)**, 7079T, Grade 12, Parking Services.

**Photolithographer**, 433C, Grade 7, Printing Services.

**Plumber Steamfitter**, 2257P, Grade 7, Physical Plant.

**Police Officer**, P02003T, Grade 7, Police Department.

**Power Plant Mechanic**, 7311P, Grade 7, Power Plant.

**Program Support Technician**, 4443T, Grade 6, Interdisciplinary Center for Applied Mathematics.

**Program Support Technician Senior**, 7185T, Grade 7, Scholarships/Financial Aid.

**Programmer Analyst**, 570S, Grade 12, University Library.

**Programmer/Analyst**, 2917D, Grade 12, Computing Center.

**Programmer/Analyst (Instructional Technologist)**, 7500M, Grade 12, CALS/229 Distance Education.

**Public Relations Specialist**, LC075, Grade 10, Athletics.

**Research Specialist**, 7506M, Grade 8, Fisheries/Wildlife Sciences.

**Secretary Senior**, 2403M, Grade 5, CSES.

**Senior Programmer/Analyst (Instructional Designer)**, 7499M, Grade 14, CALS/229 Distance Education.

**Systems Administrator (Computer Center Lead Engineer)**, 7517J, Grade 16, Electrical/Computing Engineering.

**Television/Video Producer Director Senior**, 2324D, Grade 12, University Relations.

**Television/Video Producer/Director**, 5362D, Grade 10, University Relations.

Grade 10, University Relations.

### Part Time

**Animal Care Technician B**, W022917M, Grade 5, Veterinary Medicine Experiment Station/College of Veterinary Medicine.

**Computer Lab Assistant/Office Services Aide**, W020389C, Grade 2, Computing Center.

**Computer Operations Technician Senior**, W022918T, Grade 8, Scholarships/Financial Aid.

**Fiscal Assistant**, W022460M, Grade 5, College of Veterinary Medicine.

**Fiscal Technician Senior**, 1880H, Grade 8, Residential/Dining Programs/Business Services.

**Housekeeping Lead Worker (Trades Helper)**, W022081H, Grade 2, Residential/Dining Programs/Culinary Services Maintenance Crew.

**Housekeeping Worker**, W022490H, Grade 1, Residential/Dining Programs.

**Housekeeping Worker**, W020574G, Grade 1, DBHCC.

**Laboratory Mechanic A**, W022889T, Grade 4, University Registrar.

**Laboratory Specialist**, W022908M, Grade 8, Dairy Science.

**Office Services Assistant**, W022103T, Grade 4, Motor Pool.

**Office Services Specialist**, W020106M, Grade 5, Entomology.

**Photocopy Technician**, W020254C, Grade 4, Printing Services.

**Radiologic Technologist**, W022238G, Grade 9, Schiffert Health Center.

**Security Guard (Parking Enforcement Off)**, W020119T, Grade 2, Parking Services.

### University Only

**Electrical Estimator**, U6660P, Grade 10, Physical Plant.

## SITE LICENSE

Continued from 1

had to individually present both a program of educational study and a curriculum vita to Scarpaci, who in turned passed the group application on to the Office of Foreign Assets Control. Department of Treasury officials reviewed the materials as well. "The review process was lengthy and seemingly arbitrary," Scarpaci said. "The delays irritated students and parents and complicated travel arrangements, usually on charter flights through third countries."

Now, Scarpaci has the responsibility of selecting all Virginia Tech participants who wish to travel to Cuba for educational purposes of any kind. The license authorizes travel-related transactions in connection with full-time educational activities in Cuba, but does not authorize transactions related to commercial or tourism activities. "This saves everyone the hassle of going through separate applications," Scarpaci said. Faculty members can contact Scarpaci with a proposed program of study for travel. Additionally, faculty and staff members interested in attending professional meetings or establishing professional contacts on the island can request a license to travel from Scarpaci.

## WIRELESS

Continued from 1

less industry that will be addressed by GETWEBS are evolving wireless technology, wireless technology interaction with the environment, and system integration and deployment. Carstensen said applications include high-speed Internet access for the "last mile" between a home or business and a hub that is connected by fiber. Other services could include multi-media delivery, wireless cable TV, telephony, on-demand music services, and teleconferencing.

Wireless delivery uses broadband frequency, so that in addition to convenience, information will be delivered much faster than Internet users are presently use to. "Speeds up to 155 megabits are possible, making a one-hour movie download at 56K take less than two seconds," Carstensen said.

"Establishing wireless communications at these frequencies requires roughly line-of-sight between the transmitter and receiver. The environment into which the system is placed must be

studied for line-of-sight to particular locations at which there is a market for a particular service."

The new funding will allow the integration of education and research to develop the needed tools for broadband-wireless-system evaluation with special emphasis on LMDS (Local Multipoint Distribution Services). LMDS is a two-way digital wireless communications medium that can carry voice, data and video traffic. Undergraduate and graduate students will be divided into teams to learn the fundamentals of several disciplines through the courses and opportunities offered by this project.

"A significant outcome of the research will be a group of Virginia Tech graduates with a diverse set of engineering, business, and spatial skills that are not being taught in combination anywhere else in the United States," Carstensen said. "These students will leave the program with important science skills and technical abilities to work in the new

**Program Support Technician Sr**, 3473J, Grade 7, Center for Wireless Telecommunications.

### Off Campus

**Evening Announcer**, 1962D, Grade 8, WVTF.

## FACULTY POSITIONS

### INSTRUCTIONAL

**Department of Food Science and Technology. Assistant/Associate Professor.** Contact: Cameron Hackney, Department of Food Science and Technology (0418). Review begins December 1, and continues until position filled.

**Department of Forestry. Assistant/Associate Professor.** Contact: James A. Burger, Department of Forestry, 228 Cheatham Hall (0324). Review begins March 1, 2000, and continues until position filled.

**Department of Civil and Environmental Engineering. Assistant/Associate/Full Professor. Geotechnical Engineering Program.** Contact: George M. Filz, Via Department of Civil and Environmental Engineering, 200 Patton Hall (0105). Review begins Jan. 1, 2000, and continues until position filled.

**Department of Civil and Environmental Engineering. Assistant/Associate/Full Professor. Construction Engineering and Maintenance.** Contact: J.M. de la Garza, Department of Civil and Environmental Engineering, 200 Patton Hall (0105). Review begins Jan. 3, 2000, and continues until position filled.

Complete information regarding faculty positions is available at <http://www.vt.edu:10021/admin/eoaa/index.html>.

"There are growing possibilities to conduct outreach and research in Cuba as its economy gradually opens," Scarpaci said. "At the academic level, the decentralization of decision-making is clearly indicative of an opening-up."

Next spring, Scarpaci and a professor from the University of Pittsburgh will take a group of about 20 graduate and undergraduate students, professional journalists, and researchers to Cuba. The theme of the study tour will be "Landscape, Design and Discourse in the Cuban City," in which a wide array of social, economic, and political issues will be examined through an interdisciplinary approach, using fiction and nonfiction literature to gain an understanding of how Cuban cities have been shaped.

Scarpaci recently received a grant from the Center for Excellence in Undergraduate Teaching (CEUT) to write a course on "The Third World City." Like the curriculum for the study tour this spring, the course will be approached in a cross-disciplinary manner, blending the humanities, architecture, urban geography, and planning.

multi-disciplinary occupations required in wireless telecommunications within the United States and around the world."

The NSF grant for \$199,611 was awarded in August for two years. CWT is successfully sending wireless services from campus to two locations in Blacksburg and gave a public demonstration in September (see <http://fbos.vt.edu:10021/ur/news/Archives/Sept99/99359.html>).

Established in 1993, the CWT is a Technology Development Center of Virginia's Center for Innovative Technology. It is an inter-disciplinary research center designed to help client companies develop new products and services using wireless and to provide a learning environment for graduate students that prepares them for jobs in wireless communications. CWT is the principal Virginia Tech research and teaching group in RF (radio frequency) design, wireless networks, satellites, and the geographic and business aspects of wireless technology.

**CVC COACH**



**RANDOLPH**

This week's CVC coach is Urban Affairs and Planning Department Head and Professor John Randolph, who will be leading our homecoming charge against Syracuse. Although we beat them last year in charitable giving in terms of total dollars and average gift, they soundly beat us in participation: over 30 percent of the Syracuse employees participated compared to less than 17 percent of Tech employees.

**Traffic Advisory**

Parking and traffic changes will be in effect again this weekend for the home football game. The procedures are the same as used for Saturday games.

On Friday, parking will be prohibited after 5 p.m. in the following lots: Litton Reaves/Wallace Lots (located off Washington Street and Duck Pond Drive), Coliseum Lot (located off Washington Street and Spring Road), the gravel lot located behind the Jamerson Center, and the Stadium, Track/Soccer, and Maintenance Lot (located off Spring Road and Southgate Drive). Parking will also be prohibited on Spring Road and Washington Street (from the Coliseum to the tennis courts). Vehicles will be removed from these lots and streets after 10 p.m.

The ESPN GameDay crew will be at Virginia Tech in Lane Stadium Saturday before the 6 p.m. game. Stadium gates 1-3 at the south end will open at 9 a.m. The live broadcast is from 11 a.m. to noon. Additional parking for this event will be provided in a field on the western side of Tech Center Drive, near the airport. Bus transportation will be provided between the field and the stadium from 9 to 1 p.m.

At noon Saturday traffic on Washington Street, Tech Center Drive, Southgate Drive, Spring Road will become one way toward the football stadium. Traffic on Duck Pond Drive will become one way toward B-Lot. After the game the streets directions will reverse until the traffic flow returns to normal.

The public will be charged \$5 for parking during football games. This only applies for vehicles not displaying a valid Tech parking permit. Lots used by the public will be: B-lot (large commuter lots off Prices Fork Road), and Derring, Davidson, Solitude, Price/Saunders, and Engel/Harper all along West Campus Drive. On campus, Blacksburg Transit will run shuttles every 10 minutes from the public parking area of B-Lot (located off Perry Street) to Cassell Coliseum starting two hours before the game.

Advisories are available on 1260 AM. For more information, call Parking Services at 1-3200 or, after regular business hours, the University Police Department at 1-6411.

**IN OTHER NEWS**

**Event highlights economic-development ties**

By Catherine Doss

A recent reception hosted by Virginia Tech for the Virginia Economic Development Partnership (VEDP), the Virginia Department of Business Assistance, and the Greater Richmond Economic Development Partnership enabled the university to showcase its full range of capabilities to assist the state in economic growth and development.

"The event was most beneficial," said Mark R. Kilduff, VEDP director. "It enabled us to learn first hand what Virginia Tech has to offer in the way of business resources and was an invaluable networking tool. I hope a similar event can take place annually."

More than 40 state economic-development officials attended the event. In addition, 18 individuals representing nine different organizations within Virginia Tech participated. Most of those who attended brought with them display units and literature about their business resources.

"We were able to fully represent the university's capabilities in terms of workforce training and education, business assistance, technology development, technology transfer, corporate locations, access to human resources, financing, and municipal assistance," said John Phillips, economic-development officer, whose

office hosted the event. "It was an open exchange of information and ideas in an informal setting."

"For our organization, the reception enabled us to more fully develop a number of projects on which we are working with state marketing managers," said Joe Meredith, president of the Virginia Tech Corporate Research Center.

"The event demonstrated top-level support from Virginia Tech for the close working relationship that our unit has with VEDP," said Chad Miller, economic-development specialist with the university's Public Service Programs. "Overall, it was extremely beneficial on both sides."

**Studies aimed at decreasing distress after fires**

By Sally Harris

Two Virginia Tech psychology professors are studying the effects of residential fires on children's and adolescents' psychological distress with the goal of developing intervention strategies by fire fighters and mental-health persons.

Fires and burns rank sixth among major causes of injury to and death of persons newborn to 19 years of age, according to Russell Jones and Thomas Ollendick, professors of psychology. The two have studied 103 families across socio-economic status and race, looking not only at the effect of the fire on youth, but also at the types of pre-existing psychological factors that may lead to post-traumatic stress disorder after a fire.

Working in Blacksburg and Richmond, and extending the study to West Virginia, North Carolina, South Carolina, and Georgia, the researchers have found that "the major predictor of distress is resource loss of both internal and external resources." Those resources include such things as sense of control, self efficacy, possessions, social relationships, money, time, and skills. "Although we have found that fire fighters are arriving on scene in many instances in record-breaking time, the amount of loss incurred because of the fire typically is associated with subsequent levels of distress," the researchers said.

They also found that the children who showed the highest degree of distress were from families with low socio-economic status.

Previous literature has also shown that the likelihood of being in a residential fire increases as socio-economic level decreases.

Children and adolescents exhibiting high levels of distress following a fire also reported a relatively high level of additional stressful events in their lives. Jones and Ollendick said. "These results imply that post-disaster adjustment may be more difficult given the number of other on-going stressors in one's environment," they wrote.

Jones and Ollendick found that most children tried to ignore their feelings about the fire, but the professors' previous research has suggested that discussing negative events with family and friends may lead to better post-disaster adjustment.

**ELECTRONIC SPECTRUM UPDATE**

**Bookmarking Electronic Spectrum**

While the published edition of Spectrum is now four pages each week, the electronic version is larger, often containing additional stories, full-length versions of stories space limitations prohibit in the print version, a full Achievers section and even breaking news.

Because the electronic edition of Spectrum is more informative and easy to access, readers are encouraged to bookmark the page. But some feedback has indicated bookmarking has only allowed a given issue to be recalled.

To create a bookmark that will call up the latest issue, follow these instructions:

For Netscape: Find the Edit Bookmarks selection under the Bookmarks entry of the menu bar. When the list of bookmarks appears in a window, pull the menu down from the File section. Click on New Bookmark. A window should come up which asks for a name of the

bookmark. After naming it *Spectrum*, tab to the next box and fill in <http://www.unirel.vt.edu/spectrum/>.

For Internet Explorer: Click on Favorites, then scroll down and click on Add Favorite. When the window pops up, make sure the filling tab at the top is set to Info. Add a name of the favorite, then add the url: <http://www.unirel.vt.edu/spectrum/>.

By setting the bookmark without a date, the server will default the request to the index set to recall the latest issue of Spectrum. To access any particular date of issue since this format was adopted on September 24, add the date (MM-DD-YY) after the last slash and add another slash, then [index.html](http://www.unirel.vt.edu/spectrum/9-24-99/index.html) (i.e., the September 24 issue can be recalled at <http://www.unirel.vt.edu/spectrum/9-24-99/index.html>).

**President's address set for October 26**

President Paul Torgersen will address the university community October 26, at 4 p.m. in the Donaldson Brown Center auditorium. The president's Report to the University Community will include his perspective on the state of the university, the successes and failures of the last six years, and the challenges facing the university in the coming decade. There will be a question-and-answer session following the president's report.

**MOBILE**

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choose which experiments to use by accessing a web site to learn about them. A trained person will accompany the lab.

The lab is also economical. "We believe the laboratory is a cost-effective way to teach hands-on science and technology," Bunn said. The lab will service 15-20 schools per year, providing each with a laboratory 10 times per semester. "Then the school does not need to refurbish, renovate, or install new facilities, which would cost each school a minimum of \$100,000," Bunn said. "The laboratory, providing state-of-the-art facilities and equipment and factoring in operating costs, will actually save the state money."

Volvo presented the completed laboratory to Virginia Tech at a September 30 ceremony at the plant.

President Paul Torgersen discussed Virginia Tech's land-grant mission and said, "The notion of offering the intellectual capital of the university campus to our communities and citizens is firmly embedded in our campus psyche."

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