

SPECTRUM

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

<http://www.unirel.vt.edu/spectrum/>

VOLUME 22 NUMBER 17 FRIDAY, JANUARY 21, 2000

TODAY'S EDITION
See Black
History Month
information on
page 2.

E-commerce center for research and education formed

By Sookhan Ho

A recently formed research center at Virginia Tech will help businesses develop expertise in electronic commerce and to promote research and education in this rapidly growing field.

The center for Global Electronic Commerce comprises a diverse group of faculty members at the university's Pamplin College of Business whose expertise ranges from information technology systems to the legal, managerial, accounting, and marketing aspects of e-commerce.

The center is directed by business law professor Janine Hiller, an expert in Internet law and regulation. She and other faculty members proposed starting the center more than a year ago to share information about their research in e-commerce and to respond to growing business demand for assistance.

Businesses are turning to e-commerce, Hiller said, because of large cost savings,

speedier processing of orders, and better information flow inside and outside the business. She and her colleagues have fielded dozens of inquiries from companies, large and small, that are interested in integrating Internet applications in their business.

"We see a growing need for a workforce with specialized electronic commerce expertise that is based on both information technology and business knowledge and skills," Hiller said. "Any organization that expects to facilitate rapid adoption of advanced electronic-commerce innovations must have at least as much business expertise as information-technology expertise."

The center has a threefold mission: to respond to the need for training in implementing and managing e-commerce businesses; to promote inter-disciplinary research on business and the Internet; and to design a curriculum for e-commerce education," Hiller said.

The center, she said, brings together ex-

perts with business as well as information-technology knowledge and skills. It will hold regular seminars for businesses, conduct customized strategic planning and plan implementation, and develop on-line resources. Sample topics may include "development and maintenance of customized electronic-commerce systems," "electronic marketing assistance," and "legal, regulatory, and ethical awareness."

The center's current faculty members, in addition to Hiller, are Reza Barkhi, assistant professor of accounting and information systems; France Belanger, assistant professor of accounting and information systems; Eloise Coupey, associate professor of marketing; Jim Hicks, professor of accounting and information systems; Philip Huang, professor of management science and information technology; Lance Matheson, associate professor of management science and information technology; and Wanda Smith, assistant professor of management.

Eyre addresses AVMA Leadership Conference

By Jeffrey Douglas

During remarks presented at the American Veterinary Medical Association's recent Annual Leadership Conference in Chicago, VMRCVM Dean Peter Eyre called for a more dynamic partnership between veterinary academia and organized veterinary medicine so the profession may confront the looming economic challenges it faces.

Responding to a series of economic threats identified in a highly publicized study released by consulting firm KPMG in July 1999, Eyre told 400 veterinary practitioners, administrators and educators that increased dialogue between the sectors within the profession and more "open minds" will help generate effective strategies for dealing with the problems outlined in the \$700,000 "MegaStudy."

Funded by the American Veterinary Medical Association, the Association of American Veterinary Medical Colleges and the American Animal Hospital Association, the study outlined a series of issues ranging from poor salaries and high student debt to curricular inadequacies in the schools.

"The professional journey begins in the colleges," he said. "Here is where the leaders of tomorrow are formed. If academia fails to respond, how will the profession effectively change?"

Yet change may prove as elusive in academic institutions as it is in organized professional associations, Eyre said, since each tends to rely upon well-established institutional structures better suited for reinforcing the status quo than for mounting dynamic responses to change.

Eyre said there was a sense of "complacency" throughout all levels of veterinary medicine and described a lack of "national vision" or "cohesive leadership." Eyre also suggested that academic veterinary institutions must become more responsive to the changing practice environment of the early 21st century.

"Bold leadership is not well rewarded in academia, so it is not difficult to understand why university administrators are not emerging as the champions of change," said Eyre, who outlined several strategies for curricular change.

Those included greater emphasis on critical thinking as opposed to factual memorization, increased use of information technology, and more training in business and communication skills for veterinary students.

(See EYRE on 4)

EDITOR'S NOTE

Because of a compatibility problem, quotation marks and apostrophes were inadvertently dropped from last week's *Spectrum*. We apologize for any confusion this may have caused.

Edwards' plumbing research could lower costs

By Lynn Nystrom

Many factors influence the quality of drinking water, and a relatively new problem is causing concern. The corrosion of metallic plumbing materials, once thought to last for centuries, is producing some extraordinary costs and environmental problems to consumers and to industry.

The American Water Works Association (AWWA) estimates that it will cost U.S. water utilities \$325 billion during the next 20 years to replace losses due to corrosion and the need to upgrade water-distribution systems. Nationally, corrosion of metals is believed to consume 4 percent of the gross domestic product.

Despite these costs, surprisingly little research has been conducted in this area. One of the pioneers is Marc Edwards, a recipient of a prestigious National Science Foundation Presidential Fellowship for his work in environmental engineering. Edwards points to some relatively new water-treatment steps that remove natural organic inhibitors of copper corrosion as a cause for this deterioration.

The environmental impacts from the deteriorated plumbing include holes in pipes formed through corrosion, which allow the influx of contaminants into drinking-water systems, the loss of the water resource itself, and cause property damage. More recently, leaching of lead and copper from plumbing materials into drinking water has received widespread attention due to health concerns, and forthcoming regulations will severely limit the quantities of corrosion-by-products that appear in sewage discharge and sludge.

"The proposed regulations are difficult to meet," Edwards, an associate professor of civil and environmental engineering, said. "For example, consideration of the proposed

limits on copper have prompted serious discussion of banning its use in the future as a plumbing material and possible re-plumbing of existing homes in some cases. This decision does not seem practical, since it would cost each homeowner several thousand dollars, and copper has many important benefits as a plumbing material when compared to proposed alternatives."

Edwards' research is aimed at gaining a better understanding of



how to mitigate excessive corrosion problems and the associated release of metals to water. "Preliminary experiments illustrate that a wide range of factors are involved, including natural organic matter (NOM), pH, alkalinity, sulfides and other dissolved materials in water," he said. "In some cases, particularly bad combinations of these components can cause a new copper pipe to leak in as little as two weeks, compared to the normally expected pipe lifetimes of hundreds or thousands of years."

ACTIVITIES

EVENTS

Friday, 21

Last Day to Add.
Women's Center Program, 3:30-5:30 p.m., McBryde House: Midwinter's Tea.
Women's Basketball, 7 p.m.: At Temple.

Saturday, 22

Men's Basketball, 4 p.m.: At Temple.

Sunday, 23

Women's Basketball, noon: At St. Joseph's.

Monday, 24

YMCA Open University Registration, 11 a.m.-7 p.m., University Mall.
Men's Basketball, 7:30 p.m.: U.Va. at Richmond.

Tuesday, 25

Bloodmobile, 10 a.m.-4 p.m., Squires Student Center.
YMCA Open University Registration, 11 a.m.-7 p.m.,

University Mall.

Family Support Program, noon-1 p.m., DBHCC conference room G: Recognizing Illness in Children, by Ellen Rabun.

VTU Lively Arts, 7:30 p.m., Burruss auditorium: 1776.

Wednesday, 26

Bloodmobile, 10 a.m.-4 p.m., Squires Student Center.
YMCA Open University Registration, 9 a.m.-6 p.m., YMCA Office.

"With Good Reason," 7 p.m., WVTF: Second To Last: New Treatments For Prostate and Breast Cancers.

Thursday, 27

Bloodmobile, 10 a.m.-4 p.m., Squires Student Center.
YMCA Open University Registration, 9 a.m.-6 p.m., YMCA Office.

Friday, 28

Women's Basketball, 7 p.m., Cassell Coliseum: Dayton.
YMCA Open University Registration, 9 a.m.-6 p.m., YMCA Office.

SEMINARS

Friday, 21

Highlands in Chemistry, 11 a.m., 3 Davidson: Bruce McCord, Ohio.

Monday, 24

Horticulture, 4 p.m., 409 Saunders: Lynn Gayle, Taylor and Fulton.

Thursday, 27

Statistics, 3:45 p.m., 409 Hutcheson: Bruce Ankenman, Northwestern.

Geological Sciences, 4 p.m., 4069 Derring: Harry McSweeney Jr., Tennessee.

IPPP, 4 p.m., 102 Saunders: Jean Styer.

Friday, 28

Highlands in Chemistry, 11 a.m., 3 Davidson: Kathryn Uhrich, Rutgers.

Instructional technology workshops set

Educational Technologies is offering workshops on instructional technology this semester. Spring workshops are grouped by four themes: basic skills, web development, digital content and web-based instruction.

Spring workshops offer a preview of the 2000 summer FDI workshops and are part of an on-going effort to address specific faculty interests, support new course-management tools, demonstrate emerging technologies, and present digital production strategies.

All workshops are open to faculty and staff members and graduate students. Registration is required. Detailed workshop descriptions and on-line registration information are at <http://www.fdi.vt.edu/2000spring/fdispring.html>.

An invitation to participate in shared governance

Each year at this time the Staff Senate Elections and Nominations Committee puts out a call for nominations to university councils, commissions and committees. All interested classified staff members are encouraged to consider participating in one or more of these campus-wide bodies which provide input into the operation of the university. It is an opportunity for the staff to have a voice in matters that affect the university.

Information on the councils, commissions and committees along with nomination forms will be distributed to staff organizations and are intended to be shared widely. Those interested in serving should: 1) fill out the nomination form and return it through campus mail to Becky Barlow, mail code 0319; 2) send an e-mail to hbarlow@vt.edu; 3) or call Barlow at 1-2271. Nominating another person is allowed with their permission. Note that some of the councils, commissions and committees require the staff members to be senators.

Parking changes enacted

Parking and transportation changes have been enacted this semester. The Track/Soccer Lot on the western-side of Spring Road will be closed intermittently throughout the semester for curbing and utility work in preparation for complete renovation this summer.

A construction access road will be built at the northern end of Shultz Dining Facility in the loading dock area to

BULLETINS

support the Shanks Hall renovation. The handicap parking spaces will be moved to the eastern-side of Shultz. Be aware of construction traffic when traveling on Turner Street in the vicinity of Shultz Dining Center.

Three new parking meters have been installed in front of Sandy Hall to provide short-term parking in that area. The former bus-access road, through the center of B-lot (large commuter lot off Prices Fork Rd) is now open to all traffic. Blacksburg Transit has discontinued the use of this route due to limited use. This is a one-way road from West Campus Drive to Stanger Street. Additionally, due to a high accident rate, the exit from the B-lot access road onto West Campus Drive will be restricted to right-turn only. Anyone needing to turn left can use the access road to Stanger Street. This is a temporary measure and the effectiveness will be assessed throughout the semester.

Register for a car on-line

The Motor Pool is now offering on-line reservation requests as a premium service at <http://www.mp.vt.edu/>. Make car reservations electronically and the site will automatically complete the Automobile Order Form; just print and sign.

CEUT plans workshops

The Center for Excellence in Undergraduate Teaching will present a workshop that provides ways to keep students more actively engaged during class. The quality of student engagement is the key to their deep learning of course content. Ready-to-use structures that enable student involvement will be explained, including strategies for paired learning, tips for promoting group discussion, activities for opening and closing class sessions, methods for providing breaks and pauses and lesson-planning formats. Register on the Center for Excellence in Undergraduate Teaching web page, <http://www.ceut.vt.edu/>, or call 1-4254 or e-mail ceut@vt.edu.

Fischer presentation scheduled

The School of Public and International Affairs is sponsoring a public presentation by Professor Frank Fischer of Rutgers University on February 7 at 7:30 p.m. in the BHCC rear auditorium.

The presentation is titled "Citizens and Experts in a Democratic Society: Deliberative Approaches to Public Policy Making."

Fischer is a faculty member in Bloustein Graduate School of Planning and Public Policy on the New Brunswick of Rutgers University. His recent publications include *Technocracy and the Politics of Expertise*; *The Argumentative Turn in Policy Analysis and Planning* (co-edited with John Forester), and *Evaluating Public Policy*. Fischer will present a seminar titled "Postpositivist Policy Analysis: Integrating Empirical and Normative Inquiry" for faculty members at 4 p.m. February 8 in the DBHCC Executive Conference Room. Faculty members interested in attending should e-mail James Bohland at jayjon@vt.edu.

RDP seeks nominees for Baird award

The Department of Residential and Dining Programs (RDP) is seeking nominations for the 1999-2000 A. Alan Baird Award. The award honors the student who has contributed the most to the residence hall program during or culminating in the current academic year. All students are eligible for the award, including those not affiliated with RDP.

Nomination forms are available in 109 E. Eggleston, the Hokie Passport office (41 Owens Hall), and at the Area Offices (Payne Hall, West Ambler Johnson, Newman Hall, Lee Hall, and New Residence Hall West). Nomination deadline is Friday, Feb. 18, at 5 p.m. Nominations are to be turned into 43 Owens Hall, c/o Lori Greiner (mail code 0223). A web-based nomination is also available at www.rdp.vt.edu/baird. For more information, call 1-8068 or e-mail lgreiner@vt.edu.

RDP offers free lunches

Residential and Dining Programs (RDP) is introducing a new dining opportunity called the Dine With Faculty Program. This program allows students an opportunity to take Virginia Tech faculty members to breakfast, lunch or dinner, free of charge, in one of RDP's designated dining centers. Dine with Faculty was created to encourage student and faculty interaction outside the traditional classroom.

Students will be encouraged to initiate the invitation with faculty members, but faculty members can also use the program to get to know students. For more information, call 1-8068 or e-mail lgreiner@vt.edu.

Black History Month activities detailed

By Clara B. Cox

Congresswoman Maxine Waters will provide the keynote address during Virginia Tech's Black History Month celebration. The month-long series of events will also feature a talk by the community activist and poet Angela Davis, as well as a wide variety of other events, all open to the public.

Waters, who has gained a reputation as an outspoken advocate for women, children, people of color, and poor people, was elected in November 1998 to her fifth term in the U. S. House of Representatives. She has been

appointed chief deputy whip of the Democratic Party for the 106th Congress.

Waters will speak at 7 p.m. on Thursday, Feb. 3, in the Donaldson Brown Hotel and Conference Center (DBHCC) auditorium.

Other activities during Black History Month include the following:

January 28: Discussion on "Feminism in an African Context," led by Myra Gordon, associate dean of Virginia Tech's College of Arts and Sciences, will be held from 11:30 a.m.-1:30 p.m. in the Women's Center conference

(See HISTORY on 4)

Costume ball set

By Sally Harris

Will Mae West or Castro or Cole Porter show up? Could be, when the party is the Harlem Renaissance Costume Ball.

The Harlem Renaissance class taught by Nikki Giovanni is kicking off Black History Month by hosting a recreation of the *Opportunity Magazine* dinner that officially began the Harlem Renaissance. The event, open to the public at no charge, will be held Tuesday, Feb. 1, at the Donaldson Brown Commonwealth Dining Room, 7-10 p.m. The only criteria for admission

(See COSTUME on 3)

Reading scheduled

By Sally Harris

Lucinda Roy, alumni distinguished professor of English, has scored a third starred review in *Publishers Weekly*, this one for her second novel, *The Hotel Alleluia*.

Roy's first starred review was for a book of poetry called *The Humming Birds* published Eighth Mountain Press, and the second was in January 1998 with her first novel, *Lady Moses*. Both novels were published by HarperCollins, which calls *The Hotel Alleluia* "a beautifully written, passionate new novel about sisterhood,

(See READING on 3)

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. For information on all job listings, call 1-5300. 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 EEO/AA employer committed to diversity.

Full Time

Applications Analyst, 6739D, Grade 0, DIS.

Applications Analyst, 1372D, Grade 0, DIS.

Architect, 3374P, Grade 12, Physical Plant.

Computer Operations Technician Senior, 1054D, Grade 8, Test Scoring.

Development Associate For Student Calling Program, 1450C, Grade 8, University Development/Annual Giving for Phonathon.

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

Eight full-time food-operations positions

TO THE EDITOR

Dear Virginia Tech faculty, students and staff:

In my 14 years, the Hilton New Orleans Riverside has never experienced such hospitable guests. Everyone at Virginia Tech made the Sugar Bowl extraordinary. Our success was phenomenal solely because of you all at VT.

The Virginia Tech team, coaches, staff band, parents, fans, students and alumni win the award for "best guests in town." You are and you will always be "our national champions."

A sincere thanks to all who visited the Hilton New Orleans Riverside. We look forward to future visits from the Hokies!

Yours,

Paul D. Buckley, vice president-general manager
Hilton New Orleans Riverside



VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Spectrum, a faculty-staff tabloid, is published each Friday during the academic year, with the exception of certain holidays, exam weeks, and the summer. Copy deadline is noon Friday. No advertising is accepted.

Spectrum is a non-profit publication of the Office of University Relations: Lawrence G. Hincker, associate vice president for University Relations; David Nutter, associate director for Public Affairs.

Editor
John Ashby, 1-6961

Assistant Editor
Christian Moody, 1-8538

Production Manager
Melinda Shaver, 1-8524

Business Manager
1-8819

Letters to the editor and questions for "Ask Spectrum" should be addressed to the editor, 105 Media Building, Virginia Tech, Blacksburg, VA 24061.
Electronic Spectrum: <http://www.vt.edu:10021/admin/eeaa/index.html>

Virginia Tech does not discriminate against employees, students, or applicants on the basis of race, color, gender, sexual orientation, disability, age, veteran status, national origin, religion, or political affiliation. Any-one having questions concerning discrimination or accessibility regarding the programs described in this newspaper should contact the Equal Opportunity Affirmative Action Office: 540-231-7500 (v), 540-231-9460 (TTY).

available; two part-time positions.

Food Operations Director A/Unit Manager, 1251H, Grade 12, Residential and Dining Programs/Owens Food Court.

Housekeeping Worker, 1220C, Grade 1, Residential and Dining Programs.

Housekeeping Worker, 7261G, Grade 1, Recreational Sports.

Housekeeping Worker, 6870S, Grade 1, Physical Plant/Housekeeping.

Housekeeping Worker Senior, 2745C, Grade 3, Residential/Dining Programs.

Human Resource Generalist, 1073T, Grade 12, Personnel Services.

Laboratory Specialist, 799T, Grade 8, Biology.

Laboratory Technician, 7519T, Grade 4, Chemistry.

Office Services Specialist, 6751T, Grade 5, University Honors.

Office Services Specialist, 7080M, Grade 5, CVM.

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

Office Services Specialist, 726S, Grade 5, University Library/Acquisitions.

Office Services Specialist, 1459C, Grade 5, Personnel Services.

Operating Systems Analyst, 6824, Grade 0, DIS.

Program Support Technician, 3247M, Grade 6, Biological Systems Engineering.

Program Support Technician, 7543J, Grade 6, NVC—Computer Science.

Program Support Technician, LC090J, Grade 6, Athletics.

Program Support Technician Senior, LC045D, Grade 7, Alumni Relations.

Programmer, LC092J, Grade 10, Athletics.

Programmer, 7329M, Grade 10, Agricultural/Applied Economics.

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

Public Relations Assistant Specialist, LC091J, Grade 8, Athletics.

Recreation Center Supervisor (Recreation Sup B), 6956G, Grade 7, University Unions/Student Activities.

Research Specialist Senior, 7535M, Grade 9, Horticulture.

Senior Development Associate of Annual Giving, 6695D, Grade 10, University Development.

Student Activities Building Manager, 1187G, Grade 7, University Unions/Student Activities.

Student Services Coordinator, 2316M, Grade 10, Academic Programs, CALS.

Part Time

Animal Care Tech B, W022914M, Grade 5, CVM.

Animal Care Technician A, W022155M, Grade 3, Veterinary Teaching Hospital.

Banquet/Setup (Foa-b), W022143G, Grade 2, DBHCC.

Housekeeping Worker, W020574G, Grade 1, DBHCC.

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

Office Services Asst, W022459C, Grade 4, Personnel Services.

Office Services Specialist, 802C, Grade 5, CNS.

Pharmacy Assistant A, W020839M, Grade 4, Veterinary Teaching Hospital.

Program Support Technician, W022188B, Grade 6, AIS/HRIS Team.

Program Support Technician Senior, W022954D, Grade 7, Information Technology Acquisitions.

Radiologic Technologist, W022238G, Grade 9, Health Center.

Retail Clerk, W022953D, Grade 2, Information Technology Acquisitions.

Off Campus

Evening Announcer, 1962D, Grade 8, WVTF.

Program Support Technician, 5053M, Grade 6, Virginia Cooperative Extension—Alexandria.

Program Support Technician, 7537M, Grade 6, Virginia Cooperative Extension—Portsmouth.

Research Specialist, 7534M, Grade 8, College of Agriculture/Life Sciences—Alson H. Smith Jr., AREC

FACULTY POSITIONS

NON-INSTRUCTIONAL

Service-Learning Center. Assistant Director (revised, re-advertised). Contact: Rachel Parker-Gwin, 678 McBryde (0137). Review begins February 18.

Virginia Cooperative Extension. Extension Agent. 4-H Youth Development (re-advertised), #111808. Contact: John Dooley 122 Hutcheson (0437). Review begins February 7.

Virginia Cooperative Extension. Agriculture/Natural Resources Extension Agent (re-advertisement). Contact: Steve Umberger, 122 Hutcheson (0437). Review begins February 7.

College of Natural Resources. Youth Education Coordinator. Contact: James Johnson, 324 Cheatham (0324). Review begins April 1.

READING

Continued from 2

"...Roy's heroines try to make homes for themselves where they feel at peace, whether it seems the logical place for them to be or not," the *Publishers Weekly* reviewer said. "The beautifully sustained intensity of the narrative and a multi-culturally varied and delightfully authentic supporting cast keep the reader's attention from the first chapter to the last."

Roy will do readings and signings of *The Hotel Alleluia* throughout the East through March. They will take place at the Volume Two bookstore in Blacksburg February 4 (signing 4 p.m., reading 6 p.m.)

In addition to being a novelist, Roy is a poet, artist, educator, and scholar. She wrote *Lady*

Moses, which was the first debut novel published by Harper's new imprint called Harper Flamingo, while serving as a professor of English and as associate dean of the College of Arts and Sciences.

Roy has been at Virginia Tech since 1985, first as lecturer of English. She was named assistant professor in 1987, associate professor in 1991, and professor in 1997. In 1992, she was the Margaret Bundy Scott professor of English at Williams College in Massachusetts. In 1993, she was named assistant dean for projects in Virginia Tech's College of Arts and Sciences and, in 1994, associate dean for curriculum, outreach, and diversity, a position she left in 1997 to concentrate on writing and teaching.

Roy held the Gloria D. Smith two-year endowed professorship in black studies until May 1997 and was awarded an Alumni Distinguished Professorship in English in 1997.

A recipient of the university-wide Alumni Award for Teaching Excellence, Roy was co-founder of the Service-Learning Program at Virginia Tech and co-director of AC-CESS, a \$200,000 IT project funded by the Alfred P. Sloan Foundation.

Roy won the 1994 Eighth Mountain Poetry Prize for a book of poetry, and, as part of the award, *The Humming Birds* was published in 1995. She is the author of another book of poetry, *Waiting the Dead to Sleep*, published in London in 1988.

COSTUME

Continued from 2

is that everyone must be dressed as someone who would have been alive between 1919 and 1929 no matter their age at that time—and that everyone come with an attitude of fun, Giovanni said. A \$50 prize will be given to the person with the best costume and the person or group that came the farthest for the ball.

"You cannot choose to come as Booker T. Washington because he died before 1919, but you can be Helen Keller or George Gershwin or Duke Ellington or Jackie Kennedy or Zora Neale Hurston," Giovanni said.

The original *Opportunity Magazine* event was a sit-down dinner with brilliant scholar Alain Locke as host. "The room was filled with the older, more-established, and somewhat richer white American literary lions and the younger literary aspirants of The New Negro Movement," Giovanni said. "There was a formal program, and many business cards were passed around."

Giovanni's re-creation event will be a stand-up dinner with stations around the room for "The

Opportunity" to meet costumed luminaries. For example, there will be a W.E.B. DuBois station, a Langston Hughes station, a Jessie Fauset station, and a Zora Neale Hurston station. In addition, there will be a jazz station "just to soothe our souls," Giovanni said. Each station will feature "food, drink, and conversation."

A special feature of the ball will be Carol Crawford Smith's portrayal of Josephine Baker. Crawford Smith is director of the Center of Dance in Blacksburg and was a principal soloist ballerina with the internationally renowned Dance Theatre of Harlem for 10 years.

The *Opportunity Reader* and *The Crisis Reader*, both magazines that formed the backbone of the Harlem Renaissance, have recently been published in book form, Giovanni said. "There are also many new biographies and chronologies such as *The Black New Yorkers*, which recently have been issued," she said. "The Harlem Renaissance and the Jazz Age of F. Scott Fitzgerald, Dorothy Parker, George and Ira Gershwin, Johnny Mercer, Mae West, among

many, many others, were partners in bringing a new vitality to American life."

Giovanni, professor and poet, won the NAACP Image Award for literature for her book *Love Poems* and the Langston Hughes Award for 1996 for distinguished contributions to arts and letters. Giovanni published her first book of poetry, *Black Feeling, Black Talk*, in 1968 and the second, *Black Judgment*, in 1969, becoming a voice for the black-power movement. Her works also include books of essays, such as *Sacred Cows...and other Edibles* published in 1988 and *Racism 101* published in 1994. *The Selected Poems of Nikki Giovanni* was published in 1996, *Love Poems* in 1997, and *Blues: For All the Changes* in 1999.

Giovanni's Harlem Renaissance, poetry, and Black Aesthetics classes have held special events each year to illustrate some aspect of African-American life. "The students like doing these things, and I think they learn a lot," Giovanni said.

For more information, call 1-3787.

Engineer uses of microorganisms to reduce pollution contamination

By Lynn Nystrom

The contamination of ground water due to leaking storage tanks and pipelines has occurred for decades, and the effects of the pollution remain at hundreds of thousands of sites throughout the world. To combat this problem, experts are using in situ bioremediation, a developing technology that now accounts for nearly \$870 billion in worldwide annual expenditures. A computer model for assisting engineers in cleaning up the polluted ground waters has been developed by Mark Widdowson, a Virginia Tech civil engineer.

Widdowson's efforts in this area started when he was a doctoral student at Auburn University. His thesis was on a computer-modeling project for simulating the biodegradation of contaminants in groundwater. It is now 12 years since he earned his doctorate, and he has continued improving his Sequential Electron Acceptor Model, 3 Dimensional (SEAM3D). Today, the software has been accepted for use as the preferred bioremediation code by the Waterways Experiment Station (WES) of Vicksburg, Miss. The U.S. Department of Defense placed WES in charge of the national Groundwater Modeling System (GMS).

"The SEAM3D software is designed to model the distribution of contamination over space and time, including biological reactions," Widdowson said. "It's a Fate and Transport Model."

For example, the software will indicate how widespread and how fast a contaminated body of underground water will spread. This knowledge might be particularly important if the contaminated ground water was nearing a wetland, a stream, or a reservoir.

'Most plumes of contaminants in ground water never exceed a certain size because they become stable over time. However, the key word is attenuation brought about by the presence of microorganisms in the adjacent soil and/or water. We learned in the 1990s that these microorganisms are a major player in reducing the strength of the contaminated areas,' Widdowson said.

"Most plumes of contaminants in ground water never exceed a certain size because they become stable over time. However, the key word is attenuation brought about by the presence of microorganisms in the adjacent soil and/or water. We learned in the 1990s that these microorganisms are a major player in reducing

the strength of the contaminated areas," Widdowson said.

At many sites, the Environmental Protection Agency (EPA) favors monitored natural attenuation of sites, letting nature take care of the problem. However, it learned that engineering the bioremediation through the addition of oxygen and other nutrients to a contaminated site would stimulate the bacteria to speed up their work.

The SEAM3D computer model developed by Widdowson is the tool now used to determine how well microorganisms will respond to contaminated ground water at each site and whether or not nature can handle the problem alone.

Widdowson's model is able to track each individual contaminant, such as benzene, toluene, ethylbenzene, xylene, and the recently banned MTBE. It might show that one pollutant will biodegrade, but that the presence of the remaining ones will not, thus calling for the

appropriate additional treatment.

An expert in hydrosystems and geo-environmental engineering, Widdowson said GMS is similar to a Windows software program for computers. "GMS serves as an interface for about a half a dozen codes for solving various ground water problems," he said.

He has partnered with the U.S. Navy to use SEAM3D to predict the spread of chlorinated solvents at its Little Creek Naval Amphibious Base in Virginia Beach. He is also using the software to simulate a controlled release of jet fuel at an Air Force base in Mississippi. And his model simulations of a gasoline-contaminated site near Beaufort, S.C. were instrumental in explaining why natural attenuation was ineffective.

The various projects he has conducted to date illustrate that microorganisms can help clean up some sites at a faster rate than others.

EYRE

Continued from 1

"One of the most important life skills is knowing how to provide vision and cooperative leadership in complex group settings; yet we reward students primarily for individual competitive performance," said Eyre, who is a member of the Board of Directors of the American Association of Veterinary Medical Colleges.

"Academicians must stop merely talking to themselves and look outward at the real needs of society," Eyre said. "If the profession does not act quickly, it may soon lose the public trust upon which we all depend."

He suggested that colleges of veterinary medicine must form more strategic partnerships with private practice, government and industry in order to become more responsive to change.

Eyre challenged those in attendance to return to their home states and work to forge

closer relationships with their respective colleges of veterinary medicine in an effort to create the collaborative partnerships which will be required to find solutions to the problems outlined in the KPMG study.

"The practicing profession and academia traditionally seem to hold unfortunate philosophical differences and unnecessary misunderstandings," said Eyre, who addressed the group for the second time in three years. "This will not be productive behavior in the future," he added, allowing that while unanimity of opinion is seldom achieved in collective discourse, "different points of view must not be allowed to stand in the way of progress."

"Change is constant, and the conditions which govern it are determined by society. So we must adapt or fail," he said.

In November, the VMRCVM convened the first university-based "think-tank" to evaluate and react in a formal way to the KPMG.

OBITUARY

Elva Maude Redding, 94

Elva Maude Redding, 94, died Sunday, Jan. 15. She served Virginia Tech for many years as secretary to presidents Walter Newman and T. Marshall Hahn. She also served as secretary to the Board of Visitors.

The family requests in lieu of flowers, contributions can be made through the Virginia Tech Foundation to the Elva Redding Fund, which will go to wildlife sciences.

HISTORY

Continued from 2

room.

February 1: Lucinda Roy, alumni distinguished professor of English and the author of several novels and books of poetry, will sign her latest novel, *Hotel Alleluia*, from 4-6 p.m. and will read from the novel at 6 p.m. at Volume II Bookstore.

A Harlem Renaissance Costume Ball, featuring Carol Crawford-Smith as Josephine Baker will be held from 7-10 p.m. in the DBHCC. (Editor's note: For more information, see separate article in today's issue.)

February 2: There will be a discussion on "Learning from Our Past: A Retrospective of Black Women" from 7-9 p.m. in the Black Cultural Center, 126 Squires.

February 4: Irene Lamb, a professional lecturer with Virginia Tech's University Academic Advising Center, will lead the first Prejudice Reduction Workshop from 11:30 a.m.-1:30 p.m. at the Women's Center.

February 7: There will be a Black History Quiz Bowl at 7 p.m. in the Black Cultural Center.

February 8: Claudia Whitworth, publisher of the *Roanoke Tribune*, will be the featured speaker at a Black Journalism Jamboree at 6 p.m. in the Black Cultural Center.

February 9: "Black Women in the 21st Century: A Sister-2-Sister Forum" from 7-9 p.m. will be held in 234 Squires.

February 10: The Renaissance: "Black

Collage," featuring performances by students, members of the Student Government Association, and Alpha Phi Alpha, will be held at 7 p.m. in Squires Haymarket Theatre.

February 11: Sonya Baker, assistant professor of voice at James Madison University, will present "Remembering Marian Anderson" at noon in Squires Haymarket Theatre. The program consists of a lecture/recital based upon Anderson's 1939 Easter concert on the Mall in Washington, D.C.

February 12: Hayward Farrar, assistant professor of history, will lead a discussion, "Remembering the Black Panthers," beginning at 7 p.m. in the Black Cultural Center.

February 14: There will be a discussion on "Interracial Dating in the New Millennium: Is It More Acceptable?" at 7 p.m. in the Black Cultural Center.

February 15: The NAACP will discuss "Second Reconstruction? The Road from School Segregation to Integration to Re-segregation" from 6-7:30 p.m. in the Black Cultural Center.

February 15: The Diversity Committee of Virginia Tech's College of Arts and Sciences will talk about retaining African American graduate students. The event will begin at 7 p.m. in the Black Cultural Center.

February 18: Irene Lamb will lead the second Prejudice Reduction Workshop from

11:30 a.m.-1:30 p.m. at the Women's Center.

February 21: "Christiansburg Institute: Voices from Community," will be presented from 7-9:30 p.m. in the Black Cultural Center. The program will feature a short video and excerpts from oral interviews conducted with faculty and alumni of Christiansburg Institute, the first high school for blacks in Southwest Virginia.

February 22—There will be a forum, "Importance of Black Greek Sororities," at 7 p.m. in the Black Cultural Center, and a discussion on "The Civil Rights Movement: A Past or a Present Fight?" at 8:30 p.m. in 150 Squires.

February 23: Kip Fulbeck, professor of Asian American and film studies, will give a presentation on "I Hope You Don't Mind Me Asking...Debunking Multi-racial Stereotypes" at 7:30 p.m. in DBHCC auditorium.

February 24: The movie *Black Love*, followed by a discussion will be presented from 7-11 p.m. in the Black Cultural Center.

February 25: Angela Davis, community activist and poet, will talk about "Prison Reform." The event will begin at 7 p.m. in Colonial Hall, Squires.

February 26: There will be a semi-formal banquet, *Ebony Affair: "Millennium Evolution of Culture,"* at 6:30 p.m. in Owens Banquet Hall.

For more information, call Kimberly Philpott at 1-3787.

Virginia Tech
Blacksburg, VA 24061

Non-Profit Organization U.S. Postage PAID
Blacksburg, VA Permit No. 28