

**2015 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**April 27, 2015**

Tuesday April 28<sup>th</sup>                      *Faculty Lunch Seminar: David Harris*  
Tech K140  
12:00 – 1:00pm

*Charles D. Hurd Lectures: Marvin H. Caruthers*  
Tech LR3  
4:00 – 5:00pm

Wednesday April 29<sup>th</sup>:                *Charles D. Hurd Lectures: Marvin H. Caruthers*  
Tech LR3  
4:00 – 5:00pm

Friday May 1<sup>st</sup>:                         *Chemistry Colloquium: John Wright*  
Tech LR3  
4:00 – 5:00pm

**For full schedule, including Center events, please see the Department Calendar:**  
<http://www.chemistry.northwestern.edu/events/calendar.html>

**BIP**

Meets every Friday at 2:45pm in Tech K140

**Arrivals**

Jian Zhang joined the Odom Group

**Announcements**

**Kevin Zhao**, an undergraduate student in the Silverman group, won a poster presentation award at this year's Chicago Area Undergraduate Research Symposium (CAURS).

**The Innovation and New Ventures Office (INVO)** is piloting a new opportunity to help startups based on Northwestern technologies succeed at winning SBIR/STTR awards. Our first pilot program will take place in June 2015 on the Chicago campus and is open to those companies submitting SBIR/STTR applications to NIH for the September 2015 deadline. INVO has contracted an SBIR expert to provide one hour consulting sessions to a select number of applicants.

To be considered for this opportunity, please complete the [application](#) and email it to [Jeff Coney](#) by May 10, 2015.

## **Opportunities**

**University of Cambridge** invites applications for a PhD studentship to start in October 2015 to work in the Reisner group's Christian Doppler Laboratory at the University of Cambridge. The project will focus on developing the basic science for a chemical process that captures and stores the energy from sunlight in a chemical fuel by a process known as artificial photosynthesis. The student will work in a collaborative, international and multi-disciplinary research environment ranging from synthetic molecular and materials chemistry to spectroscopy, electrochemistry, photocatalysis and engineering. Further information about the work of the Reisner group and the Christian Doppler Laboratory is available at: [www.reisner.ch.cam.ac.uk/](http://www.reisner.ch.cam.ac.uk/)

Applicants should have (or expect to obtain) the equivalent of a UK first class honours degree (and preferably a Masters degree) in a scientific discipline that is relevant to the project. The studentship will cover tuition fees and an annual maintenance grant for EU nationals. Non-EU nationals will be considered only if they can cover the differential for overseas tuition fees.

Applications should include a cover letter, CV, detailed academic transcripts and the contact details for at least two academic referees, and should be sent by email to Mrs Inger Lomax, Reisner group administrator ([pa-reisner@ch.cam.ac.uk](mailto:pa-reisner@ch.cam.ac.uk)), to whom any informal enquiries can be addressed.

Please quote reference MA05730 in the subject line of your application and in any correspondence about this vacancy.

Closing date for this application: 5th May 2015

**University of Cambridge** Fixed-term: The funds for this post are available for 2 years in the first instance.

Applications are invited for a Postdoctoral Research Associate (PDRA) to work in the Reisner group's Christian Doppler Laboratory in the Department of Chemistry of the University of Cambridge. The project will focus on developing the basic science for a chemical process that captures and stores the energy from sunlight in a chemical fuel by a process known as artificial photosynthesis. The main task of the PDRA is to develop photo(electro)catalytic systems and to explore novel concepts for the solar conversion of CO<sub>2</sub> and H<sub>2</sub>O into fuels.

The PDRA should have strong experience in Catalysis, Synthetic Chemistry, Materials Chemistry, Electrochemistry, Photocatalysis and/or Device Engineering. The candidate should be ready to think outside of her/his formal field of training to fit in a creative, collaborative and dynamic research environment. A strong record of research productivity, as reflected in a substantial publication record in journals of high impact as well as excellent communication, management and English writing skills will be required. The successful candidate will also guide undergraduate and postgraduate students and oversee the research activity of the Christian Doppler Laboratory. More information about the Reisner group, including relevant publications, can be found at <http://www.reisner.ch.cam.ac.uk>

To apply online for this vacancy, please visit the University of Cambridge's Job Opportunities webpage on the following link: <http://www.jobs.cam.ac.uk/job/6623/>. Click on the 'Apply' button on the bottom of the page. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

Please ensure that you upload your Curriculum Vitae (CV), a covering letter and publications list in the Upload section of the online application. If you upload any additional documents that have not been requested, we will not be able to consider these as part of your application.

For queries regarding the post, please contact Mrs. Inger Lomax, administrator of the Reisner Group and the Christian Doppler Laboratory at [pa-reisner@ch.cam.ac.uk](mailto:pa-reisner@ch.cam.ac.uk)

Please quote reference MA05752 on your application and in any correspondence about this vacancy.

Closing date for this application: 5th May 2015

Salary: £28,695 --- £37,394

The Department holds an Athena SWAN bronze award for women in science, technology, engineering,

**Department of Chemistry at Pennsylvania State University** has two postdoc openings in the general area of stimuli-responsive polymeric materials. Projects involve amplifying signal in the context of materials, as well as creating materials that can be recycled easily with little input of energy. Head to tail depolymerizable polymers will be a major focus, but other approaches will be explored as well. Particular interest in synthetic organic, synthetic polymer, and/or physical organic postdocs, with a preference for postdocs who want to make polymers and make materials and characterize and study the materials. Interested applicants should contact Scott Phillips, Martarano Associate Professor of Chemistry, [sphillips@psu.edu](mailto:sphillips@psu.edu); (814)867-2502. Website: <http://www.psu.edu/dept/phillipsgroup/>

**The Naval Research Laboratory in Biomaterials and Bioengineering** is taking applications for the position of Postdoctoral Associate. The U.S. Naval Research Laboratory Bioenergy and Biofabrication Section is looking for a qualified Ph.D. candidate for a postdoctoral position in biomaterials and bioengineering. Qualified candidates need to hold a Ph.D. in bioengineering, materials science, chemistry, biology, physics or related field and be willing to work on interdisciplinary programs. Candidates with research experience in bioprinting, forming nanofiber polymers (including natural products and biopolymers), optics, laser processing, hydrogels for tissue scaffolding, micro- and nano-fabrication techniques for polymers/soft materials, or mammalian cell interfacing with materials will be given preference. Specific desired skills include 3D confocal microscopy, electrospinning, computer aided design (CAD)/computer aided manufacturing (CAM), biomaterial testing, 3D cell culture, stem cell differentiation, bioreactors and/or lab-on-a-chip cell culturing, microfluidics, laser system engineering as well as hydrogel formulation and synthesis.

NRL collaborates with the National Research Council (NRC) and the American Society of Engineering Education (ASEE) to place postdoctoral associates at the Lab. The starting salaries for these positions are approximately \$74,000/yr and require US citizenship or permanent resident status. Additional information about these opportunities can be found at:

<http://nrc58.nas.edu/RAPLab10/Opportunity/Opportunity.aspx?LabCode=64&ROPCD=641515&RONum=B5647>

AND

<http://nrl.asee.org/>

Please send CV's and interest letters to Dr. Brad Ringeisen (Head, Bioenergy and Biofabrication Section, NRL) at [Bradley.Ringeisen@nrl.navy.mil](mailto:Bradley.Ringeisen@nrl.navy.mil) .

**The Chemistry Department at the Illinois Institute of Technology (IIT)** seeks candidates for a full-time lecturer position starting August 2015 (earlier start date is possible and negotiable). Applicants must have a Ph.D. in chemistry. The primary responsibilities include teaching undergraduate level courses especially general chemistry and organic chemistry. Additional responsibilities include oversight and maintenance of chemistry teaching laboratory and associated instruments. The initial appointment will be for one year with the possibility of a longer-term renewable contract based on performance and mutual satisfaction. Please visit <http://science.iit.edu/chemistry> for further information.

Applicants should send a cover letter, a curriculum vitae, a statement of teaching philosophy including experience with undergraduate lab oversight and instrument maintenance. All applications should be submitted electronically as a single pdf file to [chemistry\\_search@iit.edu](mailto:chemistry_search@iit.edu). Applicants should also arrange to have three letters of references submitted electronically to the same e-mail address or as a hard copy to: Professor Rong Wang, Department of Chemistry, Illinois Institute of Technology, Chicago, IL 60616.

Review of applications will begin immediately and will continue until the position is filled. IIT is an equal opportunity/affirmative action employer. Individuals from underrepresented groups in physical sciences are strongly encouraged to apply.

**Postdoctoral Fellow with the University of Missouri** Any candidate with experience in inorganic or organometallic chemistry would be considered, but candidates with backgrounds in *electrochemical catalysis* or *carbon dioxide activation* would be a plus. This position will likely be funded through a collaborative NSF funded Center for Carbon Capture and Conversions (C4) (<http://www.brown.edu/research/projects/capture-and-conversion-of-co2/>), though sufficient startup funds are available to continue the position even if this center doesn't get renewed in Phase II.

Professor Wesley Bernskoetter will be bringing a wonderful group of current personnel from Brown, but is looking to expand the program with talented new hires. The start date is flexible, but summer-early fall is preferred. Any candidates who might be interested in a position are encouraged to send a CV and cover letter to [wb36@brown.edu](mailto:wb36@brown.edu)

**The National Research Council of the National Academies** sponsors a number of awards for graduate, postdoctoral and senior researchers at [participating federal laboratories and affiliated institutions](#). These awards include generous stipends ranging from \$42,000 - \$80,000 per year for recent Ph.D. recipients, and higher for additional experience. [Graduate](#) entry level stipends begin at \$30,000. These awards provide the opportunity for recipients to do independent research in some of the best-equipped and staffed laboratories in the U.S. Research opportunities are open to U.S. citizens, permanent residents, and for some of the laboratories, foreign nationals.

Detailed program information, including online applications, instructions on [how to apply](#) and a [list of participating laboratories](#), is available on the NRC Research Associateship Programs [Website](#) (see link above).

Questions should be directed to the NRC at 202-334-2760 (phone) or [rap@nas.edu](mailto:rap@nas.edu). There are four annual review cycles.

Review Cycle: **February**; Opens December 1; Closes February 1

Review Cycle: **May**; Opens March 1; Closes May 1

Review Cycle: **August**; Opens June 1; Closes August 1

Review Cycle: **November**; Opens September 1; Closes November 1

Applicants should contact prospective Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities. More detailed information and an online application can be found at [www.nationalacademies.org/rap](http://www.nationalacademies.org/rap).