

**2015 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**December 7, 2015**

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

Friday December 11<sup>th</sup>:            *Department of Chemistry Colloquium:*  
   *Jonathan Barnes, Massachusetts Institute of Technology*  
   *2015 Award for Excellence in Graduate Research*  
   Pancoe Auditorium  
   4:00 – 5:00pm

**Announcement**

The Chemistry Department main office will be renovated over the holiday break. Beginning on December 15<sup>th</sup> you will be able to find us in the following locations:

Tech M192: Jonathan Maendel, Laura Makinen, Lee Copeland, Ilene Tokarz  
Tech M292: Jill Johnson, Danny Fisher, Gerri Pipersburgh

All phone extensions will remain the same.  
We hope to be back in Tech K148 by January 4<sup>th</sup>.

**BIP**

BIP: 10:00am every Friday in Tech K140  
Last BIP for 2015 will be on December 11<sup>th</sup>  
First BIP for 2016 will be on January 8<sup>th</sup>

**Arrivals**

Luke Liu joined the Harris Group  
Xinan Zhang joined the Marks Group

**Opportunities**

**The Department of Chemistry at the Illinois Institute of Technology** is looking for a part-time adjunct instructor for Spring 2016 semester, to teach CHEM 520 Advanced Inorganic Chemistry at the graduate level. Previous teaching experience is preferred. Please send your CV to: [chemistry\\_search@iit.edu](mailto:chemistry_search@iit.edu)

The course description follows:

CHEM 520 Advanced Inorganic Chemistry

Selective treatment of the chemistries of main group and transition elements with emphasis on coordination complexes, organometallic compounds and inorganic cages and clusters. Discussions of molecular symmetry, stereochemistry, bonding, electronic spectra, magnetic properties, reactions, kinetics and reaction mechanisms are included.

**The University of Arizona's College of Science and College of Medicine** are committed to building and maintaining a world class Department of Chemistry and Biochemistry. We thus seek applications from PhD scientists for tenure-eligible faculty positions beginning Fall 2016.

Applicants with research and teaching interests in all areas of biochemistry, biological mass spectrometry, and bio-inorganic chemistry broadly interpreted, will be considered. The rank of these positions is open. Candidates at the rank of Assistant Professor will be expected to establish and maintain a successful, independent research program. Applicants with highly visible, externally funded research programs will be considered for appointments at the rank of Associate or Full Professor. To apply, please submit a Letter of Interest, Curriculum Vitae, and Statements of Research Interests and Teaching Philosophy online at <http://uacareers.com/postings/6789> (Posting #F20281)

Contact information for references will be required to collect three reference letters. The University of Arizona seeks people with diverse perspectives and experiences and is a committed Equal Opportunity/Affirmative Action organization. Women, minorities, veterans, and individuals with disabilities are encouraged to apply. As an Employer of National Service, we also encourage applications from alumni of AmeriCorps, Peace Corps, and other national service programs. The Immigration Reform and Control Act requires that new employees have proof of authorization to work in the U.S.A. *Please visit the Department of Chemistry & Biochemistry website:* <http://cbc.arizona.edu/>

**Postdoctoral positions at NIH** The Optical Spectroscopy Section, LMB/BBC, NHLBI/NIH, is seeking two postdoctoral fellows (IRTA fellows or VF, see [www.nih.gov](http://www.nih.gov) for details)

Position#1 is available immediately. We need someone with extensive biochemical/cell biology expertise in the fluorescence microscopy sphere to help us apply new probe methods for superresolution (“STAQ: a route toward low power, multicolor nanoscopy”) and intracellular [O<sub>2</sub>] sensing (using, e.g., our Mb-mCherry chimera). Probe development, labeling and transfection skills esp. valued, along with protein purification/plasmid prep.

Position#2 will be available early in the spring, and will select someone skilled in the instrumental aspects of lasers and fluorescence spectroscopy in the microscope. We do FLIM, 2pFCS, RICS, STED (and related STAQ), regular and spectral-focusing CARS, and combinations thereof. Laser jockeys, optics tinkerers and coding honchos welcomed.

**Mallinckrodt Institute of Radiology** As part of a team comprising interdisciplinary scientists, **two post-doctoral positions** are available: A) **Synthetic organic chemistry** with emphasis on heterocyclic chemistry, inorganic biochemistry, and PET/SPECT Radiochemistry to develop molecules for biomedical imaging and therapeutic applications; and B) **Biochemist** with expertise in conceiving and executing cellular bioassays, histochemistry, pharmacokinetics, and receptor ligand binding assays, **preferably with working experience in handling of rodents**. Candidates with competitive credentials and track records are strongly encouraged to apply. Applicants with previous experience in applied sciences but not beyond a year of postdoctoral experience will be considered more desirable candidates.

For immediate consideration, please send a cover letter and resume with contact information for three references to:

Prof. Vijay Sharma, Mallinckrodt Institute of Radiology, Box 8225, Washington University Medical School, 510 S. Kingshighway Blvd., St. Louis, MO 63110, USA; Email: [sharmav@mir.wustl.edu](mailto:sharmav@mir.wustl.edu). Please note that e-mail is a preferred mode of communication.

**The Department of Chemistry at Virginia Commonwealth University** invites applications for a tenure-eligible, Assistant Professor position in the broad area of Analytical Chemistry to begin in fall 2016. The candidate is expected to develop and maintain a funded, nationally recognized research program. Teaching will primarily be in undergraduate and graduate courses in analytical chemistry. The candidate's research interests should complement those of existing faculty; those candidates with analytical chemistry interests that bridge to nanoscience and/or chemical biology are encouraged to apply. Candidates Demonstrated experience working in and fostering a diverse faculty, staff, and student environment, or the commitment to do so.

A Ph.D. in chemistry is required and post-doctoral experience is strongly encouraged. Well qualified candidates at higher ranks may be considered, contingent on funding availability.

Candidates will submit:

- (1) a cover letter
- (2) a curriculum vitae
- (3) a document containing detailed research proposals, teaching plans and an estimate of start-up costs to <https://www.vcujobs.com/postings/47038> .

In addition, names of three references must be entered into vcujobs; these individuals will be asked to provide recommendation letters. Review of applications will begin immediately and continue until the position is filled. Please contact Sarah C. Rutan, Search Committee Chair, at [srutan@vcu.edu](mailto:srutan@vcu.edu) for any questions about the position.

Virginia Commonwealth University is an equal opportunity/affirmative action employer and seeks to provide equal opportunities for employment without regard to race, color, religion, national origin, age, gender, political affiliation, veterans' status, sexual orientation, gender identity, gender expression, genetic information, or disability. Virginia Commonwealth University welcomes individuals with diverse backgrounds, experiences, and ideas and those who embrace and value diversity and inclusivity.

**The Surface Chemistry Group in the Materials Science Division at Argonne National Laboratory** is in search of a postdoctoral appointee. The successful candidate will enable next generation solar energy conversion through new intermediate band solar absorbers and thermal photovoltaic design. In collaboration with theoretical and computational colleagues, the appointee will fabricate novel thin film devices as well as advance the basic science of intermediate band semiconductor growth and characterization. Atomic layer deposition, materials synthesis and crystallization, as well as optoelectronic characterization will be required. Previous device experience is preferred, as device design and assessment will be emphasized. Candidates within three years of completion of their Ph.D. are eligible.

Interested candidates should send a detailed CV, along with a list of publications, to Alex Martinson [martinson@anl.gov](mailto:martinson@anl.gov). Argonne is a U.S. Department of Energy laboratory managed by UChicago Argonne, LLC. Argonne is an equal opportunity employer, and we value diversity in our workforce.

**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).