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Chairman's Message (Christopher D. Spilling)

It is great to report excellent news to you all this year. The official ground breaking for the new Science Learning Building took place on December 9th. I now feel confident that the project will proceed to completion. You recall this is the so-called Benton Stadler renovation project which has been on the books since about 1990! As I mentioned last year we are constructing a three story undergraduate teaching lab building for Chemistry, Physics and Biology. The building will be located perpendicular to Benton Hall towards Natural Bridge Road.



The ground breaking ceremony for the \$32 million Science Learning Building in December 2013. Chancellor George is eighth from the left and Chris Spilling is fourth from the right.

I am pleased to report that our faculty search last year for Hal Harris' replacement was successful. Benjamin J. Bythell joined us as assistant professor of biophysical/bioanalytical chemistry. Ben works at the interface of analytical, computational and biophysical chemistry where he strives to understand the structure, reactivity and gas-phase behavior of biologically- and industrially important chemicals. He will be installing a new mass spectrometer in the New Year.

A team of faculty colleagues lead by Associate Professor Mike Nichols submitted a successful grant application to the National Science Foundation Major Instrumentation Program for a

Circular Dichroism Spectrophotometer. The proposal included 12 principal investigators involving colleagues from the Chemistry Department, the Biology Department and St. Louis University Chemistry Department. The instrument will be purchased from *Jasco Analytical Instruments* and will be housed on the first floor of the research Wing, adjacent to the Cell Culture Facility. This instrument can be used to study the structure of proteins, nucleic acids, and small molecules and has the capability to analyze extremely rapid reactions. Colleagues in the department have been quite successful in securing grants to improve the capital equipment to support our research and teaching missions. We have wonderful central laboratories for NMR, X-ray diffraction, mass spectrometry and electron microscopy.



The alumni and faculty members who attended the event Fifty Years of Great Chemistry in April 2013

This past year marked the Golden Jubilee of the establishment of the campus in 1963. Celebrations were held throughout the year. In my opinion "Fifty Years of Great Chemistry" hosted by the Department and the Chemistry Alumni Council (CAC) was amongst the best. It was wonderful to see so many alumni return to campus for the event. We look forward to another fifty years of great success but it will be hard to top the first fifty for which all of you are responsible.

This year we saw some colleagues honored in various ways. Alexei Demchenko received the Chancellor's Award for Research and Creativity and George Gokel received the Eades Medal from the St. Louis Academy of Science. There are instances of student recognition too numerous to be included in this brief message but details are to be found later in this volume.

That is all for 2013. Dr Barton has much more for you to read in the rest of this volume. We wish all the best for 2014 and we look forward to seeing you or hearing from you in the near future.

Alumni Information

1960s

Robert Roither BS 1968 was in touch with us this spring. He retired in 2006 from Anheuser Busch and tells us that his "position" is frequently horizontal! He also told us that he and his wife were planning an extended trip to Austria and Switzerland last spring. I recall when he was employed as a forensic chemist with the St. Louis County Police Department and I took a group of undergraduates to visit the laboratory.

Gary S. Jacob BS 1969 was in town with his wife Karen for the event last April commemorating the UMSL Jubilee. The last time we heard from him he was planning on visiting Charlie Armbruster in Orlando. Gary is President and CEO of *Synergy Pharmaceuticals, Inc.*, in New York City. In January 2013 Gary announced, on behalf of *Synergy*, that oral dosing of healthy volunteers had begun in a Phase I clinical trial of SP-333, a guanylate cyclase agonist for the treatment of inflammatory bowel disease including ulcerative colitis.

Steven Mestemacher BA 1969 retired in January 2012 after a 38-year distinguished career with DuPont. He and the editor have been regularly in touch and we truly appreciate this and his support for the department.

Douglas G. Nuelle BS 1969 was on campus for the event *50 Years of Great Chemistry* in April. Doug, **Harold Messler** BS 1970, **Ken Henderson** BS 1972 and **Joe Bono** BS 1969, all contemporaries on campus came to meet each and to reconnect with the University. Doug is still an orthopedic surgeon with a practice in the mountains of North Georgia.

Gene Halet BS 1970 and his wife Susan attended the event *Fifty Years of Great Chemistry* in April. Gene is a Technical Sales Representative with the *Hilson Company* which is located in Wheaton IL. When we last were in touch with him he was with *Watson Coatings* in St. Louis.

1970s

Donald W. Stegmann BS 1972 was in touch with us recently. He worked for the Petrolite Corporation (Tretolite), which sold treating chemicals for the oil field, following graduation. In 1997 Baker Hughes bought Petrolite and moved the company to Houston. They kept a small group in St. Louis, primarily environmental testing. Since the merger he has been part of the technical organization in Houston, but has remained in St. Louis supporting the field operations for corrosion control in oil and gas wells and pipelines.

W. S. (Steve) Tait BS 1972 and his wife **Sue (Whitworth) Tait** were delighted to attend the Jubilee event.

Patricia J. Armbruster and **David A. Armbruster**, both BS 1973 attended the Department's Jubilee celebration *50 Years of Great Chemistry*.

Michael J. Finkes BS 1973, MS 1978 was elected President of the Alumni Association in the spring of 2013. Mike will continue his association with the chemistry alumni council but in

a less prominent role as the new one with the Association will be time-consuming. He continues to serve as a consultant to Monsanto from which he retired in August 2010. A nice feature appeared in December in the *UMSL Daily* titled: Meet the UMSL Alumni Association President. It may be found at http://blogs.umsl.edu/news/2013/12/04/magazinef13-finkes/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+UmslDaily+%28UMSL+Daily%29 Mike was a featured speaker at the groundbreaking for the new building associated with the renovation of Benton and Stadler Halls.

H. Dennis Mollman BS joined SLUCare, the Physicians of St. Louis University in November 2013. He obtained a PhD degree from Washington University in organic chemistry and followed this by obtaining his MD degree at the St. Louis University School of Medicine. He is a neurosurgeon and completed his residency and internship at the University of Minnesota Medical Center where he was later vice-chairman of the neurosurgery department and co-director of the Spine Center. He joined SIU School of Medicine in 2008 and moved to the Saint Luke's Health System in Kansas City where he was Director of Minimally Invasive Spine Surgery.



*Emeritus Professor of Chemistry Lawrence Barton with former UM-St. Louis colleagues **Rajiv Banavali** PhD 1983, **Shelly Kumar** PhD 1981 and **Sudhir Agarwal** a former postdoctoral fellow, all of whom worked with the late Curators' Professor of Chemistry Emeritus Robert W. Murray. They returned last March to honor Murray at the 16th Annual Robert W. Murray Lecture given by David W. C. Macmillan of Princeton University.*

Daniel Breyfogle BS 1975 continues to work at Trans-Mate, Inc., a small manufacturer of car wash and car detailing chemicals, in North Billerica, MA. His family was preparing daughter Molly's wedding in June when we last communicated. Molly is an attorney in NYC.

H. Pete Kleine, BS 1978, MS 1982 had been with Equinox Chemicals in Albany GA, since November 2010 but he and his wife Joyce find St. Louis more to their liking so they have returned home. He is now serving as the Lab Manager, Science Labs at Maryville University, and as an instructor. They are glad to be home, the draw of family and friends was much stronger than they could have imagined.

1980s

Charles Thierheimer BS 1980, MS 1984 attended the Jubilee celebration in April. He told me that he had a wonderful time at the event. He shared memories, experiences and history with many of those who attended that day. A highlight was the impromptu tour of Benton Hall with **Mike Hauser** BS 1981, MS 1986, **Steve Finkes** BS 1980, **Bill McCarthy** BS 1975, PhD 1984 and **Norm DelCastillo** BS 1981. He continues to work in semiconductor manufacturing for Hewlett Packard in Corvallis, Oregon. The chemistry of etchants is a part of his role; he has a UV-visible spectrophotometer and auto-titrator in the lab to verify concentrations that sensors report. He still finds it fun.

Deborah Tannenbaum BA 1981 who also obtained a BA in English was in touch with us recently. She is the widow of the late **Daniel Stueck**, BA 1974 who was a loyal supporter of the department and took some graduate course in the department. Sadly he died in 2007. Their two children, both boys, both have interests in the sciences. Joshua was in 9th grade when we heard from Deborah and Jacob was to start at Rolla and major in nuclear engineering. Deborah is writing a book about schizophrenia.



*Alumni on a lab tour at the Jubilee Event in April: **Bill McCarthy** BS 1977, PhD 1984; **Norm Delcastillo** BS 1981; **Mike Hauser** BS 1981, MS 1986; **Steve Finkes** BS 1980 and **Chuck Thierheimer** BS 1980, MS 1984.*

Susan (Moritz) Auinbauh MS 1982 now lives in Coppell Texas and is self-employed as a math and chemistry tutor for high school students. She is proud to tell us that her daughter Pamela AuinBauh performs ballet with the *Common Thread Contemporary Dance Company* at various locations including our own Touhill Performing Arts Center. Susan's sister, Elizabeth Fitzgerald is Director of the St. Louis Children's Museum (The Magic House) and received an honorary degree from the University last December. Elizabeth is a 1977 graduate of the university and received a *Distinguished Alumni Award* in 2009, along with our own **Robert L. Farrell** BS 1975, at the same ceremony

Laura Rexroat BA 1983 is a Chemist at Mallinckrodt Pharmaceuticals in St. Louis. She was formerly with KV

Pharmaceutical, also in St. Louis.

Barbara A. Brown BA 1984 took a leave from working with the Chemistry Alumni Council but during that time prepared the streaming video presentation shown at the event *50 Years of Great Chemistry*. She is now back with the group helping to plan the next phase of our activities.

Martin Mantler BS 1982 is a Senior Consultant at Baxter Healthcare and works in St. Louis.

Jim Essinger MS 1983 is a Research Fellow in Process and Formulation at Scotts Miracle-Gro LLC, in Cincinnati.

Dawn L. Shiang BA 1983, PhD 1988 presented a seminar in the department in October, on the work she did with Dow Chemical Co., as Associate Director for Sustainable Technologies. At the time of the lecture she and husband **Bill Shiang**, BA 1984, PhD 1988, were in the process of moving from Midland MI, to the farm they have bought near Eminence MO. At the time, Bill had been persuaded by the company not to retire but to work from home, and to do some traveling for the company, in the training of supply chain personnel. Dawn had retired a few months prior to her visit.

Rajiv Banavali PhD 1985 was promoted to Chief Technology Officer, Fluorine Products at Honeywell in Morristown, NJ. Rajiv came in with his wife Marysusan and met his former lab mates **Shailendra Kumar** PhD 1980 and **Sudhir Agawam**, a former Murray postdoctoral fellow, at the Robert W. Murray Lecture and Banquet in April.

L. Jeanette Hencken BA 1985 Chemistry and Forensic Science Teacher at Webster Groves High School and Adjunct Professor of Forensic Science at St. Louis University was honored with a *Peabody Energy Leaders in Education Award* in December. The award program supports educators who foster the future workforce and prepare students to compete in a global marketplace. She was presented with a check for \$1,000 and other items.

Tom Simpson BA 1987 did graduate work at the University of Alabama-Birmingham where he received a MS degree in Forensic Science. He just completed 23 years with the Virginia Department of Forensic Science. He is a Senior Forensic Scientist in the Controlled Substances and Trace sections, dealing mainly with fire debris as well as clandestine lab evidence. He and his wife are first time grandparents and their oldest son graduated from Virginia Tech and is trying to break into forensics. In his spare time Tom is a soccer referee with the Roanoke Valley Soccer Official Association.

1990s

Teresa (Hardesty) Clark BA 1990 has lived in China for 10 years. After graduation she worked for United Technologies Automotive as a Senior R&D Polymer Chemist, and later moved on to Chrysler as sealing engineer (rubber products and panel alignment). She and her husband moved to Beijing in 1997 with Chrysler and adopted their now 15 year old boy who is deaf. They moved back to St. Louis in 2003 to put him in school, and Teresa went through the American Sign Language Interpreter

program at Florissant Valley Community College. After obtaining her interpreting license, they moved back to China (Shanghai) in 2010. She is homeschooling her teenager because she couldn't find an acceptable educational institution that she felt would provide the adequate level of learning. She is the only certified and licensed American Sign Language Interpreter in the city. Next year he will be in 10th grade chemistry! Her other two children are 34 and 32 years old. We had hoped to get together when she was in St. Louis last summer but it didn't work out.

Michael Meisinger BA 1990, MS 1993 obtained his MS in Special Education from Lindenwood University in 2010 and has been teaching in the Special School District. At one time Mike had worked at Mallinckrodt in St. Louis.

Timothy Desmond BS 1993 is now a chemist II at Monsanto in St. Louis. He was formerly with Missouri American Water Co. but left there in September along with six other chemists after a downsizing. He began work in October 2013 and alumna **Hannah J. Smith**, BS 2007 is one of his colleagues.

Sean Dingman BS 1994, who also holds a PhD from Washington University in Str. Louis, is now Sales and New Market Development Manager, Carbonyl Iron Powders North America at BASF, in St. Louis. From 2004 through 2012 he held various technical appointments with the Sigma-Aldrich Company in St. Louis. Sean is the Secretary for the St. Louis Section of the American Chemical Society.

Arvel J. (AJ) Steeples BA 1996 the "Marketing Chemist" has been doing Marketing for over 14 years for small to medium sized businesses, taking a scientific/measurable approach to advertising that's trackable. He also does motivational speaking on various topics around town. He can be reached at a.steeple@AdPages.com. 314.629.8585.

Yana Levchinsky-Grimmond, BS 1997, MS 1999 was just promoted to Senior Manager Technology Transfer for Commercial Scale Manufacturing, Industrial Operations and Product Supply at *Regeneron Pharmaceuticals* in Rensselaer, NY. She was proud to tell me when she was visiting the department over Thanksgiving that **Brian Grimmond**, PhD 1999, a Senior Professional Scientist at General Electric in Albany NY, was honored recently by GE during their 2013 Technical Awards Ceremony for having generated 25 patents.

Jeffrey Scholten BS 1997, MS 2002 is now a Research Scientist/Chemist III at Sensient Technologies Corp. in St. Louis. Formerly he was with the Monsanto/Pharmacia/Pfizer companies and prior to his current position he was with the Medicinal Chemistry Group; a collaboration between some former Pfizer scientists and UM-St. Louis

Ali Kasiri PhD 1998 recently completed 12 years with BASF in Raleigh, North Carolina.

Anne (Cafferty) Turnbough PhD 1998 is Director of Regulatory Affairs at Oro *Agri* in Houston, TX.

Andrew G. (Drew) Breite BS 1999 was at the Jubilee event in April. Drew did undergraduate research with Rudi Winter when

he was here. He is Senior Project Manager at VitaCyte in Indianapolis and obtained an MBA degree from Butler University.

Robert Stockland PhD 1999 is progressing as a faculty member at Bucknell University, in Lewisburg PA, and was promoted to Full Professor last September. His research is going well and he says he was fortunate to add an NSF grant to his current PRF grant. On the teaching side, he was asked to serve on the ACS Exam Committee that is charged with constructing the next version of the ACS proficiency exam on Inorganic Chemistry ("Inorganic 2014"). He was on the "Inorganic 2008" committee, so he is familiar with the process. He was on sabbatical leave in the fall 2013 semester and is writing a book on *Practical Functional Group Synthesis*. The topic is huge and includes classical synthesis, microwave, ultrasound, flow, mechanochemical, etc. His target is 2000 manuscript pages by May 2014.



Joe Bono BS 1969, Mike Finkes BS 1973, MS 1978, Yana Levchinsky BS 1997, MS 1999, Jim Grib BS 1976, MS 1982 and Ken Henderson BS 1973 at the Jubilee Event.

2000s

Bryan Abney MS 2000 is now Quality Technical Leader at Catalent Pharma Solutions in Lexington, KY. He was formerly Manager of the QC Chemistry Laboratory at Alcon Laboratories in Fort Worth, TX

Elizabeth Hansen MS 2000, PhD 2003 is Associate Professor of Chemistry at Rock Valley College in Rockford, IL where she has been since 2010.

Katherine Block, BS 2001 is now a Senior Scientist at Novartis Clinical Trial Center of Excellence at *Genoptix Medical Laboratory*, which is part of the Novartis Company, in San Diego. After graduation and a stint at Pfizer in St. Louis, she received a PhD degree in biochemistry from the University of Arizona in Tucson. Prior to joining Genoptix in 2012, she was a Senior Development Scientist and Technical Lead at Beckman Coulter in Orange County, CA. She will be presenting the *Distinguished Alumnae Lecture* on Monday May 5, 2014.

Shiyue Fang PhD 2001 is Associate Professor of Chemistry at Michigan Tech in Houghton, MI. He is doing well and looking for ways to commercialize some of his recent work.

Paul E. Johnson BS 2001, MS who since May 2010 had been a Senior Product Manager at Express Scripts in St. Louis, is now Global Product Manager II, Lab Chromatography at Bio-Rad Laboratories in the San Francisco Bay area and enjoying the California weather.

Matthew Dunn, BA 2002 was married on September 14 to Rachel Link. Matt is with Chemir in St. Louis and Rachel is the Administrative Officer for the Chemistry Department at Washington University. They were both at the department's Jubilee Celebration in April.

Jennifer Van Wyk MS 2002 is an adjunct faculty member at Southwest Illinois College. She has also taught at McKendree College and the Metro-East Lutheran High School.

Darija (Bajramovic) Hadziselimovic BA 2003 recently celebrated her eighth year with Mallinckrodt in St. Louis where she is now a Senior Compliance Chemist. She is currently working on an MBA degree at Webster University.

Cherise Pruitt BS 2003 is Quality Systems Manager at McNeil Consumer Healthcare, in the greater Philadelphia area. She had been with Sigma Aldrich following graduation but spent time with Glaxo Smith Klyne and Olympus before taking up her current position in June 2012. She was in town recently but we missed her.

James A. Clark BS 2004 moved to Bangkok Thailand in January 2005 and taught English there until this past summer. He is currently taking post-baccalaureate teaching preparation courses online through Western Governors University. He recently passed the Praxis II Chemistry knowledge exam and expected to be state-certified to be a substitute chemistry teacher, soon after he contacted us in October.

Kristina (Alderman) Thompson BA 2005 who recently returned to United Industries, where she is a Chemist II. is also studying at SIU-Edwardsville and expects to receive a MS in Statistics & Operations Research in 2014.

Claire Brook PhD 2005 is a Senior Research Chemist with Mallinckrodt in St. Louis.

Papapida Pornsuriyasak PhD 2006 returned to Thailand after two years as a Research Assistant Professor in the Demchenko laboratory

Shu Yao, BS 2006 obtained a PhD at the University of Wisconsin-Madison in 2012 and is now a postdoctoral fellow at the University of Calgary, Alberta, Canada. What we didn't know is that she married Jonathan Hudson last year.

Aileen Bongat White PhD 2009 and **Colin White** PhD 2007 are very happy to be living in the same country and they are house-hunting. Aileen moved to *Dextra Laboratories* in Reading England where she is a Senior Chemist in February 2013. Her previous experience at the Louis Pasteur Institute in Paris and the

NIH in Bethesda MD has served her well in terms of expanding the company's repertoire of services. They are in the midst of developing cGMP glycoconjugate vaccines which is an area that the company was reluctant to expand into previously due to lack of expertise. Colin is still with *Datamonitor*, a subsidiary of the *Informa Group*, and he is a Lead Analyst now for the oncology team. He is doing very well and his unit continues to be the most productive and profitable. He continues to be a valuable asset to Informa in terms of developing new ways by which the company could improve their services. As a result, he's been promoted regularly

James B. (JB) Carroll BS 2008, PhD 2013, who completed his PhD degree with Janet Wilking, is now a Scientist at *Chemir* EAG, in St. Louis

Nongnuch Sutivisedsak Ph.D 2008 is now a Product Development Chemist at United Suppliers, Inc. in Peoria, IL. She was formerly with the USDA, also in Peoria. She completed her degree in Chris Spilling's laboratory

Rokas Juodeska BS 2007 is a Research Associate I with *MedImmune* in Baltimore, MD.



Artist's rendering of the new Science Learning Building

Michael Lantzy BS 2007 just became an account executive at *Teradata Applications*. He tells me he will be helping companies increase revenues and reduce cost with Integrated Marketing Management (IMM) solutions. IMM is the big picture that enables companies to succeed with data-driven marketing. Data-Driven Marketing is the process of collecting and connecting large amounts of data, rapidly analyzing and gaining insights, and then bringing that insight to market via a marketing campaign tailored to customer preferences. Previously he spent five years with *Knowledge Lake* in St. Louis was Regional Sales Manager for the North Central region.

Hui Zhao PhD 2007 has been a Senior Analytical Scientist with *Covance* in Madison, WI since last January. She continues to work with LC/GC-MS/MS in the food area. Her family moved to Middleton in the Madison metropolitan area in August. She was formerly with Tate and Lyle in the Chicago area.

Kara Kinzel BS 2008 and **Joshua Lang** BS 2007 were married on Saturday August 10, 2013. Kara is an analytical chemist at Elantas PDG in St. Louis and Josh is with Ameren.

Charulata Prasannan PhD 2009 was a postdoc at the University of Kansas Medical Center in Kansas City until 2012 but moved back to India last year to join her husband in Mumbai where he was working. She was looking for a position when we last heard from her. She would like to be involved in both teaching and research.

Saibal Bandyopadhyay PhD 2008, a postdoctoral fellow at the Ohio State University and is also a part-time lecturer in the department.

Sophon Kaeothip PhD 2010 returned to Thailand after spending one year at RIKEN (Japan),

Scott J. Hasty BS 2008, PhD 2013 accepted a temporary lecturer position at Southeast Missouri State University following completion of his degree in the Demchenko laboratory and is currently looking for a tenure-track faculty position.

Sean Whittemore BS 2008 received his PhD degree at Ohio State University where he worked with Professor James Stambuli. He then spent a couple of months as an intern with Ashland Inc. in Dublin Ohio and is now a postdoctoral fellow at the Pacific Northwest National Laboratory in Richland, WA.



Site "photo" of the new Science Learning Building

Nathan Birhanu BS 2009 will finish his final year of contract with the Peace Corps in July. He has been in Ethiopia for the last year. He has found the Peace Corps is an interesting and

fulfilling experience but he plans to return to the United States or England in July to pursue graduate school, probably in economics. He has decided to balance his interests and skills between the quantitative/analytical challenges in the world along with the social/humanistic perspective ones.

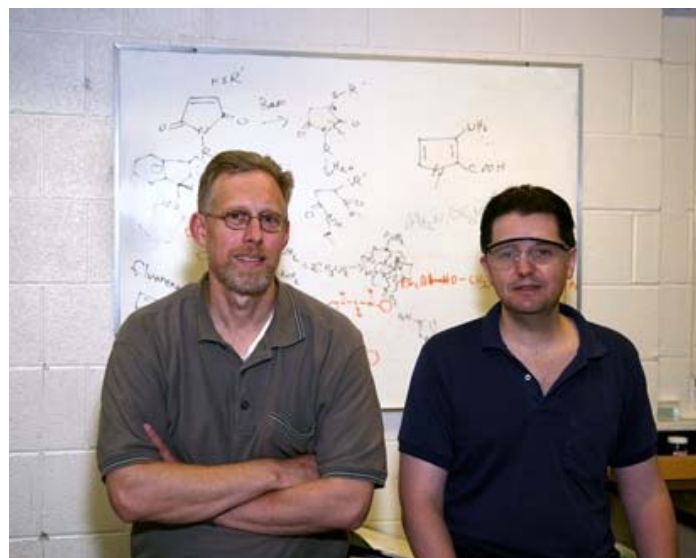
Rachel Hercules BA 2001, MS 2006 now works for *bioMerieux* as Quality Manager. She manages two teams; one of microbiologists and the other of chemists. She is focused on in-process testing development and validation with LC-MS methods. She enjoys it and when we last heard, she had just hired Matt Kleine, the son of Joyce and **Pete Kleine** (BS 1978, MS 1962).

Justyce J Jedlicka BS 2010 joined Sigma-Aldrich in 2010 as a Chemist I and became a Technical Marketing Specialist in Feb. 2012. Last February she was promoted to Tactical Marketing Manager, North America Consumer products. We were pleased to see her at the department Jubilee celebration in April.

Kenise Jefferson, PhD 2010 is a Laboratory Coordinator at the University of Illinois, Champaign-Urbana

Steve Costin PhD 2010 just finished his first semester as a chemistry instructor at the Louisiana School for Math, Science, and the Arts in Natchitoches, Louisiana, where he teaches general and organic chemistry. He took this position following two years as a postdoc at LSU School of Dentistry in New Orleans (working under Dr. Xiaoming Xu). From the latter work, he has a U.S. patent pending (for antimicrobial monomers/polymers) and a new textbook in which he is a contributing author has just been published titled *Polymeric Materials with Antimicrobial Activity*. He enjoys living in the south, away from the snow and ice.

Jeffrey Withers MS 2009 is a Chemist at Alltech, Inc. in Nicholasville, KY and lives in Lexington. He was previously with Covidien in St. Louis.



Jim Bashkin with his research colleague **Keven Koeller** PhD 1994

Girija P. Katragadda MSBB 2011, who did research with Dr. Bashkin, now works for Bayer Crop Sciences in Research Triangle Park, N.C. and is attending an MBA program at night.

Nicholas Bardol BS 2012, MS 2013 is now a Process Chemist at Sigma Aldrich in St. Louis. Nick won the Outstanding MS Student Award for 2012-13.

Sneha Ranade PhD 2012 returned to India after completing her degree with Alexei Demchenko, got married and took a position as a Senior Research Associate at SAI Life Sciences Ltd, in Pune.

Andrea Sullivan BSBB 2013 is studying dentistry at Midwestern University in Downers Grove, Greater Chicago area.

The Chemistry Alumni Council

The Chemistry Alumni Council continues to be active and met regularly during the earlier part of the year. Among other things, the group has focused on alumni networking and on arranging a few very special events. These latter have been very successful, due to the hard work done by Council Members and also the fact that so many of you attended these events. The first one was the honoring of Charlie Armbruster receiving the Chancellor's Medallion in 2008, the retirement reception for the editor in 2010, another on networking and careers in 2011, the honoring of Joyce Corey and Rudi Winter in 2012 and this past year, we perhaps topped all those with our own celebration of the UMSL Jubilee, *Fifty Years of Great Chemistry* on April 20.

This latter event was held in the foyer of the J. C. Penney Building 3:00 – 5:30 pm where more than 150 alumni, friends, faculty and university officials had a great time meeting old friends and enjoying a selection of beverages and finger food. The featured beverage was Jubilee Beer, brewed especially for the Jubilee by the Ferguson Brewing Company from. Many went on to the restaurants and bistros in Ferguson to continue the celebration afterwards.

A short program was held. Michael Finkes served as the MC and he introduced Chris Spilling who in turn introduced Chancellor Tom George, Arts and Sciences Dean Ron Yasbin and then he introduced me. We all gave brief comments although mine were not so brief.

A table with historical documents and memorabilia was set up as were a series of posters. The latter includes one illustrating Departmental Milestones, another listing Campus Distinguished Alumni Awards to chemists and also Distinguished Alumni Lecturers, a faculty and staff Timeline and finally a listing of awards received by faculty members. **Jim Grib** BS 1976 and **Sean Dingman** BS 1994 were very helpful in designing some of the posters.

Among those present were the following alums: **Pat Armbruster, David Armbruster, Alicia M. Beatty, Jay Bhattarai, Denise Billo, Joseph Bono, Andrew Breite, Eric Bruton, Henry Buehler, J. B. Carroll, Carlos Castaneda, John L. Chruma, Benjamin Colvin, Dorothy Cooke, Louis Crepps, Nikkilina Crouse, Niki Curvey, Surendra Dawadi, Norm Del Castillo Robert Dittrich, Matt Dunn, Dean Frey, Edith Fejer, Michael Finkes, Steve Finkes, Molly Freebairn, Donna G. Friedman, Paul Gontarz, Lisa Gouwens, James J. Grib, Gene Hallet, Scott Hasty, Michael Hauser, Greg Hayward, Gaofei He, Ken Henderson, Rachel Hercules, Don**

Hesse, Rick Hoyt, Gary Jacob, Justyce Jedlicka, Marko Jovanovic, Herb Kaiser, Andrew Kamadulski, Mercy Kiiru, Daniel Kleypas, Stephen A. Kolodziej, Matt Lenze, Yana Levchinsky-Grimmond, Francine Longcor, Raj Malla, Benjamin Martin, Mike Maxwell, Bill McCarthy, Harold Messler, Joe Miesel, James Murphy, Douglas Nuelle, Carl Oberle, Mark H. Owens, Archana Parameswar, Mohit Patel, Joe Poett, Holly Pope, Vince Rapini, Jeremy Ridenour, Clarise Rieser, Bruce Ritts, Alan C. Sapia, Sue Saum, Holly Scheibel, Sergey Sedinkin, John W. Seibold, Puskar Shejwalkar, W. Steve Tait, Chuck Thierheimer, James Timper, Leslie Tucker, Ryan Uding, Elena Vasilieva, Dolores Vermont, Carl Von Till, Barry Walker, Janet Wilking, Cindy Woodall, Bingli Yan and Prithika Yasomanee. I probably missed someone and to those I missed I apologize.



Hal Harris with his former undergraduate researcher Steve Tait BS 1972 and Susan Whitworth Tait BA Physics 1972 at the Jubilee Event

Graduates, Dec. 2012 through Dec. 2013

DECEMBER 2012

Brittany K. Cange MS
Elizabeth A. Hood MS
Saeedeh Negin PhD
Sneha C. Ranade PhD
Christian C. Rix MS

Lindsey E. Graham BA
Sarah E. Johansen MS
Binod P. Pandey PhD
Mohini Ravula MS
Jennifer A. L. Scott MS

Meredith K. Jacques MSBB
Christopher R. Limmex MSBB
Mohit B. Patel MSBB
Rohan Tayal MSBB

Swati Kiran MSBB
Joshua R. Nickelson MSBB
Madhulika Sharma MSBB
Christina M. Touchette MSBB

Alysia N. Battle BSBB
Radio Sonic M. Marianao BSBB
Kellie N. Radack BSBB
Panfil H. Shah BSBB

Melissa A. Marcus BSBB
Elizabeth A. Norton BSBB
Stephanie E. Schatz BSBB

MAY 2013

Alemu Koke Azanaw BS
Nicholas Bardol MS
Octavia M. Jones BS
Erin T. Martin, BS
Matthew Queensen, BS
Jeremy Ridenour, MS
Holly M. Scheibel MS

Teresa Bandrowsky, PhD
Josh Creahan BS
Matthew Lenze, PhD
Jefferson Peak, BA
Laura Perry, BS
Allison L. Saettele, BS
Maria Yingling, MS

Kevin Coffey, BSBB
 Scott, K. Ellenbogen, BSBB
 Tedan Hu, BSBB
 Allison L. Saettele, BS
 Steven G. Thomas, BSBB

Malik, Darwech, BSBB
 Sarah, M. Griggs, BSBB
 Angela D. L. Irvin, BSBB
 Andrea L. Sullivan, BSBB

Jason Atkins MSBB
 Mark T. Chipley MSBB
 David Moore MSBB
 Abbie O. Wong MSBB

Eric Bretsnyder MSBB
 Jennifer L. Mikkelsen MSBB
 Michael B. Trammel MSBB

AUGUST 2013

David Britton, BA
 James Carroll PhD
 Kaitlin Eagan, BS
 Scott Hasty PhD
 Carl D. Oberle MS
 Bojana Opacic BSBB

Stephanie R. Cernicek MS
 Surendra Dawadi PhD
 Sanjib Karki MS
 Melissa Mueller, BS
 Pushkar Shejwalkar PhD

DECEMBER 2013

December 2013

Desikan Rajagopalan BA
 Jennifer Sneathen BS
 Joseph W. Meisel MS

Maha Abutokaikah MS
 Christopher J. Hagerty MS

Amber Henry BSBB
 Snowlee Phu BSBB

Farha Ihmoud BSBB
 Ngusha Shaguy BSBB

Isra M. Darwech MSBB
 Brian Lee Matthews MSBB
 Charles Rieder MSBB

Anwasha Laha MSBB
 Amber E. Pinson MSBB

Note: BB indicates Biotechnology and Biochemistry



Jim Chickos and his former student **Don Hesse** BS 1984, PhD 1990.

The Chemistry Club

2013 was a fun year for the ACS Student Chapter **UMSL Chemistry Club** (Faculty Advisor, Michael Nichols). The Chemistry Club continued its involvement in many activities this year including career development, chili cook-off, Pi Day, and demos at the ACS Chemistry High School Day at UMSL. The club was involved in the preparation of the UMSL 50th Jubilee

Beer by the nearby Ferguson Brewing Co. National Chemistry Week 2013 included liquid nitrogen ice cream making on the back patio and interactive games with the student body to help nudge chemistry into the spotlight. Officers for 2013-14 are Hung Nguyen (President), Michael Mannino (Vice-President), Devon Brandon (Treasurer), Anna Thibaut (Secretary), Kevin Baum (SGA Rep), and Mudar Ismail (Public Relations/Historian). 2012-13 officers were Erin Lowry (President), Laura Perry (Vice-President), Kourtney Joiner-Grant (Treasurer), Erin Martin (Secretary), Devon Brandon (SGA Rep), and Hung Nguyen (Public Relations/Historian).

Chemistry Graduate Student Association (CGSA)

The CGSA was established in 2010 to work for the benefit of graduate students and it appears to have been a great success. It is now an officially recognized campus student organization. Members publish a newsletter, participate in the Relay for Life, sell tee shirts and hold various events and activities including a picnic, BBQs, float trips, pizza parties, a wine trip and most recently they held a pot luck holiday luncheon in December.

The Faculty

James K. Bashkin who is completing his second year on the faculty a Professor of Chemistry and Biochemistry has been very productive in his research program. He and **Kevin Koeller** PhD 1993, who is Research Assistant Professor in the department, were featured in the *UMSL Daily* in November for their work in developing an antiviral drug candidate designed to fight HPV, the virus that causes cervical cancer. They co-authored a study on HPV that was recently published in PLOS ONE, an international, peer-reviewed, online journal. In addition Dr. Bashkin published five other papers and one patent in 2013. At the *MedChem and Computer-Aided Drug Design Conference* in Las Vegas in October, an international conference with speakers from Africa, the Middle East, the UK and Australia, he gave an invited talk in addition to presenting a Keynote address in the opening session. In his talk at the National ACS meeting in Indianapolis "History of NanoVir, LLC, a drug discovery company supported by the NIH and grown partly through interactions with academia", he described the company he and his colleague Chris Fisher established in 2003. He also presented a contributed paper "Correlation of local effects of DNA sequence and position of β -alanine inserts with polyamide-DNA complex binding affinities and kinetics".

Eike B. Bauer is proud of the successes of his recent former students. **Erin Martin** BS 2013, a former undergraduate research student started her PhD degree work at Indiana University, Bloomington in analytical chemistry with a minor in Sustainable Energy Science. **Pushkar Shejwalkar** PhD 2013 has taken a postdoctoral fellowship at Hokkaido University, Sapporo, in Japan, **Matthew Lenze** PhD 2013 works now at Gallus Biopharmaceuticals (Contract Manufacturer of Mammalian Cell Biologics, formerly Centocor, in St. Louis). Earlier students of his, **Sergey Sedinkin** PhD 2011, is a postdoc with Professor Gokel and **Steven Costin** PhD 2010, is now a High School teacher at the Louisiana School for Math, Science and the Arts in Natchitoches, LA. Eike had a Project SEED student over the summer and is engaging paid undergraduate researchers in his group through the NSF grant. "The Investigation of Chiral

Allenyridene Complexes for Catalytic Applications" he was awarded this year He also was awarded a New Directions grant from the American Chemical Society this year in collaboration with Prof. Cynthia Dupureur.

Alicia M. Beatty took a Family and Medical Leave of Absence in the fall 2013 semester and among other things, had surgery. Her three graduate students, **Stephanie Cowin** BS 2011, Matt Fischer and Carl Oberle, all presented posters at the Midwest ACS meeting in Springfield last fall. She tells us that her surgery was incredibly successful. No pain, and increasing strength every day. However, she still limps so she will need additional surgery on the other leg too.

Benjamin J. Bythell joined the department in the summer as a replacement for Hal Harris. He is a biophysical chemist and received a MChem degree from the University of Bath, UK, in 2002 and a Ph.D. from Oregon State University in 2007. He held postdoctoral fellowships at the German Cancer Research Center in Heidelberg (2008-2010) and at the National High Magnetic Field Laboratory at Florida State University (2010-2013). He was born in England and came to the US to complete his PhD degree. His wife Suzanne is a biologist and is currently employed as postdoctoral fellow with Professor Rickleffs in the Biology Department. The planning for his research program is ramping up. He expects to hire a postdoc soon and his new mass spectrometer will arrive in the New Year. He lectured to the Mid-West Mass Spectrometry Group at Washington University in October and will chair a session at the ACS National Meeting in Dallas in March on *Mass Spectrometry and related Technologies for Energy and Fuels*. During his first semester here he taught instrumental analysis and has been planning the Colloquium Series for Spring 2014.

James S. Chickos is now the proud grandfather to two grandchildren, Samantha was born in August and Kaitlyn is now two; both children of his daughter Sarah and her husband Tom Wright. As the old timer among the regular faculty members he continues to teach a full load and direct the research of graduate students and undergraduates. He expects to have published at least 6 research articles by the end of the year. He currently has two graduate students in his research group. He is active cycling and this fall completed the Tunnel Hill Ride, 100 miles round trip in Illinois and also did the circle from St. Louis (McKinley Bridge to Alton), thence to St. Charles County and returned along the Katy Trail. Indeed he has now completed the full length of the latter, Sedalia to Machens in St. Charles County and vice versa, several times.

Valerian T. D'Souza tells me he has become the introductory chemistry czar. He has redesigned Chemistry 1111 (Chem. 11) in order to try to enhance retention and recruitment in chemistry using an unusual pedagogic system. This is a computer based system administered through a "flipped classroom" environment. This system employs artificial intelligence based ALEKS for personalized training, combined with smart technology. This allows us to track individual student progress throughout the course and gives the instructor(s) an opportunity to send out "encouragement letters" (euphemism for nag letters) to keep students on track. The system is designed to make students aware of their standing at frequent intervals through computer based quizzes and presentation of further lessons based on their

performance in these quizzes. He has also been very helpful to the editor with the latter's computer problems.



Ben Bythell who joined the faculty this past fall.

Alexei Demchenko has completed a most successful year. Two years after being promoted to Full Professor he was award the *Chancellor's Award for Research and Creativity*. Earlier in the year he had received an award from the *Mizutani Foundation for Glycoscience*. His research program in the area of synthetic carbohydrate chemistry is going well. During the period 2012-2013, his research group, which he calls Glycoworld, published 22 articles, presented 12 posters at conferences, and delivered 24 invited talks and universities and symposia. He is continuing to serve as an Associate Editor of the *Journal of Carbohydrate Chemistry*, as a Member-at-Large of the Executive Committee of the Division of Carbohydrate Chemistry of the ACS and on a number of Editorial Advisory Boards. He also served as a Vice-Chair of the Gordon Research Conference on Carbohydrates. Currently, the core of the Glycoworld consists of a post-doctoral research associate and five graduate students. Two visiting students from Russia Eugene Okun and Dmitry Vasiliev and seven undergraduate researchers also made significant efforts and valuable contribution to the overall success of the group. For updated information on current research, teaching, and outreach activity (see the Demchenko group webpage).

Cynthia Dupureur attended the *Albany Conversation* in June. This is a biannual biophysics meeting held at the University at Albany. This last fall Dr. Dupureur and PhD student Elena Vasilieva attended the *Gibbs Conference* in Carbondale, IL where Elena gave a talk on her research. In October, Dr. Dupureur spoke at the Midwest Regional ACS meeting, held this year in Springfield Missouri, in a symposium held in honor of

her undergraduate research advisor, Emeritus Professor Jim O'Brien of Missouri State. Since everyone in her laboratory who went to Elephant Rocks the first time has graduated, the group visited there (again) this summer. Dr. Dupureur remains Program Director for the Biochemistry and Biotechnology Program.



Graduates **Ryan Uding**, **Merci Kiiru**, **Holly Scheibel** MS 2012 and **Nichole Curvey** with an image of **Nathan Birhanu** at the Jubilee event. All received BS degrees in 2009.

Chancellor Thomas F. George, in addition to his responsibilities as Chancellor, continues to maintain his research as a faculty member in both the Departments of Chemistry/Biochemistry and Physics/Astronomy. Indeed he recently wrote an article for an upcoming book on how to maintain a research/scholarship program while being chancellor/president. He publishes regularly in journals and delivers lectures/seminars. As an example, in summer 2013 he was invited to make a presentation on his research in nanomedicine to the Department of Radiation Oncology in Washington University's School of Medicine. Also in summer 2013, the Crown Prince Maha Vajiralongkorn (heir to the throne) of Thailand awarded him an honorary doctorate for education in locality development from Phranakhon Rajabhat University in Bangkok. While there, Tom got to ride an elephant.

George W. Gokel was honored with the **James B. Eades Award** by the St. Louis Academy of Sciences in April. The award recognizes a distinguished individual for outstanding achievements in engineering or technology. More recently he was named a *Fellow of the National Academy of Inventors*. Among his class of inductees were other St. Louis academic heavyweights including Washington University Chancellor Mark Wrighton, Richard Bucholz, professor and vice chairman of the Department of Neurosurgery at Saint Louis University School of Medicine and Henry Foley, Executive Vice President for Academic Affairs for the University of Missouri System. George's students **Mohit Patel** MSBB 2013 and **Jason Atkins** MSBB 2013 were inducted as honorary members of the UMSL chapter of the National Academy of Inventors and they were presented the UMSL Student Inventor of the Year Award, which brought a \$500 prize. Atkins and Patel also shared a \$50,000 grant with Professor Gokel for the trio's project "Novel, non-toxic and highly efficient chemical transformation and transfection reagents." The four-campus University of Missouri System awarded the grant through its Fast Track Funding

Program. The three honors were bestowed upon Atkins and Patel on April 26 at a reception that capped UMSL's annual Research and Innovation Week. And earlier this month, the pair picked up a fourth award, taking home a \$50,000 Arch Grant to help fund their biotechnology startup *Genetix Fusion*. The award was among 20 companies chosen out of an initial field of more than 700 applicants, according to an article published May 14 in the *St. Louis Business Journal*. Professor Gokel and his postdoc **Saeedeh Negin** PhD 2013 have just published a review in *Accounts of Chemical Research*: "Synthetic ion channels: From pores to biological applications".

Harold H. Harris Founders Professor is enjoying his semi-retirement. He still teaches physical chemistry courses and participates in some committee responsibilities on campus, but he also is flexing his new (March, 2013) titanium/polyethylene knee on the tennis courts and the bicycle. He and his wife, Mary, enjoyed a summer trip to the northwest – Portland, Mt. Hood, Mt. Rainer, Takoma and Seattle, and the San Juan Islands (the upper left corner of the continental US). They will be spending winter break down in Naples, Florida.

Bruce Hamper celebrated his fourth year on the UMSL faculty and continued to develop new courses and research opportunities. He introduced a new online chemistry course for the health professions employing a combination of YouTube videos, recorded lectures and the online testing facility. This fall Bruce and undergraduate researcher Michael Mannino attended the ACS Midwest Regional Meeting in Springfield, Missouri, where Michael presented an excellent talk on "Resolution of Chiral Phosphonates". Bruce is also working with advanced high-school students Jessie Knobbe and John O'Keefe, developing NMR spectroscopy methods for analysis of intermolecular interactions. He continues to enjoy biking and restoring his blue '69 Austin Healey.

Wesley R. Harris wears two hats these days. As Associate Dean of the Graduate School he continues to work with graduate program directors in Biochemistry/Biotechnology, Chemistry and Biology to develop new Professional Science Master's programs and he is working with Academic Affairs to develop a plan for promoting undergraduate research on the campus. He just returned from a meeting of the Council of Graduate Schools in San Diego that covered topics like retention in STEM programs, academic dishonesty, and the effects of the ACA on graduate education. He was able to take a couple of extra days to visit with his son, Jonathan, and his family. In the department, with Chris Spilling, he is still heavily involved in a small company, ALKYMOS, which has licensed some chemistry technology from UMSL. They recently had a paper (co-authored with their colleagues from the University of Kentucky) accepted in the *Journal of Pediatric Pharmacology and Therapy* that describes their new device for removing Al(III) from pharmaceutical solutions.

Stephen Holmes is proud of the students who worked in his research laboratory this past year. Graduate student **Philip Ferko** BS 2010 is an ACS Chemistry Coach (only one in St. Louis and one of two in MO). Undergraduate Hung Nguyen served as President of the Chemistry Club for 2012-13, presented a poster at the ACS Midwest Regional Meeting in Springfield and travelled there via an ACS St. Louis Section travel grant. He was also supported by a College of Arts and Sciences research

grant, and was named Outstanding Junior Chemistry major last year. An article appeared about him in the *Current*. He had also had undergraduate student **Desikan Rajagopalan** (Now BA 2013) and his father Dr. Ragavan Rajagopalan, a former adjunct faculty colleague working in his lab last summer in addition to two students from the STARS program. He is excited that two new graduate students joined his group in fall 2013. Steve was an invited speaker at the ACS meeting in Indianapolis in the Symposium, New Trends in Molecular Magnetic Materials Symposium: title, "Tuning Magnetic and Optical Bistability in Cyanometalate Complexes". He also published 3 papers and 1 review article during the year.

Rensheng Luo director of the NMR facility was promoted to Research Associate Professor this past year. He has been exploring ways to assist faculty members in the use of the relatively new 600 MHz NMR spectrometer in their research. He is pleased to have received his first research grant from the Interdisciplinary Intercampus Research Fund and published a paper under this grant support.

Michael R. Nichols continues to investigate Alzheimer's Disease (AD)-related research with particular attention to the amyloid-beta protein and inflammation. Current doctoral students are Shana Terrill-Usery (5th year), Sanjib Karki (4th year), Ben Colvin (3rd year), and Lisa Gouwens (2nd year). Undergraduate researchers this past year were John Heuvelman, Eleni Goranitis, Laura Janks, and Richard Davenport all from the BCBT BS program. Dr. Nichols attended the American Society for Neurochemistry meeting in May and was elected to the ASN Council. His whole research group attended the ACS Midwest Regional meeting at Missouri State University in October and Dr. Nichols and Shana presented at the Society for Neuroscience meeting in November where he met former lab members, **Nikkilina Crouse**, PhD 2009 and **Jill Touchette**, BS 2009. A stimulating collaboration with the Stine Lab led by Dr. Yih Horng Tan and Shana Terrill-Usery came to fruition with a publication in *Biomaterials Science* in 2013.

James J. O'Brien has been preparing to assume the position of Chair of the St. Louis Section of the American Chemical Society in 2014. He continues his research in spectroscopy in collaboration with Leah C. O'Brien from SIU-Edwardsville and they recently published an article on the electronic transitions of nickel monochloride in the *Journal of Molecular Spectroscopy*.

Nigam P. Rath coauthored 20 papers in the past year. He presented a poster at the American Crystallographic Association, Honolulu on single crystal to single crystal phase transition, coauthored by **Raj K. Malla** PhD 2012 and Professor Spilling. X-ray diffraction experiments are now being conducted in both organic and inorganic chemistry undergraduate laboratories with his help. On the personal side daughter Niharika completed her undergraduate degree (BLA) summa-cum-laude in 2013 and will complete her MD degree in May 2014 from UMKC.

Christopher D. Spilling is in his 10th year as Department Chair and is completing his two year term as Chair of the Faculty Senate and University Assembly. This has been a fairly quite year for Chris. His duties kept him close to home although he was able to travel to Washington for an NIH panel and Colorado for a Department Chair's meeting. He gave lectures and Southeast Missouri State University and Washington University.

He graduated his 17th PhD student **Surendra Dawadi** (PhD 2014) Surendra joined alumnus **Courtney Aldrich** BS 1994 at the University of Minnesota as a postdoctoral fellow. His oldest son Andrew (22) just graduated from Embry Riddle Aeronautical University with a degree in Homeland Security (emphasis Cybersecurity) and commissioned as an Ensign in the US Navy. He will be stationed in San Diego. Robert (20) just returned from a seven month deployment in Afghanistan. William (15) is a sophomore at Chaminade College Prep. The whole family was able to attend Andrew's graduation in Florida.



Holly Pope BSBB 2009, Jim Timper, BS 1982, MS 1984 and J. B. Carroll BS 2008, PhD 2014 at the Jubilee event

Keith J. Stine completed a year in which he had an active crew of researchers in his laboratory including three graduate students and a postdoctoral associate under NIH support. **Binod Pandey** PhD 2012 moved on to a postdoctoral position at Pennsylvania State University in the lab of Stephen Benkovic. Keith's lab also hosted two high school students in the STARS program for the summer of 2013. Research on a number of aspects of nanoporous gold continues, including collaboration with Professor Demchenko's lab on using the material as a support for carbohydrate synthesis. In the past year, his group published four papers including Dr. Pandey's work and collaborations with the Demchenko Laboratory. In addition one just came out in 2014 involving Dr. Tan and two members of the Nichols lab. His group presented posters at the recent ACS meeting in Indianapolis in the Colloid and Surface Chemistry Division. Dr. Stine again organized a day long presentation of hands-on science activities at the Missouri State Fair this past summer for the Missouri Science Outreach organization SCOPE, assisted by four graduate students from the department. He also completed his two-year term as a member of the Life Sciences panel of the University of Missouri Research Board, and moved on to serving as an ad hoc member of an NIH panel. He has been invited by Wiley to edit a book to be entitled *Carbohydrate Nanotechnology* and to become a new co-author of *Experiments in Physical Chemistry*, published by McGraw-Hill. He also coordinated ACS Project SEED at UMSL and two students were supported in the program, one working in his lab and another working in Prof. Bauer's lab.

Janet Braddock-Wilking had two students earned Ph.D. degrees this past year. **Teresa Bandrowsky** in May 2013 and

James B. (JB) Carroll in August 2013. Research efforts continue on the synthesis and characterization of luminescent Group 14 cyclic compounds and she recently submitted a patent application on some aspects of this research. She also published a paper recently in *Organometallics* on some of JB's work on siloles and paper is under review in the *European Journal of Inorganic Chemistry* on recent work by 2012 PhD graduate, **Sitaram Acharya** on the synthesis of Pt and Pd PTA and DAPTA complexes. Her son Kevin is a senior in high school and recently earned Eagle rank in Boy Scouts. Colleague, Mike Nichols served as one of his merit badge counselors. Her other son Alex is looking forward to spending an upcoming semester studying journalism in London.

Chung Wong reported that his graduate student Paul Gontarz published his first paper in the journal *Bioinformatics*. Chung talked about Paul's work for the first time in Hong Kong this summer. Paul continues to help with advising students, including two undergraduates - Peter Gontarz and Tedan Hu - and three graduate students - Kelsey Delph (Biology), Anwasha Laha (BCBT), and Aaron Wilkerson (BCBT) - on genomics projects. Tedan has completed her BS degree in BCBT and moved on to graduate studies at Washington University. BCBT MS student, Snowlee Phu, also spent this summer in Chung's lab working on structure-based drug design. In the fall Chung was pleased to meet the current PhD adviser, Dr. Scott Silverman, of former summer undergraduate intern, Jagdeesh Chandrasekhar. Dr. Silverman is a Professor of Chemistry at the University of Illinois at Urbana-Champaign, and was one of the invited speakers in this year's Biochemistry Biotechnology Symposium on Nucleic Acids held on October 25, 2013.

Zhi Xu successfully completed sabbatical leave and returned to campus in Fall 2013. He is teaching physical chemistry and conducting research in the area of ultra-sensitive analytical instrumentation.



Dr. David W. C. MacMillan the 16th Annual Robert W. Murray Lecturer with Chris Spilling just after the lecture in March 2013.

In Memoriam

Dr. Stuart W. Weidman, who was on the faculty from 1965 through 1969, died at age 75, on December 10, 2010 in Germantown, Tennessee, from cancer. He was survived by his

wife Marilyn; son Daniel, daughters Suzanne and Tricia and nine grandchildren. Stu had received his undergraduate degree from Washington University and had started his PhD work with Tom Kaiser, also at Washington U, but completed it at the University of Chicago where Kaiser relocated. Stu was the first to obtain an external grant in the department. After leaving UMSL in 1969, he spent several years at the Washington University School of Medicine and then moved to the University of Tennessee Medical Center in Memphis. His final years in research were spent at the Rush University Medical Center in Chicago. He took early retirement for health reasons and moved back to Memphis.

Emeritus, Retired, and Former Faculty Members

Charlie Armbruster has not been well these last several months but the editor has been in touch with him on and off during the year. I spoke to him just before Christmas and he had been in the rehab center in Orlando for more than four weeks. Here are the comments he sent to be read at the Jubilee Event in April: *"I am deeply saddened that it is impossible for me to be with you in person to celebrate this happy event - an event which has particular significance for me. Indeed the establishment, nurture and development of the UMSL Department of Chemistry has been the focus of my life for over fifty years. In the early days I was widely ridiculed for what many considered the wildly unrealistic lofty goals I set for the Department. Over the last fifty years our achievement has far exceeded even those optimistic expectations. But even as we celebrate our past successes we look forward to continuing these traditions for many years to come"*.

Lawrence Barton who is still associated with the department after 47 years spent the year much the same as last year. He typically can be found in the department advising students, working on departmental events, doing alumni-related work, and updating the website and the graduate brochure, unless of course he is on the golf course, working in his garden or traveling. He and Pat spent more than three months in Fort Myers, FL in their new condo in 2013. They also spent just over a week in England visiting family and attending the 50th wedding anniversary of one of his friends from grade school. He was thrilled that the Jubilee celebration in the department, *50 Years of Great Chemistry*, in which he had a major role in planning, was such a success. During the year he was in touch with several former colleagues from the very early days and during efforts to contact them, he sadly learned that Stuart Weidman, a colleague from the 1960s, had died a couple of years ago. He played almost 150 rounds of golf in 2013 and his handicap dropped to the level it was when he was 16. It is now 14 and the lowest it has ever been. That's what retirement can do for you!

Eric Block, who spent from 1967 – 1981 in the department, and the editor have been in touch recently. Eric's wife Judy, is recovering from and is in remission from a bout with esophageal cancer. Eric has recently been on sabbatical leave from his position on the faculty at the University of Albany and had just and just returned from spending one month in Shanghai working at the Shanghai Jiaotong University School of Medicine with his neurobiology colleague on olfaction as a Chinese Academy of Sciences Visiting Professor. He considers himself to be very lucky to have had his NSF grant renewed this past summer (now

34 years of support and counting!) and will continue research rather than retire: something he had been contemplating. The Blocks spent New Year's Eve with Lol and Pat Barton and Hal and Mary Harris.

Joyce Y. Corey who joined the faculty in 1968 described a somewhat quiet year but it certainly had its share of travel misadventures. Her travel to the Silicon Symposium in Lubbock, Texas (held at Texas Tech) in May was complicated by the raging Oklahoma tornado. She enjoyed the Plenary Lecture which was on the topic she studied for her PhD thesis (50 years ago!). A few days later she was scheduled to fly to Venice, via Chicago and Paris, but a tornado touched down in St. Charles! So chaos reigned again and she had to rebook everything using airport "courtesy" phones. The next she was delayed again so she rebooked again and had to pay for her flight from Paris to Venice (her initial destination) twice. She was able to book an earlier flight to Chicago and made the connection, eventually reaching Venice about 9 hours later than her original schedule. She visited with a friend who lives in Venice part of the year and with whom she on sabbatical leave in Montpellier in 1982. He is very knowledgeable about the culture and art of Venice and she enjoyed every moment except they were on the go, sightseeing all the time. From Venice she flew to Basel to meet with another set of friends from Montpellier who live in the Vosges valley in the Alsace. The Germans invaded France through the Vosges Mountains during the WWII. This visit was much less hectic and one of the memorable things was visiting the Parc de Wesseling; a thriving community that made "printed" cloth during the 19th century. The area was quite beautiful with magnificent Rhododendrons blooming when she was there. This part of her trip was more relaxing. Her flight back from Basel to Charles de Gaulle (Paris) by Air France was complicated by the enormity of the airport causing movement around it most difficult and the weather was so bad that her flight was delayed resulting in a missed connection in Chicago. In August she returned to Chicago to visit her former student **Vincent Chang** MS 1979 and they were fortunate to see the Impressionist and Costume Exhibit at the Art Institute which was really spectacular. She and Vincent also visited the Botanical Garden the morning she left and enjoyed especially the extensive vegetable gardens. **Roberta Farrell** BS 1975 and her husband came through St. Louis in November as part of a business trip and they all spent a morning in the new wing of the Art Museum and had lunch there. Much to her surprise, with only a few days' notice, she was drafted to teach the Basic Inorganic course (Chem. 3412). This was quite a challenge as she had not taught since the end of 2007. It was an interesting experience but she doesn't expect to do it again. She started with 22 students and 16 will took the final exam (sound familiar?). She published a chapter in a book in the fall 2013 and is working on another writing project that she expects to be published in 2014.

Dennis J. Diestler is Professor Emeritus at the University of Nebraska in the Department of Agronomy and Horticulture and a Member of the Nebraska Center for Materials and Nanoscience. He sent a nice message recalling the two years he was in the department between 1967 and 1969.

David L. Garin is enjoying his extended run as President of the UMSL Retirees Association but is determined to serve next year as past president. This summer, he met with former coworkers and coauthors, Ken Henderson and Dorothy Cooke Greco,

surrounding the Jubilee year activities. Dave joined the faculty in 1966 and shared an office with the editor for one year.

Marcel L. Halberstadt is still keeping quite busy on several fronts, including the continuing management of a group of 40-50 retired engineers in the Michigan Retired Engineer Technical Assistance Program. They assist small businesses across the entire State in pollution prevention and energy conservation efforts. He is also involved in some work that has led to his writing a sizeable review paper that was presented last June at the Air & Waste Management Association Annual meeting in Chicago. He also sent us a nice message recounting the time when Charlie Armbruster recruited him in 1965 when he was a postdoc at NBS (now NIST). He was in the department from 1965 through the end of 1971.

Jane A. Miller was at the Jubilee event in April. She tells me that she regularly attends the Wednesday Club. The Wednesday Club of Saint Louis was founded in 1890 by women who wished to continue their intellectual growth, stay abreast of the times, and contribute to the community. Jane recently wrote a History of the Chemistry Department at Newcome College where she was once on the faculty. She joined the faculty in 1965 and became Professor Emeritus in 1992.

James P. Riehl was in the department this fall. He had come to a conference in St. Louis and found time to play golf with the editor and visit with former colleagues in the department. He has been Dean of Science and Engineering at the University of Minnesota-Duluth since 2000 and plans to retire in 2014.



Vince Rapini BS 1976, *Jim Grib* BS 1996, MS 1982 and *John Seibold* BS 1977 enjoy the Jubilee Brew and 50 Years of Great Chemistry.

Rudolph E. K. Winter continues to assist Joe Kramer in the mass spec lab, albeit he says, banker's hours, three to four days a week. The lab has been fortunate to add two instruments this past year. From *Covidien*, which is now *Mallinckrodt* again, a Shimadzu LC-MS with electrospray ionization and from *Pfizer* a Micromass Maldi TOF (time of flight) Mass Spectrometer. His collaborative work led to a publication the *Journal of Organometallic Chemistry* with colleagues in Europe.

Former Staff Members

Betty Eshbaugh has moved to her "home" state of Ohio. She now lives with her husband Ken in Miamisburg, OH. For those who don't know, Betty was with the University from 1963 through 1998. She was initially in the Chancellor's Office but joined the department in 1964.



Some of the students who received Aid to Education Awards last spring: left to right. Howard Mayes, Ahmed Mohamed, Michael Mannino, Hung Nguyen Anna Thibault and Dimitry Krits with Dr. Spilling

The Robert W. Murray Lectureship

The 16th Annual Lecture was given on Friday March 15 2013, by **Dr. David W. C. MacMillan**, James S. McDonnell Distinguished University Professor of Chemistry, Chairman, Department of Chemistry and Director of the Merck Center for Catalysis at Princeton University. For 2014, the honor goes to **Professor Joanna Aisenberg**, Amy Smith Berylson Professor of Materials Science, Professor of Chemistry and Chemical Biology in the Department of Chemistry and Chemical Biology and Director, Kavli Institute for Bionano Science and Technology at Harvard University. The lecture is to be held on Monday March 30. Associated with the Lectureship is the Robert W. Murray Lecture Banquet which we have typically held at the Glen Echo Country Club on the Sunday preceding the Lecture. This past year we were delighted that members of Bob's family attended for the first time including Claire Murray, daughter Kathleen Murray, son Daniel Murray and his wife Dawn. Also a number of Bob's former students and postdocs attended either the lecture, the banquet or both.

Scholarships and Fellowships

The Charles W. Armbruster Undergraduate Chemistry Scholarship was established following the events in August 2008 when Dr. Armbruster was awarded the Chancellors Medallion spoke at Commencement and was honored by alumni, colleagues and friends in a reception. The Scholarship is given to incoming Missouri resident undergraduate students in the Department of Chemistry, transferring from other universities and community colleges. The award for 2012-13 went to two students: **Mitchell Haskin** and **Kaitlyn Prade**.

The Lawrence Barton Scholarship: is designed primarily for junior chemistry majors who are first generation college students and who have some financial need and was established after Dr. Barton stepped down from the department chair position in 1998. Contributions to the endowment continue to be excellent and this has allowed the provision of more than one scholarship in recent years. For 2013-14, scholarships went to **Courtney Gipson**, **Hung Nguyen** and **Phylicia Patton**.

The M. Thomas Jones Memorial Fund: was the first endowment that recognizes performance by graduate students. It was initially funded through contributions from family, friends and colleagues of Dr. Jones and recently his widow Patricia Jones and family have made substantial contributions to allow us initially to endow it and to improve it. Currently it is used to fund an annual award for the top graduate student seminar in each semester. The graduate students vote on this award and for 2012-2013 awards were made in Fall 2012 to **Douglas Hammerstroem** and in Spring 2013 to **Surendra Dawadi**.

The Barbara W. Brown Fellowship for Women in Chemistry is designated for women students over the age of 24 and **Barbara (Willis) Brown** (BA 1984) established it in 2000. The 2012-2013 fellowship went to **Anna Thibaut**. This is the only fund that is dedicated to the support of women students and you can designate your contribution to this fund if you wish.

The Eric G. Brunngraber Undergraduate Research Fellowship has existed since the late 1980s but was endowed more recently by the family of the late Dr. Eric G. Brunngraber, and we are delighted that they continue to add to it. The award is for undergraduate research. If you are interested in supporting this important aspect of the department's activities, you may designate your contributions to this fund. For 2013-14 the fellowship went to **Ahmed Mohammed**.

The William and Erma Cooke Memorial Scholarship is the major endowed award in the Department, was one of the first such endowments on the campus. It is designed primarily for sophomores. It was endowed by Dr. Dorothy C. Cooke, in honor of her parents William and Erma Cooke, in 1989. Dorothy received her BS degree in chemistry in 1971 and is now a physician. She was always most appreciative of the support she got from the department and especially when she did research with Dave Garin. The Scholarship has provided support for two students annually now since 1992. In 2013-2014 fellowships went to **Dmitry Krits** and **Melissa Thornton**.

The Linda and Michael Finkes Chemistry Scholarship is relatively new and was endowed through the generous contribution of **Linda** BA political science 1970 and **Michael J. Finkes** BS 1973, MS 1978. The recipient for 2013-14 was **Eleni Goranitis**.

Other Departmental Student Awards

Undergraduate

The award for the **Outstanding Student in Introductory Chemistry** went to **Matthew Fiess** who received a certificate and the *Handbook of Chemistry and Physics* from the Chemical

Rubber Company. The Award to the Outstanding Student in Sophomore Chemistry went to **Melissa Thornton**, the American Chemical Society Award for Analytical Chemistry went to **Erin Martin** and **Matthew Queensen** who received a certificate and a one-year subscription to *Analytical Chemistry* and the ACS Awards in both **Inorganic** and **Organic Chemistry** went to **Erin Martin**. The American Chemical Society-St. Louis Section's Outstanding Junior Award went to **Hung Nguyen**. The award was presented at the Annual ACS High School and College Awards Night in April. **Erin Martin** received the **Alan F. Berndt Outstanding Senior Award** and the **American Institute of Chemists-Student Award Certificate**. The 2012-13 Undergraduate Chemistry Aid to Education Awards were given **Dmitry Krits**; **Michael Mannino**; **Howard Mayes**; **Ahmed Mohamed**; **Hung Nguyen**; **Daniel Simmons**; **David Switzer** and **Anna Thibaut**. Finally a Certificate of Commendation for Outstanding Service was presented to **Erin Lowry**, **Hung Nguyen** and **Laura Perry**.

Graduate

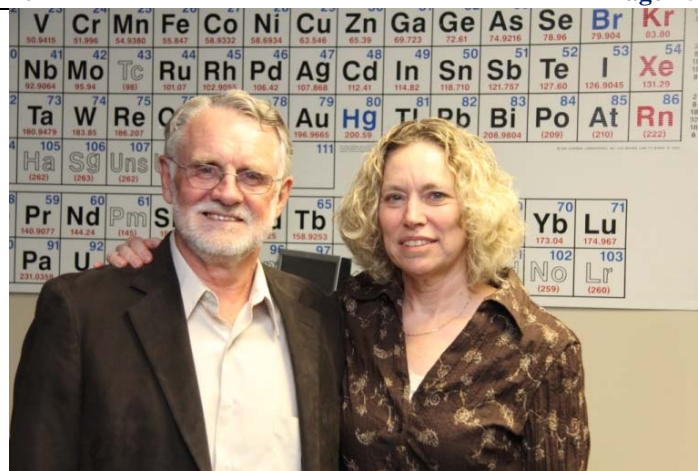
The 2012-13 Graduate Student Research Award went to **Jagodige Prithika Yasomanee** and the 2012-13 Graduate Teaching Assistant Award in Memory of Jack Coombs was awarded to **Paul Gontarz** and **Nicholas Bartol** was honored with the Outstanding MS Student Award. **Allan Alla**, **Teresa Bandrowsky** and **Jagodige Prithika Yasomanee** were winners in the 2012-13 Graduate School Fair Research Poster Competition and a 2012-13 Graduate School Dissertation Fellowship was awarded to **Jagodige Prithika Yasomanee**.

Distinguished Alumni Lecture

The 26th Annual Lecture was presented by **Kim Gorman**, BA 1993. Kim did research here with Wes Harris, and then spent three years assisting on the Human Genome Project at the Washington University School of Medicine, prior to joining the St. Louis City Crime Lab, where the Chief Criminalist was **Harold R. Messler**, BS 1970. There she was hired to work on the new technique PCR (genetic finger printing using DNA) and with the knowledge she gained, she struck out on her own after three years and founded *Paternity Testing Corporation* in Columbia, MO where she is President. The lecture for 2014 will be given on Monday May 5 by **Dr. Katherine M. Block** BS 2001 who is a Senior Scientist at the Novartis Clinical Trial Center of Excellence at *Genoptix Medical Laboratory*, which is part of the Novartis Company, in San Diego.

Editor's Column (Lawrence Barton)

2014 promises to be an exciting year. Chancellor George told me recently that there could be \$121 million of construction on campus during the year. The long-awaited Benton/Stadler renovation along with a Wellness Center, a College of Business Building and a Nursing/Optomety Building on Natural Bridge Road as the great Streets initiative begins will be very encouraging for us all. Writing the UMSL CHEMIST continues to be a joy for me because it assures I will stay in touch with many of you. I hope more of you will stay in touch in the future so please don't hesitate to e-mail me, call me or write to me.



Kim Gorman BA 1993, the 26th Annual Distinguished Alumni Lecturer with Dr. Barton

Department History 1995 – 2000

The period between 1995 and 2000 was one of change for the campus and the department although there wasn't quite as much change as we had hoped. Throughout that period references were made to the "upcoming" renovation of the undergraduate teaching laboratories in Benton and Stadler Halls although that never came about. The Clay Center for (Molecular Electronics) Nanoscience was opened, plans were drawn for the construction of a new student center and the final fundraising for a performing arts center was underway. In the department even more striking changes took place. We saw major retirements and personnel changes, a change in leadership in the department and the development of plans to place greater emphasis on biochemistry.

A steering committee helped plan and open what is now the Center for Nanoscience, consisting of physicists Feldman and Fraundorf, along with Bill Welsh, Jim O'Brien and me as Vice Chair to Feldman. Building equipment funds helped purchase research equipment for all those individuals and also Anderson, Brammer, Chickos, Harris, Corey and Stine. We were also able to use the funds as matches for major instrumentation grants helping augment our NMR and XRD Facilities. Elsewhere on the campus, the Master Plan was proceeding and Cardinal Newman College and Mount Providence School were purchased as were the apartments on the hill on the east side of Florissant Road. We began acquiring the rest of the Daughters of Charity property adjacent to the south campus until all that remained that was not part of the campus was the spectacular St. Vincent's Home. Close to home the West drive parking garage was constructed and West drive itself was realigned so as to intersect Natural Bridge Road opposite Clearview in Belnor.

Changes in the personalities in the department abounded. Charlie Armbruster announced he would be leaving the University in 1998 to finally retire to Orlando, FL so his long-awaited replacement, Don Becker was hired for the 1998 -1999 academic year. Charlie, who chose to be designated an Adjunct Professor rather than an Emeritus Professor when he retired in 1992 (he didn't want students to think he had retired) had been teaching here for 37 years. Becker was the first biochemist to serve as a regular faculty member here. I had announced earlier that 1997-98 would be my last year as department chair and we

selected Gordon Anderson to take the helm, quite early on so the transition from my 18-year term would be smoother. At the same time that Charlie left us Bob Stearns who had taught introductory and analytical chemistry for us since 1966 also retired. Bob Murray retired at the end of 1999 after 31 years here and Dave Garin took early retirement in March 1999. He came to UMSL with me in 1966! Dave Larsen, one of the true old-timers in the department, took advantage of an early retirement initiative in 2000.

We also experienced much change in the office staff around this time. Betty Eshbaugh, our very long time office head retired after 34 years with the University in December 1997. Her responsibilities were assumed by Lisa Hoguet who became our administrative Secretary in January 1998. The gap left by Betty was not filled until April 1998 when Joanne Jolly, daughter of a student whom I taught in the early 1970s joined the staff. Poor Gordon Anderson, our new chair saw lots of turnover in the office in his first couple of years. Joann didn't last long and resigned in August 1999 to be replaced by Glenda Gillespie. Lisa had a baby girl Tara and took a leave of absence but decided to resign to give her child full attention in August 1999. She was replaced by Nicole Jacobs who became the head secretary but she didn't like the long commute and she too left after nine months to be replaced by Charmaine Henson. At the end of 1999 Ronda Schneider retired and she and her husband Mike moved back to Quincy, IL, where they had met two decades earlier. Randa was replaced by Pat Mayberry.



*Doctoral graduates in August with their advisors: Dr. Alexei Demchenko with **Scott Hasty** BS 2008; Dr. Chris Spilling with **Surendra Dawadi**, Dr. Eike Bauer with **Pushkar Shejwalkar** and Dr. Janet Wilking BA 1985 with **J. B. Carroll** BS 2008*

Other staff changes took place during this period but first I mention an event that shocked the department and the College of Arts and Sciences. Chancellor Touhill in April 1997 fired Terry Jones who was Dean of the College. This was a great disappointment to us because we believed we had been treated quite fairly by Terry. However his temporary replacement, Martin Sage, was also very good for the department. Ken Owens who had become our full-time glass blower in July 1997 was put on hard money (made permanent) in late spring 1998 as was John Gutweiler who had been teaching for us since 1972. Also Martin put through the paperwork for Dave Garin's retirement so I could be involved in signing off for my office mate from 1966! Frank May joined us from Monsanto as a Research Investigator.

He brought with him an X-ray Powder Diffractometer and he ran powder patterns of research samples, for the undergraduate inorganic laboratory and also for external users. He is still with us today! In 1999 Chair Anderson promoted Joe Kramer, Electronics Technician to Spectrometrist, thereby assigning him to the Mass Spec Lab. A proposal written by Rudi Winter and me had been funded by the NSF to purchase a JOEL M-Station high resolution mass spectrometer in 1997 and it had been installed in 1998. Joe married **Donna Palmer** our store – room manager in May 1996. Donna who had been with us since 1989, obtained a BA in chemistry in 1999. In 2000 she was promoted to Coordinator of Laboratory Operations. In fact she was on maternity leave at the time; their daughter Jessica was born in April 2000. Joe's new role led to the expansion of Gordon Kerschmann's role to service most of the electronics equipment in the department. Originally his role was to service the NMR spectrometers. This essentially coincided with the upgrade of the Varian XL-300 Spectrometer, made possible by a grant from the National Science Foundation, to a Bruker Avance 300 spectrometer, equipped with a four-nucleus probe (^1H , ^{13}C , ^{19}F , and ^{31}P). This became the department workhorse instrument and is used by students to this day. Perhaps the most notable event involving the staff during this period was the presentation of the ACS St. Louis Section *Outstanding Chemical Technician Award*, in 1999 to Ted Windsor, our beloved machinist/jack of all trades.

Chris Pigge, a synthetic organic chemist had joined us in 1996 from Wayne State U where he was a postdoctoral Fellow with James Rigby. We had begun to talk about expanding our offerings in biochemistry and developing closer ties with the biology department. These developments would add to our already growing interaction with the physics department though the Center for Molecular Electronics. When Don Becker joined us from the University of Nebraska in 1998 the biochemistry area took off in the department. In addition, in the four years he was with us he built a sizable research group consisting of graduate students and undergraduates and was successful in generating external funds, publishing his work and developing



***Erin T. Martin**, BS, **Matthew Queensen**, BS at the 2012-13 Awards Ceremony with Dr. Spilling. Erin won the ACS Awards for both Organic and Inorganic Chemistry and shared the ACS award for Analytical chemistry with Matthew. Erin also won the Alan F. Berndt Senior Award and is now doing graduate work at the university of Indiana. Matthew is in our program and works with Dr. Bauer*

external collaborations. In 1999 we established the biochemistry option for the BS degree, originally proposed by Wes Harris in 1997. Chris Spilling had received tenure in 1995 and Brammer, O'Brien and Stine were promoted in 1996. We made the decision to try to establish an endowed lecture in honor of Bob Murray in 1995. Fund raising began for the Robert W. Murray Lectureship and quite quickly we raised almost \$4,000 from the faculty. This would go on to be a very successful initiative. The first lecture was given in 1998 by Bob himself and Chris Foote, from UCLA 1995. Fund raising began for the Robert W. Murray Lectureship and quite quickly we raised almost \$4,000 from the faculty. This would go on to be a very successful initiative. The first lecture was given in 1998 by Bob himself and Chris Foote, from UCLA gave the second one in 1999. At the end of the 1990s Zhi Xu was recommended for tenure and promotion and it was granted in 2000.

The summer of 1998 had several events recognizing change in the department. We honored Charlie Armbruster as he left for Florida at the Alumni Center in August 1998 and later in February 1999 a nice reception was held to recognize my 18 years as department chair. Kathy Osborn, Vice Chancellor for University Relations was involved in the latter. She had been very helpful and supportive of our activities in alumni relations. I was disappointed when she left the following year to become the Executive Director of the St. Louis Business Council, I thought it was due to the fact that her work in raising funds for endowed chairs was not generally recognized by the faculty. Early in 1999 we established the Lawrence Barton Scholarship. Within a short time the minimum \$10K, necessary to endow it was raised and it has done very well since then, thanks principally to you, our alumni. Our faculty colleagues received several honors during this period. Rudi Winter received the *Chancellors Award for Outstanding Teaching* in 1998 and Bill Welsh won the *ACS St. Louis Section Award* in 1999 and Gordon Anderson would win it in 2000. Rudi's award led to his receipt of the *Governor's Award for Excellence in Teaching*.

In November 1998, I was appointed Acting Director of the Center for Molecular Electronics. Very soon after that the University entered into an agreement with the St. Louis Plant Science Center. They were building their facility on Olive Boulevard near the Monsanto campus. They needed somewhere to house, temporarily ILTAB, the international Laboratory for Agricultural Biotechnology. Part of that involved adaptation of one of the labs in the Center in order to allow biochemistry research. This would prove to be a real bonus for the department – perhaps the only bonus from that interaction – as two years later we were able to recruit Dr. Cindy Dupureur and have a laboratory ready for her to move into. At the time funds were very tight in the campus. I was even publishing the UMSL CHEMIST without color to cut costs! A bright spot appeared to be the promised renovation of Benton and Stadler Halls. Before I stepped down as chair I had participated in twice on committees advising a group of architects on the redesign of the building(s). In 1998 the go ahead was withdrawn although I believe \$4.5million had been appropriated in the legislature but not released. The next year those funds were moved to the appropriation that would eventually fund part of the construction of the Touhill Performing Arts Center. I received a call from then-Senator Wayne Goode apologizing for the mistake but by that time the damage was done. There would be two more committees set up for the design of the building, one in 2009 and

one quite recently. Ground-breaking finally occurred in December 2013! We did receive about \$2.5million the following year (1999) and those funds were used for some internal renovations, primarily for the Gordon Anderson laboratory which moved to the third floor of the Research Building.

We continued to be served very well by our alumni, both in contributions to scholarship and in other ways. An alumnus of the School of Business Administration Robert Harris who was with Sigma Aldrich provided funds to support a minority chemistry student and the Harris Fellowship served our students well. At the beginning of the decade **Bob Lamberg** BS 1972 funded the *Robert L. Lamberg Scholarship*, the last one went to **James Laird** BA 2000 in 1998. Also at the end of this period **Barbara Brown** BA 1984 informed us that she wanted to establish a scholarship, *Women in Chemistry* in the department. Both that one and the *Lawrence Barton Scholarship* would be first awarded in 2000. The winter 1998 UM-St. Louis Magazine featured five alumni who are physicians and among them were **Phil Asaro** BS 1977, **Louis Crepps** BS 1971 and **Bob Lamberg** BS 1972. Alumni were prominent in the ACS St. Louis Section during the period. **Pauline Bellavance** PhD 1978 served as treasurer for four years and entered the Section Chair succession in 1999. **Greg Wall** BA 1974 had served as chair in 1996. **Donna Friedman** PhD 1980 had been a National Councilor since 1994

After Charlie Armbruster left in 1998, we didn't immediately solve the problem of who would handle the freshman chemistry load in the future but chose a temporary solution when **Dee (Lange) Bianca** BS 1983, PhD 1991 taught the course for a year (1998-99). Other visits by alumni during this involved the Distinguished Alumni Lectures when **Robert Lamberg** (BS 1972) in 1996, **Dawn Shiang** (BA 1983) in 1997, **Karl Seper** (BS 1982) in 1998, and **Mike Ennis** (BS 1978) in 1999 were honored by the department.



Paul Gontarz, graduate student with Dr. Wong at the Graduate Student Research Symposium in the spring. Paul won the Jack L. Coombs Outstanding Graduate Teaching Assistant Award for 2012-13

Not only were our alumni very generous during this period, others were most generous too. We had established the *Eric G. Brunngreber Fellowship* in 1988 but the funds ran out in 1999 and we were unable to make an award. However the family decided to endow the Fellowship in 2000 and it continues today

as the only departmental fellowship devoted to undergraduate research. The *Mallinckrodt Fellowship*, which had been funded in 1987, was awarded to graduate students through 2002. This generosity would continue and grow and during the next several years, generous contributions from alumni allowed us to award several scholarship and the details will be given in the next installment.



Artist's rendition of the Wellness Center under construction on campus.

Thanks to our Generous Contributors 2013

Below we list the individuals, chemistry alumni and friends who made contributions to the department in 2013 and to the memorial funds in honor of Robert Murray, Tom Jones and Eric and Lois Brunngraber. The list and the amount we raised, especially during these difficult times, are both very impressive and we are most grateful for your support. If we missed out your name, we apologize and hope you understand that we are fallible. Recent gifts will appear next year.

Abbott Laboratories Fund
 Nicholas Adelstein
 S. Massoud and Elizabeth A. Amin
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Acknowledgments.

I wish to thank to **Drs. Eike Bauer, Jim O'Brien, Dan Younger** and the Department of Media and Marketing for providing photographs.

UM-St. Louis Chemistry Alumni Fund

Enclosed is my contribution of \$ _____ Yes I work for a matching gift corporation.

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 Contact me; I have ideas for a new scholarship/fellowship or other fund _____
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Please respond to this questionnaire. We have mentioned previously how important it is for us to keep track of what you are doing, both professionally and personally.

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