

chemistry *distillations*

Newsletter of the Department of Chemistry, The College of William and Mary
www.wm.edu/chemistry Fall 2009



From Big Kahuna...to Big Cheese



What have I gotten myself into?

the chair serves at the pleasure of the faculty and the Dean and, of course, his sanity.

If I could choose the year to become chair, it is unlikely this year would have been a top choice. This year, more than any other, can be described as a changing of the guard. Dave Kranbuehl has just retired, though he will continue on for three more years at half time. Bob Orwoll and Steve Knudson will retire at the end of this year. We are proceeding with two hires to replace these three positions, and our search continues to fill the vacant Gottwald endowed chair. On the staff side, Ted Putnam, Louise Menges and Lynda Stitzel all have said this year will be their last. (All of this seems too much like a group of some type of animal leaving a distressed seagoing vessel!) I expect a few more retirements in the next several years, so that nearly half of the department will have turned over during my stint. On a positive note, we are excited that Jonathan Scheerer, our first new hire in several years, joined the faculty this summer.

The renovation of Rogers Hall was completed this year. It is now called ISC II; I am not sure what will become of the Rogers name, and Rogers 100 has been renamed ISC 1127. Biology and Psychology have moved into the second and first floors, respectively. Restructuring (the charter school initiative) actually resulted in cost-savings. There was equipment money left over, which we will use for the purchase of a GC/ion trap MS and three gas generators.

Last year Gary Rice said that it would be the last time he would write this column. Of course, he had made the same promise before. This time, to his great relief, he kept his promise. One has to be careful when a new chair is being selected. A call goes out for volunteers. Before I knew it, everyone else had taken a step backward and placed a finger on his or her nose. So this is how I come to write this column. My term (or sentence) is for five years, but

Other fun activities planned for this year are a program review and an assessment of general education requirement (GER) courses. Departments and programs are reviewed in clusters, and Chemistry is grouped with biology, geology and environmental science and policy. The five person external review team will have two chemists: Mike Doyle from the University of Maryland and Nancy Mills from Trinity University. Chemistry 101 and 103 will be assessed this fall. This process is somewhat like the standards of learning for K-12, except, of course, that we are a postsecondary institution. We will have to show that these courses result in student learning.

The American Recovery and Reinvestment Act of 2009 provided significant funds to science, and Bob Pike and JC Poutsma were

awarded grants from the National Science Foundation. The College also seized the opportunity to request a variety of expensive instrumentation. The College was limited on the number of grants it could submit, and as a result, our request to submit a proposal to replace our 11-year-old NMR was not granted. In fact, next year's proposals for the Major Research Instrumentation program have also been claimed by other departments. We are hoping to be allowed to submit a proposal to the Chemistry Research Instrumentation and Facilities program next year. As we learned this year, having the word 'Chemistry' in the program title does not guarantee that the Chemistry Department can submit a proposal to the program. Our current NMR was relocated from Rogers Hall last year. It

took several weeks to bring the instrument back to being fully operational, and while it is functioning to the satisfaction of most research groups, it has been getting quirkier with age. Given its age, it is not the kind of instrument we like to showcase. Just like my 1995 Chevy Van, it is also likely to need major repairs in the future, only parts will be harder to find.

I have been chair now for only two months, and one thing that has become very clear to me is that this job pulls you in many directions at the same time. I am amazed and grateful that Gary Rice was not only able to endure the position for eight years, but also to do such a great job.

Chris Abelt

2 Thanks, Big Kahuna!

3 We welcome Jonathan Scheerer to our faculty

3 Crystals

4 Homecoming reception 2008

6 News from alums

10 The Class of 2009

11 Puzzles

Thank you, Gary!

In July the department threw Gary Rice a party in appreciation of his efforts and accomplishments during eight years as chair, and to help him celebrate leaving that job behind.

We presented Gary with some gifts, too, including what we hope will be a relaxing stay at Peaks of Otter Lodge on



Gary looked pleased.

the Blue Ridge Parkway this fall, along with something he could enjoy more immediately—a selection of microbrewery beers!

...from all of us



The beer



The cake

...and thanks to all of you!

Last year alumni were very generous in their support of the Chemistry Department. A significant impact was felt by the giving challenge provided to the Department by Professor David Kranbuehl, who partially retired at the end of the Spring 2009 term. He matched \$5,000 of the new donations made by alumni last year. The challenge for alumni giving remains. In addition to helping fund state-of-the-art instrumentation—for example, a new NMR spectrometer—your donations do many other things, such as supporting student research. Annual giving provides greater financial security, and it allows the Department to conduct strategic planning. As a reminder, the established funds which qualify for the matching challenge are the unrestricted *Chemistry Fund* (Account 2967) and the *Alfred Armstrong Memorial Fund* (Account 2020). Gifts can also be sent in honor of other faculty members; for example, recent Department Chairs. Mail contributions to **The College of William and Mary, P.O. Box 1693, Williamsburg, VA 23187-1693**, payable to **The College of William and Mary Foundation**.

Please note how you are designating your gift in the memo area of your check. In addition, on-line donations can be made through the chemistry web site at www.wm.edu/chemistry. Go to the Support Chemistry link in the left navigation bar.

Chris Abelt

Current Faculty

Chris Abelt , organic, chair	<i>cjabel@wm.edu</i>
Carey Bagdassarian , biophysical	<i>ckbagd@wm.edu</i>
Debbie Bebout , biochemistry	<i>dcbebo@wm.edu</i>
Gary DeFotis , physical	<i>gxdefo@wm.edu</i>
Elizabeth Harbron , organic	<i>ejharb@wm.edu</i>
Rob Hinkle , organic	<i>rjhink@wm.edu</i>
Steve Knudson , physical	<i>skknud@wm.edu</i>
Lisa Landino , biochemistry <i>Coco Faculty Fellow</i>	<i>lmland@wm.edu</i>
Bob Orwoll , physical, polymer	<i>raorwo@wm.edu</i>
Bob Pike , inorganic <i>Garrett-Robb-Guy Professor</i>	<i>rdpike@wm.edu</i>
J. C. Poutsma , analytical <i>Margaret L. Hamilton Professor</i>	<i>jcpout@wm.edu</i>
Ted Putnam , dept. administrator	<i>tdputn@wm.edu</i>
Gary Rice , analytical	<i>gwrice@wm.edu</i>
Jonathan Scheerer , organic	<i>jrscheerer@wm.edu</i>
Dave Thompson , inorganic <i>Chancellor Professor</i>	<i>dwthom@wm.edu</i>

Emeriti

Ed Katz , 1980	
Cirila Djordjevic , 1992	
Dick Kiefer , 2003	<i>rlkief@wm.edu</i>
Bill Starnes , 2006	<i>whstar@wm.edu</i>

Phased Retirement

Dave Kranbuehl , 2009–2012	<i>dekran@wm.edu</i>
-----------------------------------	----------------------

On leave for 2009–2010

Rob Hinkle Fall 2009, Spring 2010	
Gary Rice Spring 2010	

Adjunct Faculty, 2009–2010

Homer Smith Fall 2009, Spring 2010	
Sirisoma Wanigatunga Fall 2009	

Chemistry Department, February 2009

Our first departmental photo in the ISC.

Back row, left to right:

Dave Kranbuehl, Randy Coleman, Gary DeFotis, Dick Kiefer, Bob Orwoll, Elizabeth Harbron, Carey Bagdassarian, Rob Hinkle.

Middle row, left to right:

Lynda Stitzel, Patricia Hilger, Debbie Bebout, Linda Savedge, Lisa Landino, Louise Menges, DerHong Shieh, Chris Abelt.

Front row, left to right:

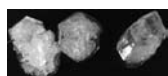
Bob Pike, Bill Starnes, Ted Putnam, Gary Rice, Steve Knudson.

Missing: JC Poutsma, Dave Thompson.



A new faculty member

We welcome **Jonathan R. Scheerer** as Assistant Professor of Chemistry this fall. Jonathan received a B.S. in chemistry from Beloit College in 2001. He is a strong supporter of undergraduate research, and continues to value his early research experiences at Beloit, Columbia University (Gilbert Stork) and Colorado State University (Al Meyers). In 2006, Jonathan completed his Ph.D. in organic chemistry at Harvard University in the laboratory of David A. Evans. While at Harvard, he completed the synthesis of the most potent natural hallucinogen, a molecule called Salvinorin A. Jonathan comes to us from Johns Hopkins University, where he has been engaged in post-doctoral research with Craig Townsend studying the biosynthesis of both carcinogens and anti-cancer therapeutics. At William and Mary, Jonathan will teach broadly across the organic curriculum and research the synthesis and biosynthesis of bioactive compounds.



Crystals!

West Point, VA high school chemistry teacher Robin Carey spent the summer of 2009 as an intern in the Department of Chemistry helping to develop an outreach program for local elementary schools. The “Crystals!” program was conceived by Prof. Pike and, with funding from the National Science Foundation, will be piloted by Pike and his students in the Williamsburg area 5th grade classes this fall.

Robin spent the summer working out crystal-growing recipes that will be used in the hands-on part of the “Crystals!” program. She was also instrumental in producing a full-color “Crystals!” booklet, the lesson plan, safety sheets, and student data sheets for the program.

Some of the results of Robin’s work can be viewed at the “Crystals!” web site, <http://people.wm.edu/~rdpike/crystals.html>. The booklet, which is posted on the site, contains home-based activities in crystallography, including recipes for growing crystals from household compounds.

A graduate of Longwood University, Robin teaches chemistry and AP chemistry at West Point High School. The AP course is offered as dual-enrollment with Rappahannock Community College. Robin first came to know the William and Mary Chemistry Department when attending the summer Chemistry AP Institute in 2008. Her internship this summer was associated with Masters work she is completing through the University of Maryland. Robin was a great addition to the summer program in the department, and we wish her well!



Robin shows off some of the results of her summer’s efforts in Bob Pike’s lab.

Snapshots from our 2008 Chemistry Homecoming Reception

Not pictured are Winfred Ward ('54), Dale Harris Cohen ('63) and Mary Disa Raulfs ('08), all of whom escaped being photographed.



Bill Anderson ('38) and Bob Orwoll interrupt their conversation for a photo.



Sarah Cotts ('08), a masters student, Dave Kranbuehl and Judy Auping ('73)



Julie Warner Jester ('98, MS '01)



Bob Orwoll takes notes while he and Gary DeFotis talk to Bill Anderson ('38).



Randy Coleman describes something 3-dimensional to Anne DeLanoy ('98).



Callie Raulfs ('04) and Carey Bagdassarian.



Ryan Wong ('08) and Lisa Landino



Janice Moseley Langer ('92), her husband Matthew (W&M '93) with Dick Kiefer



Barb Besal ('06) and Bob Orwoll relax.



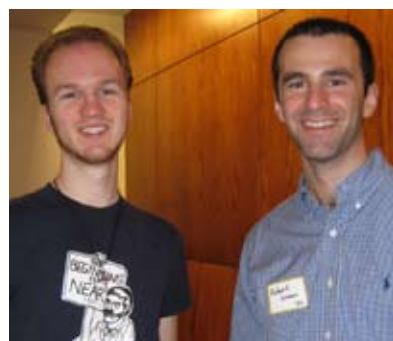
Bethany Lobo and Krista Hessler, members of the Class of '03



Gary Rice and Mark Argentine ('88) chew the fat.



Bob Orwoll chats with Stephanie Murray ('03) and Callie Raulfs ('04).



John Vanderson ('08) and Robert Green ('07)



Patti Barry ('63) chats with Jean Takeuchi (MA '76); Gary Rice and Patti's husband Marshall are behind them.



Randy Coleman visits with Emily Hall and Andrea Emanuele (both '07).



Anika Armstrong ('09) and Colleen Riesbeck ('07)



Randy Coleman and Colin Fuller ('08)



Randy Coleman and Dick Kiefer look at photos with Wendy Krause Pelton ('93).



Najiba Murad and Shannon Kim, Class of '09



Lee Speight ('09) and Tim Krause ('99)



Emily Harbert ('08), a masters student



Lissa Anderson and Amanda Ley (both '09) help open wine bottles.



Chris Abelt goes back for more.



Some '73 classmates get together—Mary Mann Smith, left, whose husband Smitty is behind her, talks to Judy Auping. To Judy's right is Betty Martin (W&M '73); Dave Kranbuehl and another (unidentified) classmate are in conversation.



Eileen Aquino, her brother Eugene ('88) and Norah Bate ('09), a masters student

News of Our Alums *It is wonderful to hear from you—please continue to keep us up to date with what is going on in your lives! Information about how to contact the Department is on the back page of this newsletter, or you can contact your favorite professor, who will forward the message. (👤 indicates an alum at last fall's reception.)*

Attention W&M Chemistry alums who are on Facebook! Consider joining the “William and Mary Chemistry Alumni” Facebook interest group—on the site you can see pictures of the Integrated Science Center. Joining our interest group is a good way to keep in touch with the department and with other alumni who have already joined.

Class of '38

👤 **Bill Anderson** spent most of his career on the faculty at MCV, and became Medical Director at Richmond Memorial in the late 60s. He retired 25 years ago from internal medicine, and has lived in Williamsburg Landing for the past 8 years. He is a good friend of Ed Katz and remembers Alfred Armstrong, Bill Guy and Professor Robb. Bill recalls that the men in his dorm (Monroe Hall) used to think how wonderful it would be if women were allowed to cohabit Monroe with them, and when he went back to Monroe recently to see if he could find his old room, he was surprised by a coed who asked if he needed any help. “No,” he replied, and did an about face to leave by the nearest exit!

Class of '54

👤 **Winfred O'Neil Ward** wrote to us after receiving the 2008 *Distillations* last fall. “I now run the chest and tuberculosis clinic for the State of Virginia, and continue working with Physicians for Peace—since 2000 I have been on 36 missions to 16 countries. I serve on the Board of Swem Library, and have worked with the W&M men's gymnastic team since 1985. I am proud to have received a W&M Alumni Medallion in 2007.”

Class of '61

Richard Cottrell stopped by in April for a visit and a quick tour of our new facility. He is still involved in formulating cleaning chemical products and has become quite active in work with the EPA and with technical committees devoted to Green Chemistry and safer ingredients for new Green products.

A report from **George Dresser**: “After graduation I joined the Navy and did see a great deal of the world during six years of active duty. Upon release from active duty I came to College Station, Texas as a graduate student and subsequently joined the Texas Transportation Institute, the Texas A&M University System, as a researcher. I never did very much with my chemistry but have always felt that my William and Mary experience prepared me for a lot of different opportunities. I continued my military career in the Naval Reserve, retiring as a captain in 1988. I also continued my graduate education with a Ph.D. in Civil Engineering. I retired from the Texas Transportation Institute in 2003. Mary Elizabeth Tracy, William and Mary Class of 1961, and I were married in 1962 and we have four children and six grandchildren.”

(George, we did pass your kind words on to Ed Katz.)

Class of '63

👤 **Patti Barry** and her husband Marshall have retired and now live in Gloucester.

👤 **Dale Harris Cohen** reports that she is still consulting as a Tech Info Specialist working on patent and competitive intelligence information.

Class of '73

👤 **Judy Auping** develops computer programs at NASA's Glenn Research Center in Cleveland, and says she is considering retiring in another year or so.

👤 **Mary Mann Smith** has contributed a second generation to W&M—her daughter Haley is a student here, and loves it.

Class of '76

In a message to Bob Orwoll, **Bruce Dressel** weighed in on the debate about the choice of a mascot for W&M by offering a suggestion for a logo that would retain the pair of feathers sticking out from behind “W&M.” Bruce points out (1) that the UVA Cavaliers have crossed swords in their logo and (2) the pen is mightier than the sword. So, he concludes, crossed quills (i.e., feathers) would be quite appropriate in W&M's logo. Bruce elaborated on his idea with a pair of limericks:

The Purlained Feather

*In Sixteen hundred and ninety-three
William of Orange (with Mary's permission) doth decree:
To build us a college
And fill it with knowledge
Now NCAA mandates it be feather-free
They say it's offensive
Let Quill rise defensive:
I'm mightier than the sword
Now it's up to the Board (of Visitors)
Say yes and we'll not be so pensive.*

Bruce added that he had been a Navy Corpsman, and has three sons, two of whom graduated from UVA; his youngest is an avionics electronics specialist on Apache Helicopter computer subsystems.

👤 **Jean Takeuchi** (MA '76) has just retired from Eli Lilly in Indianapolis.

Class of '81

Pat Kaczaral is now global product manager for hormones at Solvay Pharmaceuticals in Marietta, GA. Pat says his job took him to six European countries in the first three months of 2009!

Susan Shoaf was recently promoted to associate director of pharmacokinetics/pharmacodynamics at Otsuka Pharmaceutical Development and Commercialization Inc. in Rockville MD. Susan and her husband Curtis Barton have two sons, Andrew

and Kevin, and live in Silver Spring, MD. Susan says “Classmates may remember me as more of a Field Hockey/Lacrosse/Chemistry major but science did win out in the end (although I am now coaching Andrew’s Boys Lacrosse Club Team). I wish I had been able to take Biochemistry sooner than my Senior year, but that was the first year Dr. Coleman taught it!”

Class of ‘82

Our speaker at Convocation on August 28 was **James Comey**, who has been General Counsel and Senior Vice President at Lockheed Martin Corporation since 2005.

From **David Erickson**: “I just finished reading the *Chemistry Distillations* and thought I would drop a line after some 26 years. I worked part-time for Ted Putnam and fixed a vacuum pump for Trevor Hill and TA’d an Inorganic lab. I had Randy Coleman for Biochemistry, Gary DeFotis and Steve Knudson for Physical, and Inorganic with Cirila Djordjevic and S. Y. Tyree. I am probably forgetting some...”

I really started to apply myself in graduate school (read that I did not play rugby or claim membership in Sigma Pi—you may remember that 1982 was the last year for many years of the existence of Sigma Pi). I dove more deeply into numerical methods in planetary atmospheres, geophysical fluid dynamics and beyond.

I have had roughly 8 Ph.D. students at Duke, UVA and in the University of California system and I always remember the experience at William and Mary as outstanding preparation for the next 2.5 decades of my life. I hope all is well in the new building and perhaps I can show up sometime!”

Class of ‘85

Lt. Colonel Mark Fukuda (’85, MA ’92), was among those interviewed in Cambodia on a segment of PBS’s *News Hour* which aired on August 25. Mark, a doctor at Walter Reed Army Institute of Research, is a member of an international team working on the treatment and prevention of drug-resistant malaria increasingly prevalent in remote areas along the Cambodia-Thailand border.

Class of 1986

Ron Hann (Ph.D. UVA ’08) was promoted to colonel in the U.S. Army this year and is now an assistant Professor of Chemistry at the U.S. Military Academy at West Point.

Class of 1988

Mark Argentine works in the analytical division of Eli Lilly Pharmaceutical in Indianapolis, and is still enjoying analytical research and development.

Class of 1990

Lt. Colonel Phillip Smith (’90, MA ’91) is now joint product manager of the Army’s Joint Vaccine Acquisition Program, where he will be developing new vaccines to protect our military and civilian populations against bio-warfare threats. Phillip and his wife **Maj. Kirstin Adams Smith**, Ph.D. (’94), have 3 children: Megan, Connor and Liam.

Class of 1993

Wendy Kraus and her brother **Tim** (’99) attended last fall’s reception. Wendy has 3 children—8, 6, and 2; and Tim has 2.

Class of 1994

Kathryn Beers (M.S. polymer science, Carnegie Mellon, ’96, Ph.D. chemistry, Carnegie Mellon, ’00) was featured in an article in the Feb. 2, 2009 *C&E News* titled “*Polymer Chemist Reflects on White House Science Advising Post.*” Director of NIST’s Combinatorial Methods Center and acting group leader in the Polymers Division of NIST’s Materials Science and Engineering Laboratory, Kathryn took leave from her job at NIST for part of 2007 and 2008 during a 13-month rotation at OSTP (Office of Science and Technology Policy).

Class of 1996

Ivana Verona Yang is Assistant Professor at the National Jewish Medical and Research Center in Denver, CO.

Class of 1998

Anne Delanoy is a doctor in family practice at a community health center in West Virginia.

Julie Warner Jester is Science Advisor to U.S. Rep. Vern Ehlers of Michigan.

After receiving his Ph.D. from Virginia Tech in 2002 and post-doctoring at the U. of Vienna, Austria, **Kevin Schug** joined the Chemistry and Biochemistry Department at UT Arlington in 2005, where he is now an assistant professor. His research focuses on analytical problems using LC/MS and matrix-assisted laser desorption/ionization-mass spectrometry. Earlier this year Kevin was named 2009 Emerging Leader in Chromatography by *LCGC Magazine* in an international competition, and he has received an NSF CAREER award for work using mass spectroscopy to study quantitative binding determinations. This program, which NSF supports until 2014, includes a substantial educational component; development of pedagogical materials for K–12 students having limited English proficiency, and a presence at the Texas State Fair to promote this effort (and science, in general). This past summer Kevin was also named to the editorial advisory board of the *Journal of Separation Science*.

Class of 1999

John Maksymonko received his law degree from Washington Univ. (St. Louis) in 2007 and is working as a patent attorney for Lee & Morse, Falls Church, VA.

Anne McNeill received a 2009 Beckman Young Investigators Award for research titled *New Strategies For Stimuli-Responsive Materials*. She is a member of the Department of Chemistry and Macromolecular Science and Engineering at U. Michigan.

Class of 2000

Theresa Nguyen-Evans, who ran into J.C. Poutsma at a mass spec conference over the summer, has finished her post-doc at Johns Hopkins and is now living in Tampa, Florida, working in

a new startup division of Draper Laboratory. Her husband Kenyon is a new tenure-track professor at the University of Tampa.

Liz Levy is working at Winslow Green Management Company as Senior Environmental Research Analyst.

Melissa Garland Yaroschak writes, "After 8 years with Merck as a medicinal chemist, I have left the company and now am working full time from home running my children's portrait photography business (www.reflectionsoflifephoto.com). I am a little sad that I won't be putting my chemistry degree to use, but I've never been happier and this transition allows me to spend a lot more time with my daughters, Aubrey, 3, and Caroline, 1. Geoff (W&M '03) and I are expecting our third child this Christmas."

Class of 2001

Jason Johnson is working on a Masters degree in Chemical Engineering through NC State while remaining a Senior Scientist at Merck Co.

Class of 2002

News from **Jonathan and Jenine Cole Maeyer**: their second child, Everett Brooks Maeyer, was born in June, and the Maeyer family is moving this summer, as Jenine starts as Laboratory Coordinator for the Chemistry Program at the U. of Pennsylvania this fall.

Ryan Carra will graduate from law school at UVA in 2011. He spent this past summer as a legal intern at the Environment and Natural Resources Division of the Department of Justice in Washington, D.C.

Class of 2003

🍷 From **Bethany Lobo**: "I graduated from Harvard Law School in 2006, and I've been practicing law in the San Francisco Bay Area since then. I'm headed to Sacramento in September 2009 to clerk for one year on the U.S. Court of Appeals for the Ninth Circuit. First, though, I'm headed to Europe this summer for a month-long vacation—will be visiting England, Ireland, Sweden, the Netherlands, Italy, France, and Germany—I'm very excited. I get occasional Williamsburg cravings, and I'm hoping to make it back to Virginia at some point within the next year. Hi to the chem department!"

Ron Quinlan finished his Ph.D. in the Applied Science Department in August of '08, and has been looking for research positions in the DC area while working at the U.S. Patent and Trademark Office. His wife, classmate **Lara Pawlow**, is starting her second year of residency at Fairfax Family Practice.

🍷 **Stephanie Murray** has completed her Masters of Public Health at UNC in Maternal and Child Health, and will be a CDC fellow in their Public Health Prevention Service (PHPS) program starting this fall.

Adam Slansky just graduated from medical school (SUNY Downstate) and has begun his residency for neurology in Miami, Fl.

Class of 2004

Capt. Jane Alston, MD (USAF) graduated from University of Pittsburgh School of Medicine this past spring, and has just begun residency training in General Surgery at Northwestern McGaw Memorial Hospital in Chicago.

Kt (Katherine) Moynihan sent us an update: "I took a year off to work and have been at Vanderbilt University working on my Ph.D. in Cell and Developmental Biology for the past 4 years. This fall I will be awarded my doctorate and I plan to pursue a post-doc in biomedical science."

Katheryn Taylor Pashow received her Ph.D. in Chemistry from UNC-Chapel Hill in 2009 and is now working at the Savannah River National Laboratory. She was married to Scott Pashow this past April.

John W. J. (Bill) Slavin graduated from Purdue University in May with a Ph.D. in Analytical Chemistry.

Kelly Kennett completed her M.D. at the Medical College of Virginia in 2008. She is currently a second year resident at the Children's Hospital of New Orleans pursuing her board certification in pediatrics.

Class of 2005

Megan Dellinger has resigned from employment at Gelest Co. and starts law school at UVA this fall.

Heather Gaburo writes: "I just graduated in May with a Master of Health Science as Pathologists' Assistant from Quinnipiac University in Hamden, CT. After graduation, I spent a week driving across the country and two weeks vacationing in Hawaii. I currently live in La Jolla, CA and just started working as a PA at Sharp Memorial Hospital in San Diego, CA, exploring & photographing the west coast in my free time. Look forward to hearing updates from other alums!"

News from **Sarah Robinson Vicente**: "**Diego** ('05) and I just celebrated our first wedding anniversary. We were able to spend 6 weeks in Argentina this spring working, traveling, visiting family and eating! After graduating in May and receiving a promotion to Lieutenant, Diego just began his intern year in general surgery at Bethesda Naval Hospital just outside of D.C. I work with the National Cancer Institute's office of education. I am also getting my MPH at George Washington University in health promotion. We just added a new member to our family, a one-year old border collie mix named Wren. We look forward to visiting W&M and all our old friends this fall!"

Class of 2006

🍷 **Chris O'Neill** is in his third year at Columbia Medical School.

🍷 **Barbara Besal** is teaching chemistry and AP chemistry in Virginia Beach (and missing W&M).

Class of 2007

News from **Dan Tice**: “I left my position as a lab chemist at Ciba Chemicals in Suffolk, VA and moved to Chicago in June 2008, where I am presently working on my Ph.D. at Northwestern University. I am in the Physical division working for Professor Emily Weiss, where our research is on charge and energy transport in semiconductor quantum dots. Additionally, I’m a joint student with the Materials Science Department, on fellowship in the NSF’s IGERT (Integrative Graduate Education and Research Traineeship) Program working on incorporating nanoparticles into various fabricated materials. Things are very exciting, and my research experience at W&M has proved invaluable!”

Emily Dugan has received her Masters degree in Chemistry from U.C. San Diego and is starting as a high school chemistry teacher this fall.

An email from **Kate Heller**: “I am applying to programs in conservation biology with a focus on wildlife conservation. After graduation I went into the Peace Corps and spent my time abroad working on issues of environmental conservation and animal welfare, and I am really interested in pursuing this further. I am currently working at an environmental services firm in NY where I run the Soil Vapor Extraction system for VOC remediation.”

📍 **Colleen Reisbeck** finished her second year of teaching high school chemistry in June. This fall she will be attending the William and Mary School of Education full time for a Masters degree in school counseling.

Maria Happel Traver writes, “I am currently a graduate student at Duke University in the Molecular Genetics and Microbiology Department and am starting to prepare for my preliminary exam. I was recently married to fellow W&M alum Clayton Traver. We live in Durham, NC, with our two adorable cats, Google and QT.”

Alex Zestos received a \$1500 award from the Society of Plastics Engineers for a paper he presented at their national conference in Chicago this summer, based on work he did for his 2008 Masters thesis at W&M.

Class of 2008

An email from **Alex Gade** to her Chemistry profs:

“First and foremost, thank you so incredibly much for providing me with recommendation letters for a whopping TWO years! I am so grateful for all of the kind words you have to say about me and my passion for chemistry.

So, it has been quite a bit since I’ve received news about my various applications. Basically, I got into OSU, which I was expecting since they accepted me last year, and UT-Austin. Everywhere else rejected me, which was quite disappointing, but I suppose I reached a bit too far there with harvard/columbia/whatnot.

I have happily chosen to take my Ph.D. in Austin at U Texas. I am looking forward to sunshine and warm weather after a year in Norway. My research here has been quite the enlightening experience—I am so SICK of flash chromatography that if I have to watch anything else drip for hours on end I might get a bit crazy.

Hope all is well in Williamsburg and congratulations on the completion of another successful year. Have fun with the graduation festivities!”

Lauren Katkish worked as a scribe at both Inova Fairfax Hospital and George Washington University Hospital from June 2008 to this summer, and started medical school at George Washington School of Medicine in August.

Class of 2009

Tiffany Williams is a graduate student in Cornell’s Materials Science and Engineering program. “I have been having a productive time at NASA Langley this summer”, she writes. “My research there is concerned with the synthesis and characterization of novel nanomaterials (primarily h-BN, expanded graphite, and MWCNTs). I have recently discovered that some work I did there last year has been included in a manuscript that was accepted to the Journal of Physical Chemistry C. The paper, titled “*Direct Mechanochemical Formation of Metal Nanoparticles on Carbon Nanotubes*”, will be published a couple of months from now. I am very excited, since this is my first publication! My NASA research advisor is hopeful that we will be able to publish a couple more papers based on my work.”



News of our colleague Mel Schiavelli

Mel Schiavelli joined our faculty in 1968, taught organic chemistry, and served as department chair, dean of the faculty of arts and sciences, provost and interim college president. In 1994 he accepted the position of provost at the University of Delaware, where he remained until retiring in 2002.

Not long thereafter, we discovered that he had become president of Harrisburg University of Science and Technology in Harrisburg, PA. From an article about the school in the June 26, 2009, issue of *The Chronicle of Higher Education*, we learned more. It turns out that, during a coffee stop along a Pennsylvania highway, Mel had spotted a newspaper article about plans by the City of Harrisburg to start a new university. Intrigued, he volunteered his services as a consultant and, in 2002, he became the university’s founding president. “I wanted to do something audacious,” he said, “and I am a rotten retiree.” This year Harrisburg University graduated its first class of students.

You can learn more about Harrisburg University at www.harrisburgu.net.

Here’s some contact information for Mel:
717.901.5152 or mschiavelli@HarrisburgU.net.

2009 Chemistry Concentrators and Their Destinations

Joshua Eroid Robert Abelard	masters program in chemistry, W&M
^M Nashrah Ahmed	teacher, Teach for America-D.C. Corps
Lissa Caitlin Anderson	graduate studies in bioanalytical chemistry, UVA
Anika Elizabeth Armstrong	(Aug. '09) undecided
^H Norah Gerow Bate	masters program in chemistry, W&M
^φ ^H Matthew Cooke Bernier	graduate studies in analytical chemistry, U. Arizona
Rachael Harden Brickey	undecided
Carolyn Marie Brown	graduate studies in pharmacology, Boston U.
Joshua Kyle Campbell	not reported
Michael Brandon Carey	masters program in chemistry, W&M
^φ ^H Hannah Caitlin Cohen	graduate studies in pharmacology, U. Wisconsin-Madison
^H Elise Ann Dennis	graduate studies in chemistry, Indiana U.-Bloomington
Sarah Elizabeth Donnelly	ER scribe at Mary Immaculate Hospital for a year, then med school
Anna Arturovna Donnis	pharmacy school, MCV
Carolyn Ann Edson	tutor at Royal Hospital School in UK; applying to med school
Korey Michael Erb	(<i>chem/interdisciplinary</i>) cultivator, Dayspring Farm CSA
^M Thomas Robert Essig	undecided
Sean Michael Evans	graduate studies in health policy and management, Johns Hopkins
^M Rachael Elizabeth Fovargue	(<i>biol/chem</i>) not reported
William John Gabler	undecided
Cole Lesdon Grinnell	(Aug. '09) not reported
Omar Mohamed Hamdy	masters program in chemistry, W&M
^M Carlin Rogers Hauck	medical school, Tulane
Lauren Michelle Hogge	medical records transcriptionist, Riverside Health Systems
Christopher John Katilie	undecided
Shannon Beatrice Kim	medical school, EVMS or MCV
Marissa Taylor Kovary	law school, St. John's U.
^φ ^M ^H Jacob Edwin Kuperstock	medical school, Stanford School of Medicine
Christopher Hsin-Min Maffei Lee	work for Americorps before medical school at Tufts
Woo Jin Lee	(Dec. '08) retail sales
Daniel Francis Leiva	not reported
^H Amanda Noelle Ley	(<i>chem/psyc</i>) year or two off before pursuing a Ph.D. in chemistry
Christopher Jan Manitius	not reported
Thomas Bennett McKenzie	patent examiner, U.S. Patent and Trademark Office
Andrew James Midland	not reported
^φ ^M ^H Sarah Joan Milam	masters program in forensic science, VCU
^H Najiba Murad	undecided
^M Anna Marie Muto	year's service as campus minister, W&M's Catholic campus ministry
William Donald Rector	not reported
^M Brandon Alexander Ritzo	not reported
Chela Rodriguez	(<i>art history/chem</i>) not reported
^M Mara Susan Rosenkrantz	undecided
^φ ^H Brooklynd Dawn Saar	masters program in chemistry, W&M
^H Lee Colyer Speight	graduate studies in chemistry, U. Penn
^M Cyrus Zane Wegbreit	veterinary school, VA-MD Regional College of Veterinary Medicine
Tiffany Vernice Williams	graduate studies in materials science, Cornell School of Eng.
Anne Lee Zimmerman	dental school

^φ PBK ^M Monroe Scholar ^H Honors in Chemistry

2009 Chemistry Master's Candidates and Their Destinations

Arthur Jaeton Glover (<i>May '09</i>)	graduate studies in Applied Science, W&M
Elizabeth Mara Jacobs (<i>May '09</i>)	seeking employment
Jia Liu (<i>August '09</i>)	graduate studies in chemistry, NC State

A puzzle for chemists

Here is an original chemistry-themed crossword puzzle written especially for this edition of *Distillations* by Bob Pike. A serious crossword enthusiast and author, Bob recently submitted his first puzzle to *The New York Times*, so keep your eye on Puzzleman Will Shortz's Crossword feature there.

The names of nine Nobel laureates in chemistry or physics are among the clues in this puzzle. Enjoy!

Answers will be in the next issue of *Distillations* (*just kidding*—we'll post them on Chemistry's website).

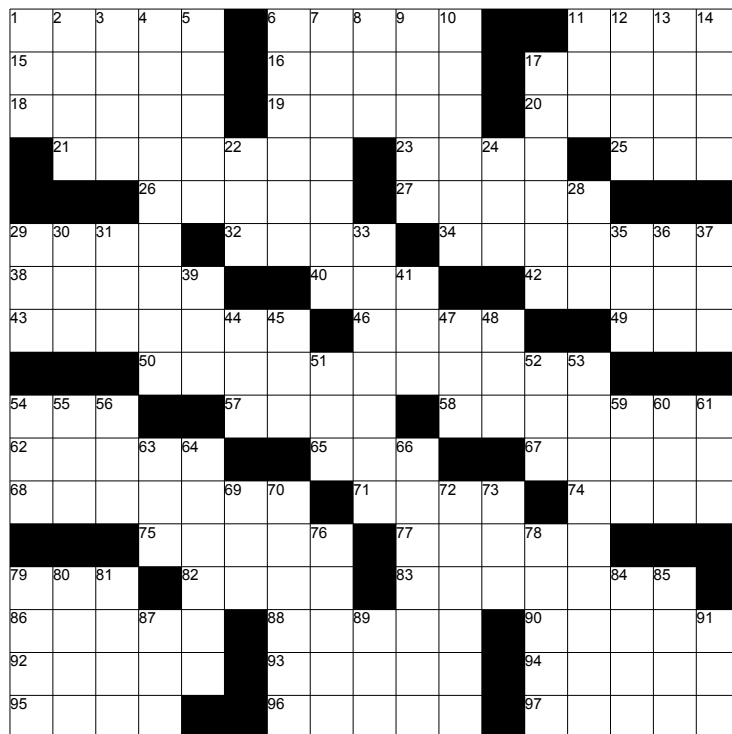


...And does anyone know for what use this oddly-proportioned **2800mL** flask might have been made? It was among glassware donated to the department last year from a NASA Langley lab being dismantled.

Nobelists Robert D. Pike

ACROSS

1. Physics 1915, X-ray diffraction
6. Chemically convert
11. Batch of product
15. Chemistry 1918, catalysis
16. Additional
17. Mythological namesake of an element
18. Angle variable
19. Chemistry 1990, synthesis
20. Carboxylic acid derivative
21. Prepared for microscopy
23. Apple pesticide
25. Trig. function
26. Famous firch
27. Daybreaks, poetically
29. See 32 across
32. With 29 across, "Mr. Mom" costar
34. Inactive
38. Condensation type
40. Wife's title
42. Long-time W&M Chemistry Chair
43. Foggy weather
46. A transition metal
49. Busiest U.S. hub
50. Physics 1933, orbital theory
54. Sneaky
57. An oval has two
58. Lakefront Canadian city
62. Honks
65. A dicarboxylic acid, abbrev.
67. Gather leftovers
68. Chemistry 1954, bonding
71. Interactive computer game
74. Poet Pound
75. Untarnished
77. Vamoose
79. Beginning of a series
82. "Don't ____ me bro!"
83. Having extra genetic material
86. One who overindulges EtOH



© Literate Software Systems

88. Physics 1903, radiation
90. Figure of speech
92. Play guitar well
93. Salicylic acid, e.g.
94. Chemistry 1936, dipole moments
95. Scary dinosaur
96. Had a picture taken
97. ____ y la luna
17. Chemistry 1920, electrochemistry
22. The Grey Lady, abbrev.
24. Part of to be
28. Swine home
29. Band ____
30. Bass, e.g.
31. Vitamin need, abbrev.
33. A transition metal
35. Savings vehicle, abbrev.
36. Amount after taxes
37. Western blot, e.g.
39. ____ cit.
41. ____ Lanka
44. Old TV band
45. Not am.
47. Prov. of 58 across
48. Type of assn.
51. Mil. school
52. Energy unit
53. Shining example
54. 0 deg. C, 1 atm.
55. Mauna ____
56. Not I
59. Pince ____
60. Roundbottom flask residue?
61. "Three ____ match"
63. Separation techn.
64. Became shallower
66. Sulfur-containing amino acid
69. Teachers org.
70. Tank topper
72. Tirade
73. Prefix with lateral
76. Surgeon prefix
78. It's made sotto voce
79. Type of Prof.
80. Physics 1922, orbital theory
81. Remedy
84. Marbles
85. It has its ups and downs
87. Fruit fly distinction
89. Latin thing
91. Brooks or Gibson

Make our Chemistry reception part of your Homecoming 2009!

The Department is having its wine and cheese reception for chemistry graduates in ISC I on Friday, October 23, starting at 5:30 pm in the second floor lobby (above the Barksdale Field entrance). We look forward to seeing you there. If you can join us, please try to let us know by October 9. You can e-mail us at pxhilg@wm.edu, give us a call at 757-221-2540, or return this form to:

Patricia Hilger
Chemistry Department, College of William and Mary
P.O. Box 8795
Williamsburg, VA 23187-8795

Yes, I plan to attend the Chemistry reception on Friday, Oct.23, 2009, at 5:30 pm.

Name _____ Class of _____ No. of guests _____

Even if you're unable to come, consider using this space to let us know what you're doing and mailing this form to us at the above address. We'd love to hear from you.

NONPROFIT
U.S. POSTAGE PAID
WILLIAMSBURG, VA
PERMIT NO. 26

Department of Chemistry
P.O. Box 8795
Williamsburg, VA 23187-8795

WILLIAM & MARY
The College Of

