Justin Kennemur, a 2002 chemistry alumnus, recently won the 2010 AkzoNobel Award in Applied Polymer Science. This award is sponsored by AkzoNobel and given to the best paper presented at the AkzoNobel Award Symposium as part of the Polymeric Materials: Science and Engineering (PMSE) program at the ACS Meeting.

Kennemur was introduced to polymer chemistry during his time at Radford. “I could not have asked for a better undergraduate level chemistry education,” he says. “At Radford, the chemistry program was a family where students could go to any faculty member to get the help they needed. This personal level of education was instrumental in my growth as a chemist since, let’s face it, this major can often be very difficult,” says Kennemur.

After graduation from Radford, he worked at Polymer Solutions Incorporated in Blacksburg as an entry level chemist. There, he was promoted twice and received the title of Senior Chromatography Analyst.

He wanted to continue his education, so he applied to graduate schools. He was accepted to North Carolina State University (NCSU) and recently finished his Ph.D. Currently, he is as a Post-Doctoral Scholar with the Bruce M. Novak Polymer Research Laboratory. He will be moving to the University of Minnesota-Twin cities in January 2011 to begin a Post-Doctoral position for the Center for Sustainable Polymers.

Kennemur received the AkzoNobel Student Award for the research that he conducted at NCSU. The award includes a cash prize of $1,600, a plaque and an all expenses paid trip to Anaheim, Calif., for the spring 2011 ACS meeting where he will officially receive his award.

AkzoNobel is the largest global paints and coatings company and a major producer of specialty chemicals. Based in Amsterdam, the Netherlands, the company has over 60,000 employees working in more than 80 countries. The company’s mission is to develop sustainable answers for its customers.

Rogers Award Application Available

The 2011 Rogers Undergraduate Research Award application is now available online at www.radford.edu/csat. Application Deadline is noon on Friday, December 3, 2010.

The award will fund one exceptional undergraduate research project to be conducted during the spring and summer of 2011 and completed during the 2011-2012 academic year.

The College of Science and Technology Scholarship and Awards Committee will grant, on a competitive basis, one $500 prize to a current sophomore or junior student enrolled in CSAT. Applicants must be full time Radford University students, and must remain enrolled at RU through the completion of the project.

Working in collaboration with a CSAT faculty member, each award recipient will plan and implement an extensive and significant research project. The faculty sponsor will write a letter of support on behalf of the student’s proposal. The sponsor of a Rogers Undergraduate Award winner will submit a narrative assessment of the student’s project upon its completion or no later than April 29, 2012.

Applicants are encouraged to think creatively in designing their research projects. Proposals focusing on any of the degree programs in CSAT will be considered. The integration of interdisciplinary approaches is encouraged.

Upcoming Events:
- CSAT Fall Picnic, Sept. 9 at 4 p.m. in Bisset Park
- Hike the Cascades with the CSAT STEM Club Sunday, Sept. 19. Meet at 2 p.m. in Reed Hall parking lot
- Planetarium show tonight at 7:30 p.m.
$130,000 Grant Will Enhance Science Education in Southside

Elementary and middle school students and teachers in Southside Virginia will be benefiting from enhanced teaching and learning opportunities in the sciences and mathematics thanks to a $130,000 grant from the U.S. Department of Education and the State Council of Higher Education for Virginia (SCHEV).

Project Directors are chemistry professor Francis Webster, Professor Emeritus of physics Franklin Jones and School of Teacher Education and Leadership assistant professor Dana Gregory Rose.

The goal of this project is to enhance elementary and middle school students’ science and mathematics literacy and Standards of Learning (SOL) test achievement by improving the mathematics and science content knowledge and teaching skills of elementary and middle school teachers, including teachers’ understanding of how to teach literacy across the disciplines. Specifically, the project will use inquiry-based science, mathematics and reading curriculum materials, strategies and assessments that align with Virginia’s science and mathematics SOLs to foster more effective teaching and learning.

The project proposal received rave reviews from the SCHEV selection committee. “The review panel was impressed with the quality of the proposals submitted. You and your faculty are to be commended for the important work you are doing with the area public schools and the significant contribution you are making to increase student achievement,” said Daniel J. LaVista, Executive Director of the State Council of Higher Education for Virginia.

- Cameron Elliott

IT Faculty and Students Receive $15,000 for Research

Information Technology faculty member Hwajung Lee and students Catherine Greene, Bretny Khamphavong, Nancy White and Chloe Norris received $15,000 from the 2010-2011 Collaborative Research Experience for Undergraduates (CREU) program for their project “Multi-hop Wireless Electricity Charging Protocol in Wireless Sensor Networks.”

According to Lee, the objective of the research is to integrate a wireless electricity technique into wireless sensor networks. These networks monitor physical or environmental conditions through sensors.

A sensor is a tiny computer with extremely limited computational capacity, memory size, data transmission capacity and battery power. Due to the limited battery power in each sensor, energy efficiency has been one of the most critical factors for the effectiveness of these sensors. The group will research a way to integrate wireless electricity, also called witricity, into these networks.

“To the best of our knowledge, this is the first attempt to integrate witricity technology into wireless sensor networks while minimizing energy leakage and maximizing network lifetime,” says Lee.

Nominate a Student for Udall or Goldwater Scholarship

Do you know an outstanding sophomore or junior student with a list of research accomplishments and a high grade point average? Nominate him or her to be a Radford University Udall or Goldwater Scholarship nominee.

The Morris K. Udall Undergraduate Scholarship is offered to full-time sophomores or juniors who have demonstrated commitment to careers related to the environment. Students must have at least a “B” GPA and be a U.S. citizen, U.S. national or U.S. permanent resident. This $5,000 scholarship may be used for tuition, fees, books, room and board or other specifically approved expenses. For more information, visit www.udall.gov/

The Barry M. Goldwater Scholarship is targeted to students who intend to pursue careers in mathematics, the natural sciences or engineering.

RU is eligible to nominate up to four students for this $7,500 scholarship. To be considered for nomination as a Goldwater Scholar, a student must be a full-time sophomore or junior, have a “B” or higher overall GPA, be in the upper fourth of their class, and be a U.S. citizen, permanent resident or U.S. national. For more information, visit www.act.org/goldwater/

Please send nominations to CSAT Dean J. Orion Rogers by October 4, 2010 for consideration.
CSAT faculty interested in teaching during Summer Bridge 2011 are invited to submit curriculum proposals to the Dean’s Office by Friday, Oct. 29, 2010. Summer Bridge is scheduled for July.

The Summer Bridge program’s goal is to introduce female high school students to future educational and professional opportunities available to them in the mathematics, science and information technology fields.

During Summer Bridge 2010, rising sophomores, juniors and seniors learned about defending sensitive computer systems from hacker cyber-attacks by using secret mathematical codes, using archaeological and biotechnology techniques to analyze physical and DNA evidence to investigate mock crime scenes to determine the “culprit,” and exploring environmental science using technologically advanced GPS systems and field research to analyze the “health” of our rivers.

Math faculty member Patterson Rogers and information technology faculty member Prem Uppuluri collaborated during the “cybersecurity and codebreaking” track. Georgia Hammond from biology and Cliff and Donna Boyd from anthropological sciences worked together in the “forensics” track, and Beth McClelland in geology and Rick Roth in geography incorporated both their disciplines in the “river science” track. Faculty teaching a course during Summer Bridge 2011 will be paid a $3,500 stipend and can recruit an outstanding student from their discipline to serve as a teaching assistant. Teaching assistants receive a stipend of $400.

Curriculum proposals should include the title of the course, course description, budget, facility requirements, learning outcomes and expected final product such as a student produced project, presentation or poster to be presented during the closing session of the camp.

The Summer Bridge Curriculum Committee will choose six courses to offer during the week-long summer camp.

Email proposals to Assistant to the Dean Ann Brown at abrown238@radford.edu by Friday, October 29.

Virtual Career Fair Scheduled

Radford University (RU) will be the first medium-sized college to participate in a new cutting edge trend. Cyber communication is at an all time high with programs such as Skype, it is only right to bring virtual communication to the job market. RU will host its first ever Virtual Career Fair Tuesday, November 2, 2010 and Tuesday, February 8, 2011.

Kathryn Jordan, Director of the Center for Experiential Learning and Career Services thinks this will be a great opportunity for employers and students.

“We are hopeful that this additional recruiting opportunity will provide a forum for our students to talk to additional companies and get their questions answered in a greater depth than can occur while standing in line at a booth,” says Jordan.

Students will post their résumés which will be reviewed by recruiters. On the day of the fair, employers will be available to talk to students in a virtual chat room or can connect with the students individually. Later in the week, students will have the option to video conference a live screening interview.

The event is open to all RU students and alumni. For more information, visit the Career Services website at http://careers.asp.radford.edu/Events/Calendar.html.

Dean’s Office Welcomes Public Relations Intern Cameron Elliott

The CSAT Dean’s Office welcomes communication intern Cameron Elliott. She is a communication major with emphasis in public relations. As an intern working with the Assistant to the Dean Ann Brown, she will help with the writing of articles for the College of Science and Technology (CSAT) newsletter From the Dean’s Desk and assist in developing and maintaining content on the CSAT website. She will also assist in event planning for the college’s special events such as the Alumni Advisory Council meeting in October.

Cameron is an avid animal lover. In her free time, she volunteers with Pound Pals at the Radford Animal Shelter. She is also a die-hard UNC fan and will be attending the home games this football season. When asked what she wanted to gain from this internship she said, “To become a more confident writer, gain communication experience and to be able to add to my professional portfolio.”
CSAT STEM Club News

CSAT STEM Club is starting off big this fall semester with its first meeting on Tuesday September 7, 2010 at 6pm. The new officers had their first official meeting on Monday August 30, in which they talked about new things that the club would be deciding to do this year and what trips the club would go on. Some of the ideas that were mentioned were: doing another hike at the Cascades and visiting a zoo, such as the Mill Mountain Zoo. The club will also continue to hold Colloquium talks by Radford professors in the STEM field.

Club fair went well, with a lot of new members signing up, some who were Bridges and Pipeline Scholars and others who joined, because the club dealt with their major. The CSAT STEM Club is also having their first picnic on Thursday, September 9 from 4-7 p.m. at Bisset Park, Shelter #1 for anyone who wants to come. The year so far is starting off with a lot of good ideas, and more events are in the making.

Jasmine Jackson, Secretary of CSAT STEM Club

The College of Science and Technology’s 2010-2011 Dean’s Student Advisory Council met Tuesday afternoon at 4 p.m. in Davis Hall, room 113. The council consists of outstanding students from each of the college’s disciplines. These students were nominated by their program to represent the students in their areas.

This year’s council includes biology major Erin Fowler, chemistry major Corwin Johnson, anthropological sciences major Brittany McReynolds, physics major Brendan Conniff, geology major Sarah Gregory, computer science major Brian Putt, information science and systems major Brittany Little and mathematics major Abby Thompson.

The meeting agenda included a discussion of upcoming events for the year including the Alumni Advisory Council meeting on Oct. 1, the Homecoming Alumni Panel scheduled for late January, the SuperMACC high school academic competition in March, RU Science Exploration Day for girl and boy scouts in April, the CSAT Academic Achievement Reception in April, a Science Fair in the spring, Camp Invention in June and Summer Bridge in July.

Dean Orion Rogers also discussed the progress of the building committee and their visits to science buildings across the state.

In addition to hearing about college activities and events, the students were invited to talk about issues that students in their areas experience. One of the roles of the council is to advise the Dean regarding students experiences within the college and bring to his attention any issues that need to be addressed.

The next meeting of the CSAT Dean’s Student Advisory Council will be Monday, Sept. 27.