

Contents

- *Letter from Chair* ... 1
- *Fellowships* 1
- *Faculty news* 2
- *Student news* 3
- *Department news* ... 4



Connect with the department!

Click images below to follow us on Facebook, Twitter and LinkedIn



Alumni - send us your updates and news:

chemalum@mail.cm.utexas.edu

Make a Gift

Letter from the Chair

It has been a remarkable year in the department of Chemistry & Biochemistry, with our faculty members being recognized by Presidents and Emperors. In February, the bright lights of the world's scientific community were shining on two of our own. Dr. Al Bard was awarded the National Medal of Science by President Obama in a White House ceremony. The same week, it was announced that Grant Willson was the winner of this year's Japan Prize. Earlier in the year Dr. Willson was recognized as the UT Austin Inventor of the year, another noteworthy achievement on our campus. A number of other faculty have been

recognized with national and international awards, including university and state of Texas level teaching awards. See the [department web page](#) for a full list.

In the midst of these accolades, important changes are taking place. As part of a significant reorganization of the biological sciences at UT, the biochemistry faculty are going to reside in a brand new department called the Department of Molecular Biosciences. Fortunately, they will not be physically moving, so we will still maintain close scientific and academic ties with our dear friends and colleagues. The result is that by September 1, 2013, we will once again be



Prof. Brent Iverson
chemchair@cm.utexas.edu

called the Department of Chemistry.

Finally, I am extraordinarily pleased to announce that we have been able to recruit two of the most sought-after young chemists in the country to join our faculty. Dr. Sean Roberts, an experimental physical chemist, uses the tools of ultra-fast nonlinear spectroscopy to build a comprehensive picture
(Continued on page 4)

Focus on Giving

Richard Lagow Excellence Fund in Inorganic Chemistry

Established in the memory of Prof. Richard Lagow, this endowment enhances activities and support for students to further excellence in the study of Inorganic Chemistry, primarily in the form of invited lectures.

Mallet Library

Located in Welch, the Mallet Chemistry Library serves the chemical research needs of our faculty and students. Mallet Library has two endowment funds that are used to purchase information in the chemical sciences. First, the Boggs Chemistry

Library Endowment, established in 1998 by Prof. James E. and Mrs. Ruth Ann Boggs, supports the enhancement of library resources. The second, the A. E. Skinner Chemistry Library Endowment was established in 1985 in honor of longtime Mallet Librarian Aubrey Skinner and supports acquisitions in the area of chemistry.

(Continued on page 4)

Faculty News

Professor C. Grant Willson Awarded Japan Prize



Photo from japanprize.jp

Dr. Grant Willson received the Japan Prize, an international award similar to the Nobel Prize, for his development of a process that is now used to manufacture nearly all of the microprocessors and memory chips in the world. The prize includes certificate of merit, a prize medal, and a cash prize

of 50 million yen (approx. US\$650,000); Dr. Willson shares the prize with colleague Dr. Jean M.J. Fréchet, who is now vice president for research and professor of chemical science at King Abdullah University in Saudi Arabia.

The Japan Prize Presentation Ceremony and Banquet, with the emperor of Japan in attendance, took place in Tokyo on Wednesday, April 24, 2013.

Professor Allen Bard Awarded National Medal of Science



Photo by Ryan K Morris/National Science & Technology Medals Foundation

On February 1st, Dr. Allen Bard received the National Medal of Science at a White House ceremony for his contributions to electrochemistry. The National Medal of Science was created in 1959 and is

administered for the White House by the National Science Foundation. Awarded annually, the Medal recognizes individuals who have made outstanding contributions to science and engineering.

Two of the twelve recipients were from UT Austin, the only institution with multiple awardees; Dr. John Goodenough of Cockrell School of Engineering is the other recipient. On February 12, the UT Tower was lit in honor of Dr. Bard and Dr. Goodenough's achievement.

Class Action Suit To Fund the Analysis of Wine Varietals

The Supramolecular Sensors Stream, run by Professor Eric Anslyn as part of the Freshman Research Initiative (FRI) program, has been the beneficiary of a recent class action lawsuit. This undergraduate laboratory creates array-based sensing protocols to classify and potentially validate the authenticity of red wine varietals. After publication of part of this work in the journal *Chemical Science*, Anslyn's work was written up in the popular press in magazines such as *Wine Spectator*, and *Wines and Vines*. These non-scientific articles attracted a lot of attention and, unbeknownst to Anslyn, caught the eye of some wine consumers in Northern California.



France takes the claim of a wine varietal very seriously, as evidenced by the current incarceration of individuals that sold Gamey grapes to Gallo and Constellation wines under the name of Pinot Noir grapes. These two wine distributors were subsequently sued by consumers in Northern California as part of a class action case.

(Continued on page 4)

More faculty news

- **David Vanden Bout** and **Dmitrii Makarov** promoted to full professors
- **Mike Rose**, **Ilya Finkelstein** and **Andreas Matouschek** joined the department in Fall 2012
- **Christopher Bielawski** named to newly created Welch Regents Chair in Chemistry

Student News

Chris Bates wins Ben Streetman Prize

Congratulations to graduate student Chris Bates of the Willson Group on winning the Ben Streetman Prize. The award, a University-wide prize, is given each year for outstanding research by a graduate student in electronic and photonic materials and devices. Former students of Dean Ben G. Streetman created the award in his honor. Chris is the first chemist to have won this award since it was established in 2001. The award honored his work on block copolymers for lithographic applications. He received a certificate and a cash prize of \$1000.00 and presented an award address at Microelectronic Research Center. The award was presented by Dean Emeritus Ben Streetman.

The Ben Streetman Prize was established by the Board of Regents of The University of Texas System on May 29, 2001, for the benefit of the Cockrell School of Engineering. Gift funds were provided by alumni and friends of the university. The endowment honors Dean Ben G. Streetman of Austin, Texas a 1966 graduate of The UT Austin Cockrell School of Engineering.

Graduate Student Invited to Lindau Nobel Laureate Meeting

Jon Moerdyk, a graduate student in Professor Christopher Bielawski's research group, received an exclusive invitation to attend the 63rd Lindau Nobel Laureate Meeting dedicated to Chemistry in Lindau, Germany this summer.

Jon will have the opportunity to listen to and interact with an outstanding group of peer researchers as well as 37 Nobel Laureates from around the globe. "I really feel very blessed and am immensely honored to be selected to attend the Nobel meeting in Lindau, Germany this summer. I believe the Nobel meeting is a once in a lifetime opportunity to interact with some of the most recognized members of the scientific community as well as forge connections and share experiences with peer researchers from around the globe," says Jon.

We congratulate Jon on his selection to participate in this prestigious event.

Stellar Student Spotlight: Jason Yoo

Background and Interests: I was born in New York, however, I spent most of my life in South Korea. When I was 11 years old, I went to New Zealand to study English for 5 years so my accent is a total mixture. When I was young, I wanted to be a pilot just because of the cool sunglasses and the well-fitted uniform. I started to find true interest in science when I was in 5th grade after a science camp. Since then, my interest in science deepened and I decided to major in Chemistry.

Describe your research project: The research that I am currently working on is detection of single particles in low concentration. I am using a magnet to enrich the magnetic beads within the microfluidic channel and using electrochemical detection to detect them. We can either use insulating particles to block the mass transfer of redox species or use catalytic nanoparticles to enhance the signal from the reaction. Use of permanent magnet is a great advantage because the magnetic strength is very high. Also, there is no need for complicating setups. This research is fascinating because it allows us to detect the presence of particles even in a very low concentration and this technique can be



applied to ultra-sensitive biosensors.

Plans for the future: I am planning on going to graduate school to continue my passion for research. However, I want to experience as many fields of science as possible before I choose which one I want to be part of.

Thoughts about the department, UT and Austin: The main reason I transferred to UT is because there is so much you can do here. If you have the willingness and passion, the opportunities are all over the campus. The department of chemistry has been fabulous in providing me with the resources and kept me motivated. UT is not only large in size but also dense in quality. I fear that I might not want to graduate until I have experienced everything I can.

Alumni! Submit your news to chemalum@cm.mail.utexas.edu.

If you permit, the updates will be printed in the next issue. Please include your full name and graduation year.

Department News

(Chair, Continued from page 1)

of the interfacial structure and dynamics of nanoscale materials. We continue to be challenged by a lack of diversity among our faculty. For this reason I am especially pleased to report that we have also recruited Dr. Emily Que. Her research spans the fields of bioinorganic chemistry and chemical biology, centered on the development of coordination chemistry approaches for studying cancer and reproductive biology.

Mallet Library Adds 100,000th Volume

The Mallet Library is a core asset of the Department and an invaluable resource for all researchers at UT Austin. Founded in the same year as the University, in 1883, it was one of the first priorities of UT's first faculty chairman, John W. Mallet. It has grown, moved, and evolved over the decades, but its mission to support research in the chemical sciences remains unchanged.

In 2012 the Mallet Library added the 100,000th volume to its collection, the largest of its kind in the U.S. Of course, this milestone doesn't reflect the huge number of digital resources that the Libraries make available to the UT community, including databases, electronic journals, and e-books that students and researchers use every day.

The Library's continued excellence would not be possible without the ongoing support of alumni and donors who have helped to build two [endowment funds](#), one established by Dr. and Mrs. Boggs, and the other in memory of longtime librarian Aubrey Skinner. All graduates understand how vital a robust information infrastructure is to success in scientific inquiry. So please consider a donation to a library endowment and help keep us on the path to our 200,000th volume.

Catch up on what's new in the world of chemical information via our [web site](#).

David Flaxbart, Librarian

Ian Riddington Appointed Interim Mass Spec Director

Following a nationwide search, Dr. Ian Riddington has been named the Interim Director of the Mass Spectrometry Facility. Dr. Riddington received his Ph.D. from the University of Sheffield and served as a Regional Service Manager for GB Scientific for 12 years. He joined the department's mass spec facility in 2009 as a research associate.

As interim director, Dr. Riddington will be responsible for overseeing daily operations and short term planning, as well as supervising facility research staff.

(Wine, continued from page 2)

As part of the settlement, Gallo and Constellation had to pay back consumers for the falsely labeled wines. Surprisingly, after the consumers sought their compensation, part of the remaining settlement money was granted to Anslyn to be used to further the UT Austin efforts into verifying a wine's varietal. Dr. Anslyn says "I received a phone call from an attorney in NYC one afternoon, and he explained to me the situation, and called my attention to a court document naming UT Austin and my own work as beneficiaries of the lawsuit. It's great, we have received funding without me having to do a thing!"



THE UNIVERSITY OF TEXAS AT AUSTIN
DEPARTMENT OF CHEMISTRY AND
BIOCHEMISTRY

105 E. 24th St. Stop A5300
Austin, TX 78712-1224

Phone: 512-471-3949

Fax: 512-471-6835

Website: www.cm.utexas.edu

(Giving, continued from page 1)

Dr. Bennie F. Walker Graduate Endowment

The Dr. Bennie F. Walker Graduate Endowment was established by the Board of Regents of The University of Texas System on June 7, 2012, to benefit The University of Texas College of Natural Sciences. Gift funds were provided by Bennie F. Walker, Ph.D. and support outstanding incoming graduate students.

To support the [Richard Lagow Excellence Fund in Inorganic Chemistry](#), the [Mallet Library](#), or the [Dr. Bennie F. Walker Endowment](#) follow any of the above links or click the "Give" button on the front page. You may also visit the [College of Natural Sciences](#) for more giving opportunities.