The Case Chemist

NEWS FROM CASE WESTERN RESERVE UNIVERSITY'S DEPARTMENT OF CHEMISTRY

Mary Barkley, Department Chair

From the Corner Office

Capital Campaign

During Alumni Weekend in October, the university launched a $1 billion fundraising campaign, "Forward Thinking: The Campaign for Case Western Reserve University." Chaired by university trustee Frank Linsalata (CIT '63), this is the university's first capital campaign since 1995. President Barbara Snyder made the announcement at the BlueBash, a campus-wide celebration attended by 3,000 students, faculty, staff, alumni, and friends.

Of particular importance for the College of Arts and Sciences, Dean Cyrus Taylor announced a $20 million pledge from an anonymous donor to create an endowment for the natural sciences. All of the science departments are very grateful for this extraordinary commitment to the college. You can read Dean Taylor's reflections on this transformative gift at http://newartsci.case.edu/magazine/a-message-from-the-dean/.

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From the Corner Office

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University Financial Update

President Snyder continues her excellent stewardship of Case Western Reserve with renewed efforts to control costs, increase revenue, and strengthen our core mission – academic excellence. On the revenue side, the university raised $126.2 million in cash and pledges from alumni and friends in fiscal year 2010-11, breaking its all-time record by nearly $3 million and surpassing last year's total by more than $10 million. This exceptional fundraising success is a tribute to the amazing generosity of our alums and friends despite uncertain economic times. We thank you for your continuing investment in the university and in the Department of Chemistry.

Vice President for Research

Robert Miller, a renowned professor of Neurosciences and Vice Dean of Research in the School of Medicine, was appointed Vice President for Research. Although common at research universities, the VP for Research is a new position at Case Western Reserve. A priority for this position is to facilitate the submission of program-level grants with interdisciplinary teams drawn from multiple units of the university as well as from other institutions. Given the increasing tendency of funding agencies to support multi-investigator grants rather than traditional individual investigator grants, Bob Miller's leadership is a real benefit to our faculty. You can read more about Bob in The Daily at http://cwru-daily.com/news/?p=3033.

Chemical Biology Major

This past spring, our Undergraduate Affairs Committee, chaired by **Mike Kenney**, hammered out the details of our new BA degree in Chemical Biology. It is currently wending its way through the various university committees and will ultimately be submitted for approval by the Ohio Board of Regents. Although it is not official yet, I can give you a sneak preview of the new curriculum: In addition to one-year introductory chemistry, physics, and biology courses, chemical biology majors will take one-semester foundational courses and labs in organic chemistry, analytical chemistry, physical chemistry, and biochemistry. Our new chemical biology lab will be the first biochemistry lab course offered at the university, and we expect that many biochemistry majors as well as our chemical biology majors will enroll in it. The new one-semester foundational courses align us more closely with American Chemical Society guidelines for the undergraduate major. Chemical biology majors will also take two advanced chemistry courses as electives.

Safe and Sustainable Chemistry

You may have heard through the news about serious accidents in

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chemistry laboratories at other research universities. These incidents, while rare, are a wake-up call to everyone who teaches and works in labs and prompted us to renew the focus on safety. We formed a departmental safety committee that inspects all of our research and teaching labs several times per year and makes suggestions for improvement. **Greg Tochtrop** is working with the Department of Occupational and Environmental Safety on campus to adapt the Department of Energy guidelines for safe handling of high-energy compounds for our labs.

Special Grants

Through the Provost's Interdisciplinary Alliance Investment Grants program, **Anna Samia** received funding from the Institute of Advanced Materials (IAM@Case) for image-guided biomaterials development. In addition, **Adriana Popa**, a second-year graduate student in Anna's research group, was awarded a NASA Fellowship.

Carlos Crespo received an American Chemical Society Project SEED grant for summer research internships

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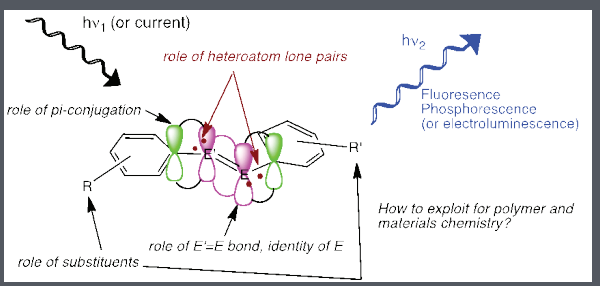
Faculty Spotlight: John Protasiewicz

In his project "Conjugated Inorganic-Organic Materials Possessing Unique Electronic and Optical Properties," recently funded by the Chemical Synthesis Program of NSF's Chemistry Division, **John D. Protasiewicz** is exploring the development of new types of conjugated molecules and polymers. Some types of these technologically important materials, most of them based solely on arrays of carbon-carbon double or triple bonds, have been known for some time. This project seeks to expand the range of conjugated materials to include other double bonds, especially those involving the Group-15 elements phosphorus, arsenic, antimony, and bismuth. In addition to developing new synthetic methods to achieve these materials, John's lab will undertake photochemical studies, often in collaboration with former colleague M. Cather Simpson (now at the University of New Zealand, Auckland) to explore their properties. While contributing to the basic understanding of conjugated materials chemistry, this project will also have significant impacts on fields and applications such as sensor technology, organic lightemitting diodes, solar photovoltaics, molecular electronics, and other areas where energy (in the form of light or electricity) meets molecules and polymers.



From the Corner Office

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for economically disadvantaged high school students. Three high school students from the Cleveland area spent eight weeks doing chemistry experiments in our labs. The College of Arts and Sciences provided matching funds in support of their research.

Comings/Goings

Tom Robilotto (PhD '10) departed at the end of the summer term to begin postdoctoral studies at Georgia Tech with Joseph Sadighi. **Stephanie Ohtola** (CWR '10) joined the office staff as a department assistant and continues the tradition of providing outstanding service to faculty, staff, students, and visitors.

Faculty Honors and Awards

Greg Tochtrop was appointed to the Frank Hovorka Assistant Professorship in Chemistry.

Geneviève Sauvé received a prestigious 2012 CAREER award from the National Science Foundation for her work on developing n-type low bandgap conjugated macromolecules. Geneviève earned her PhD at the California Institute of Technology, where she worked under Nathan S. Lewis on dye sensitization of nanocrystalline titanium dioxide. She then served as a senior development chemist at PPG Industries in Pittsburgh. In 2002, Geneviève joined Richard D. McCullough's group at Carnegie Mellon University as a postdoctoral fellow and then research associate. She became an assistant professor of chemistry at CWRU in 2009.

Geneviève Sauvé

Geneviève's research focuses on developing new conjugated polymers with interesting opto-electronic properties for organic solar cell applications. To better evaluate her new materials, she integrates them into solar cells using the shared facilities at the new Materials for Opto/Electronic Research and Education (MORE) Center. Geneviève co-planned the MORE Center with Kenneth Singer in the physics department and contributed a large part of her start-up money towards equipment to make and characterize organic solar cells. To accomplish her research goals, Geneviève actively collaborates

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with faculty in the Departments of Physics, Macromolecular Science and Engineering, and Materials Science and Engineering. She has also received a 2012 Glennan Fellowship from the University Center for Innovation in Teaching and Education (UCITE) to develop laboratories for her popular new course, "Solar Energy Conversion," which is offered to both undergraduate and graduate students. Parts of these laboratories will also be adapted for use in our undergraduate laboratories to further expand opportunities for engaging and educating students about solar energy conversion.

Alumni Updates

James W. Altschuld, BA '61, a Professor Emeritus from the Ohio State University, is still writing and editing in a variety of fields. Since retiring he is enjoying time with his wife, sons, and grandchildren.

Jolene Weinstein Appleman, BS '67, recently retired from Pfizer Inc. and is teaching pharmaceutical patent law at Fordham Law School.

Mike Bada, BS '94, is currently a research associate at the University of Colorado Anschutz Medical Campus, where he performs bioinformatics research. His lab focuses on knowledge representation and reasoning, information retrieval and extraction, and natural-language processing.

Michael Bokoch, BA '03, completed his biophysics PhD at Stanford in 2010, with a focus on membrane protein NMR. His thesis work was published in *Nature*. He has since graduated from medical school and has started residency training in anesthesiology at UC San Francisco.

John Brinkley, PhD '70, retired as Director of Research, Particles Division, at Thermo Fisher Scientific. He is now working as a volunteer in various watershed projects and environmental preservation.

A. Michael Broennle, BA '63, retired as a Senior Anesthesiologist at the Children's Hospital of Philadelphia after 37 years engaged in clinical practice and in teaching residents and fellows.

Dominick Casadonte, BS '77, recently stepped down after five years as Chair of the Department of Chemistry and Biochemistry at Texas Tech.

Paul R. Casner, ADL '71, is still in the Department of Internal Medicine at Texas Tech University Health Services Center in El Paso, TX. He is currently a Professor of Medicine and Chief of the Division of Geriatrics.

Martin Deetz, BA '96, is working in Spring House, PA as an applications development leader for Dow Water & Process Solutions. He is helping to provide clean and sustainable water across the globe.

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We want to hear from you!

We are proud of the accomplishments of our faculty, students and alumni. Let us know about job changes, awards, honors and life events. Please email your news and contact information updates to **contact-cas@cwru.edu** or use the enclosed envelope.

Alumni Updates

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Virginia Amelia Mramor Erdy, BA '59, is retired. Formerly a chemist for Sohio and a high school chemistry and physics teacher, she also tutored community college students.

Brian P. Gersh, BA '76, visited our department in October. He is a principal consultant for Charles River Associates in Boston, and expressed an interest in talking with students who might consider a career in consulting.

Michael Guttman, MS '68, retired after 38 years of teaching chemistry at Miami-Dade College.

Meredith Earl (Hampton), BS '05, finished her PhD from the Inorganic Division at the University of North Carolina. She accepted a position at Liquidia Technologies working on vaccines research.

James A. Hathaway, BA '55, is retired. He enjoys traveling, and spends part of his winters in Costa Rica. He plays tennis, reads, and tutors students in math and chemistry.

Joseph A. Helpern, BA '77, holds an endowed chair in brain imaging at the Medical University of South Carolina, where he is a Professor of Radiology and Neuroscience, Vice Chairman for Radiology Research, and Director of the Center for Biomedical Imaging. He currently has two NIH grants focused on using MRI to study the biophysics of brain disease, including Alzheimer's Disease and ADHD.

Scott A. Iliff, BA '89, has a dental practice in Amherst, Ohio.

Marjorie Oberlin Kniola, BA '61, retired as Vice President in Information Technology from a large insurance company.

Christ A. Koconis, BS '58, is retired. He plays golf, travels, and volunteers for his local Habitat for Humanity.

Fred J. Kohl, BS '63 (CIT), PhD '68 (CWRU), now serves as NASA Project Manager for the International Space Station (ISS) Life and Physical Sciences research project.

Sarah Langhorst, BA '07, earned her DDS from the University of Michigan School of Dentistry, and has started a residency in general dentistry in Ann Arbor.

Marianne Lalonde, BS '09, is co-advised by Joe Hupp and Karl Scheidt at the Northwestern University Department of Chemistry. She is studying applications and synthesis of porous materials. Fellow Case alums in her PhD program include **Brian Jones**, BS '08, **Eliza Zielazinski**, BS '07, **Jennifer Clay**, BA '10, and **Steve Wobser**, BS '07.

Syed Mahmood, BS '04, BA '04, MPH '07, MD '10, is now in Internal Medicine at Harvard Medical School's Massachusetts General Hospital. Syed is enjoying Boston but still misses Cleveland.

Tony Masri, BA '03, returned to Cleveland for an internship in internal medicine at Metro Health Center, then joined the University Hospitals neurology residency program. He was the chief neurology resident until June. In July he began a sleep medicine fellowship at Stanford.

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John A. Miceli, BA '64, MA '67, PhD '70, retired after 20 years of chemical regulatory responsibility, involving EPA, OSHA, DOT, NRC, and FDA guidelines.

David Mog, BS '64, thoroughly enjoyed his first year of retirement with trips to China, Tibet, New Zealand, and Hawaii. He volunteers as a tour guide for an environmentally-friendly school building. He is looking forward to seeing many classmates at his 50th reunion in 2014.

Amish Pandya, BA '97, recently moved to the Greater Chicago area, where he has a practice in general dentistry.

Philip E. Rakita, BS '66, was recently elected to the Board of Directors of the Fulbright Academy of Science & Technology. He continues as Managing Director of Armour Associates, Ltd., and divides his time between western North Carolina and Paris, France.

Arnold L. Rheingold, BS '62, MS '63, won the 2012 ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry. Arnold has published an astonishing 2,100 papers on the structures of compounds. Overall he has published papers with 4,200 different coauthors including Nobel Laureates Roald Hoffmann, Richard Schrock and Richard Heck. A faculty member at the University of California, San Diego, Arnold has served as chair of the ACS Division of Inorganic Chemistry, on the

Arnold Rheingold
source: C&EN

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2012 Distinguished Alum

Pauline Ho, BA, Flora Stone Mather '69, was the recipient of the 2011 Distinguished Alumna Award. Pauline is an accomplished senior executive in pharmaceuticals and biotechnology. She was Vice President of Strategic Marketing, Pharmaceuticals Group, with Johnson & Johnson from 2003 to 2010. She retired in 2010 after 41 years of professional life, of which 37 were with J & J. In her award talk, she emphasized the success one can achieve with a good education as a foundation.

Pauline Ho

Alumni Updates

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editorial advisory boards of *Inorganic Chemistry* and *Organometallic Chemistry* and on the ACS Joint Board-Council Committee on Chemical Abstracts Service.

Emanuel M. Schreiber, BS '76, works in the Genomics and Proteomics Core Laboratories at the University of Pittsburgh, performing protein identifications using nanospray LC/MS.

Joseph T. Snodgrass, BS '80, is an Analytical Development Scientist at Vertex Pharmaceuticals. He works to deliver significant treatment advances to hepatitis C and cystic fibrosis patients.

Henry C. Stevens, MS '50, PhD '51, is chairing the Akron ACS Award and John Crano (PhD '62) Memorial Award committees. He also teaches basic chemistry courses at the University of Akron.

Richard Wanderman, BA '65, has a medical practice and is President of DCT Enterprises. He has also published a book of poetry.

Stephen G. Weber, BA '70, is a Professor of Chemistry and Clinical Translational Science at the University of Pittsburgh. He carries out research with graduates, undergraduates, and postdocs in bioanalytical and materials chemistry. He also spends time playing folk/blues on acoustic guitar and upright bass.

In Memoriam

Charles H. Springer	MS '50, PhD '56
Birgit Jacobson	MS '58

Support the Chemistry Department

You can contribute to our success by making a gift to the department. Your gift will allow us to continue to offer opportunities for our students to excel academically and to conduct cutting-edge research. Please return your gift in the enclosed envelope or give online at **giving.case.edu**. Thank you.

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