

2014 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
May 5, 2014

Tuesday May 6: *Faculty Lunch Seminar: Danna Freedman*
Tech K140
12:00 – 1:00pm

Wednesday May 7: *Monthly Faculty Meeting*
Tech K140
12:00 – 1:00pm

Thursday May 8: *Organic Seminar: Dr. John Mathias*
Ryan Hall 4003
4:00 – 5:00pm

Friday May 9: *Inorganic Seminar: Joel Miller*
Tech K140
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 3:00pm in Tech K140

Arrivals

Bill Pandit joined the Chen group

Announcements

Enhanced Plasmonics (a tech startup company consisting of graduated Van Duyne research group members) has recently launched an Indiegogo Campaign to help fight counterfeit medicine using handheld lab analysis devices.

Please find the campaign here:

<https://www.indiegogo.com/projects/handheld-lab-analysis-fight-counterfeit-medicine#home>

And additional information here:

Website: www.epdevices.org

facebook: [facebook.com/EPDevicesProject](https://www.facebook.com/EPDevicesProject)

Twitter: twitter.com/EPDevices

Google+: plus.google.com/116828642282329973738

Youtube: <http://youtu.be/EF25KgAS1dQ>

The ANSER Center and ISEN are proud to host the 7th ANSER Solar Energy Symposium on May 22-23, 2014 on Northwestern University's Evanston campus. Please mark your calendars!

We will be celebrating ANSER's fifth anniversary this year, and the Keynote will reflect on the Center's greatest achievements during that time and also provide a window into the future of solar energy research at ANSER. The focus of this year's symposium is "Solar Fuels," and we are excited to have an all-star lineup of speakers for this event.

Keynote: Thursday, May 22nd, 4:00 - 5:00 pm (Pancoe Auditorium)
[Prof. Michael Wasielewski \(Northwestern University/ISEN/ANSER\)](#)

Friday, May 23rd, 9:00 a.m. - 4:00 p.m. (McCormick Tribune Forum)
[Prof. James Mayer \(University of Washington in Seattle\)](#)
[Prof. Eric Masanet \(Northwestern University\)](#)
[Dr. David Tiede \(ANL\)](#)
[Prof. Robert Crabtree \(Yale University\)](#)
[Prof. Frank Osterloh \(University of California – Davis\)](#)

Please visit the [ANSER Symposium website](#) for additional event and speaker information, fill out [this form](#) to register, and forward this email to anyone you know who might be interested in attending our Symposium.

We look forward to seeing you on May 22nd and 23rd!

Opportunities

The Department of Biological, Chemical and Physical Sciences at Roosevelt University has an opening for a full-time Visiting Assistant Professor, Organic Chemistry.

Location: Teaching duties will include courses at both the Chicago and Schaumburg campuses

Job Summary: The Department of Biological, Chemical and Physical Sciences invites applications for a one-year full-time visiting faculty position in organic chemistry, beginning August 2014. Duties include teaching organic chemistry I and II lectures, discussions and labs, synthetic organic chemistry, and/or upper level courses in the candidate's specialty. Opportunities for undergraduate research are also available. The successful candidate will demonstrate a commitment to undergraduate education and strong verbal and written communication skills.

Minimum Qualifications: PhD in organic chemistry or closely related discipline.

Preferred Qualifications: Additional teaching and/or postdoctoral experience is preferred.

Required Applicant Documents

1. Letter of interest
2. Curriculum vitae
3. Teaching statement
4. Contact information for three references

Optional Applicant Documents: Statement of undergraduate research interests.

Special Instructions to Applicants: Upload required and, if desired, optional documents to HR website, jobs.roosevelt.edu. Candidates should request references to send letters directly to Prof. Kristen Leckrone, kleckron@roosevelt.edu. Review of applications begins March 1, 2014 and continues until the position is filled.

University School of Milwaukee is widely recognized as one of the top independent schools in the United States. Located on the North Shore of the Milwaukee, Wisconsin area, University School is a coeducational, college preparatory day school for students prekindergarten (age 3) through grade 12. We are seeking qualified Upper School Science Teacher candidates for immediate consideration for the 2014 – 2015 school year. The science teacher in Upper School is responsible for providing a stimulating and developmentally appropriate

educational environment in a way that is in accordance with the mission of the school and the philosophy of the science department.

Essential Functions

- Teaching load may include Chemistry (10th grade), Chemistry-Honors (10th grade), Physics (11th grade), AP Physics 1, AP Physics 2, AP Chemistry and/or AP Physics C.
- Organizing and providing developmentally appropriate educational programs and instruction; planning and implementing curriculum and differentiated instruction for Upper School students.
- Providing activities and opportunities that encourage curiosity, exploration, and problem-solving appropriate to the developmental levels and learning styles of his/her students; creating inquiry-based laboratory environments.
- Planning and preparing supportive and caring classroom environment in which children can learn and interact positively with one another; overseeing instruction and authentic assessment; supervising children in the classroom and laboratory.
- Supporting students in the independent science research process.
- Interacting with parents; maintaining open and cooperative communication with parents and families.
- Participating in regular divisional, cross-divisional, and departmental meetings and perform various faculty supervisory duties.

Qualified candidates will have the following:

- The ideal candidate will have a degree in Physics and/or Chemistry or related field.
- Experience teaching AP-level Physics and/or Chemistry courses to Upper School aged students.
- Experience with Vernier software and hardware.

Applicants should submit, no later than Friday, May 16, 2014, the following:

- A cover letter explaining why they are specifically interested in and qualified for this position.
- A current resume.
- A statement of educational philosophy and/or other supporting material (e.g. articles or speeches) that will be helpful to the Search Committee.
- The names, addresses, and telephone numbers of three references.

This information should be addressed to the Director of Human Resources and emailed to jobs@usmk12.org.

To learn more about University School and its mission, please visit our website at www.usmk12.org

University School is an equal opportunity employer and educator who fully and actively support equal access for all.

The Department of Chemistry at Iowa State University is looking to hire a "lecturer" with a specialty in analytical and/or physical chemistry, to start in Fall 2014. While this is not tenure-track, it is intended as a career-level position. The lecturer will be asked to be an active part of our faculty community. We will award a 3 year contract, which is renewable on mutual agreement. After 6 years of service, lecturers are eligible for promotion to "senior lecturer", which entitles them to a 5 year contract. We hope that candidates who are considering tenure track positions at smaller schools might also be interested in this opportunity. Our ideal candidate has some teaching experience already, perhaps as a sabbatical replacement, adjunct, or other temporary position after their PhD, or as a fill-in instructor at their PhD institution.

The position is for a 9-month per year contract, but we are active in teaching summer sessions and have a good history of being able to give all the lecturers who want to teach in summer that opportunity.

We will begin review of applicants after May 15.

The link for the on-line job listing and application is www.iastatejobs.com/applicants/Central?quickFind=85234

Sharpless Laboratory at the Scripps Research Institute, La Jolla, www.scripps.edu/sharpless/ has five postdoctoral positions available starting on June 15th to work on the new Sulfur(VI) Fluoride Exchange chemistry (Sulfur(VI) Fluoride Exchange (SuFEx): Another Good Reaction for Click Chemistry, Jiajia Dong, Larissa Krasnova, M.G. Finn, K. Barry Sharpless*, Angew. Chem. Int. Ed. in press).

The successful candidates will have expertise in organic, organometallic and medicinal chemistry with an outstanding publication record in top chemistry journals. Experience with multiple assay platforms such as LC-MS, HPLC or complex molecule synthesis is desired. Ability to manage multiple projects, strong communication and grant writing skills and work independently in interdisciplinary fields is required. Please send a cover letter, a Research Summary, CV and list three individuals as references to kbslab.scripps@gmail.com

The Department of Chemistry and Biochemistry, University of California at San Diego has a postdoctoral position in synthetic organic and/or medicinal chemistry available in the laboratory of Prof. Seth M. Cohen www.cohenlab.ucsd.edu

The position is available immediately and will be filled as soon as a suitable candidate is identified. A highly motivated candidate is sought to pursue investigations broadly defined in the area of metalloprotein inhibitor development. This includes studies on the design and synthesis of new small molecule inhibitors, the development of inhibitor 'prodrugs', and related studies (for more information and a list of relevant publications see <http://cohenlab.ucsd.edu>). Qualified applicants are expected to have a strong record of productivity (e.g. publications), good oral and written English language skills, and should be able to provide three letters of recommendation. Extensive experience and proficiency in multi-step organic synthesis is required along with appropriate analytical, purification, and characterization methods. Such methods may include, but are not limited to: chromatography, NMR, MS, FTIR, UV-Vis, HPLC, etc. Experience in biochemical assay development, in vitro screening, and/or computational docking and structure-based drug design would be additional skills of interest. Candidates with more biochemically-oriented training (e.g. structural biology, protein expression/purification, etc.) may also be considered on a case-by-case basis.

Applicants should send a cover letter, CV, and three letters of recommendation to scohen@ucsd.edu The candidate should clearly indicate in the cover letter their available start date and long-term career goals. In addition, a statement indicating how the candidate's training is ideally suited to our investigations on metalloprotein inhibitors is strongly encouraged – proposed research directions that the candidate would like to pursue are welcome

The Department of Chemistry, Western Illinois University (WIU), invites applications for a tenure-track faculty position as Assistant Professor of Chemistry in Macomb, Illinois. A Ph.D. is required, preferably in an area of chemistry with an interest in applications to Forensic Chemistry. An individual with all but dissertation will be considered; however, the Ph.D. must be completed prior to receiving tenure-track status. The successful applicant will be expected to teach courses in forensic chemistry and to mentor undergraduate and graduate (M.S.) research students within our chemistry/ biochemistry/ pharmacy, and forensic chemistry programs. WIU is a comprehensive public university offering 57 undergraduate degree programs, 36 graduate degree programs, and a doctorate degree. With a student-to-faculty ratio of 16 to 1, WIU's 720 full-time faculty teach 95% percent of all undergraduate as well as graduate courses in addition to 13 pre-professional degree programs and 10 certificate programs. Western Illinois University is a member of the NCAA and competes at the Division I level. The Leslie F. Malpass Library ranks among the finest at comprehensive universities in the United States. Salary is competitive. Faculty salary minima can be found in the UPI faculty contract agreement on page 87 at http://www.wiu.edu/provost/upi_agreement/pdfs/UPI%20Agreement.pdf#87. Starting Date is August 14, 2014. Review begins immediately and will continue until the position is filled.

Complete applications include 1) a letter of application, 2) current curriculum vita or resume, 3) the names, telephone numbers, and e-mail addresses of three current professional references, 4) copies of unofficial

academic transcripts, official transcripts will be required for selected candidate, 5) statement of research interests and mentoring experience, 6) statement of teaching interests.

To apply, please upload the requested documents by clicking APPLY NOW at the following URL <https://www.interviewexchange.com/jobofferdetails.jsp?JOBID=48036> or by navigating to the WIU Employment page at the following URL <http://www.wiu.edu/employment/>

Questions regarding the search may be directed to: Dr. Rose McConnell at rm-mcconnell@wiu.edu. For assistance with the online application system call the Office of Equal Opportunity and Access at (309)298-1977. AA/EO employer. WIU has a non-discrimination policy including sex, race, color, sexual orientation, gender identity and gender expression, religion, age, marital status, national origin, disability, and veteran status.

Sr. Scientist Position with Merck & Co. Inc. Established in 1891 Merck & Co. Inc. is a global research-driven pharmaceutical company dedicated to putting patients first.

Join us and experience our culture first-hand — one of strong ethics & integrity, diversified experiences, exceptional science and a resounding passion for improving human health. As part of our global team, you'll have the opportunity to collaborate with talented and dedicated colleagues while developing and expanding your career. We currently have an exciting opportunity to join our Analytical Sciences group located at our Kenilworth, NJ site.

In this role, you would be developing and utilizing characterization techniques to support product formulation development for new Merck products. In particular, product support includes:

- Analytical methods development and validation
- Analytical investigations
- Process and product characterization
- Developing novel analytical experiments and techniques to predict drug product performance
- Clinical study support
- Completing above tasks in an accurate and timely manner

Effective interaction with other technical, regulatory, research and manufacturing groups is critical. You'll have the opportunity to work with teams comprised of scientists and non-scientists, to effectively coordinate efforts and track the progress for multiple projects, and to provide technical leadership on interdivisional initiatives.

You would also support the implementation of new technology, including developing expertise in specialized equipment or techniques such as HPLC, LC/MS, GC/MS, Spectroscopy, and Dissolution. You would also keep abreast of innovative and novel scientific developments in the pharmaceutical industry by presenting papers at meetings, attending seminars, and reading relevant literature.

Qualifications: PhD in chemistry with 0-5 years analytical experience, and demonstrated publication record are required. Additionally, a strong academic record and well developed verbal and written communication skills are required.

For more information and to apply go to:

https://merck.taleo.net/careersection/ext_merckunitedstates_en/jobdetail.ftl

Laboratory Technician with GreatPoint Energy will play a key role in the operation and maintenance of GreatPoint Energy's lab scale catalytic coal gasification (CCG) units in Chicago, IL. The Laboratory Technician will work closely with the Research and Engineering staff to evaluate catalyst formulations and reaction test matrices for GreatPoint Energy's proprietary CCG process.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Catalyst solution preparation and impregnation
- Coordinate the calibration, start-up, operational and analytical procedures of lab scale testing units with the Research and Engineering staff
- Operate autoclaves for catalyst extraction and catalytic coal gasification units on a daily basis
- Data collection and analysis to ensure efficacy and accuracy of results– make recommendations for corrective action
- Lead role in interfacing on-line analytical methodology and sample collection/submission
- Ensure that equipment and processes comply with applicable safety, regulatory and engineering standards
- Interface with facility and site personnel regarding infrastructure and compliance
- Perform troubleshooting and preventive maintenance on systems – coordinates actions as needed
- Train other personnel in reactor operation and maintenance

SUPERVISORY RESPONSIBILITIES:

None

QUALIFICATIONS/EXPERIENCE:

Minimum of 5 years of experience in Chemical or Process Engineering/Sciences

Preferred Qualifications:

5-7 years of experience in high temperature/high pressure reactor operation

1-3 years of experience in interfacing on-line analytical instrumentation

EDUCATION:

- Bachelor's Degree in a technical/Science discipline preferred
- Two year college with >10 years of experience will also be considered

For more information please contact E. Joseph Campbell PhD, Director of Catalyst Research jcampbell@greatpointenergy.com . More about GreatPoint Energy at www.greatpointenergy.com

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.

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.