

**2015 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**February 2, 2015**

Tuesday February 3<sup>rd</sup>:            *Faculty Lunch Seminar: Alexander Statsyuk*  
Tech K140  
12:00 – 1:00pm

Thursday February 5<sup>th</sup>:            *Special Seminar: Mark Ji*  
Ryan 4003  
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**

Cleiser daSilva joined the Hupp Group

**Announcements**

**How to Secure Initial Financing for Your Startup presented by INVO – Innovation and New Ventures Office**

SBIR/STTR GRANTS ARE THE ONLY SUBSTANTIVE SOURCE OF NON-DILUTIVE FUNDING

*PLEASE JOIN US FOR THIS INFORMATIONAL SESSION, IF YOUR RESEARCH FINDINGS HAVE COMMERCIAL POTENTIAL AND YOU'RE THINKING ABOUT STARTING A COMPANY BASED ON YOUR RESEARCH.*

Tuesday, February 3<sup>rd</sup>  
Noon-1:30 PM  
Ford ITW Room  
(2nd floor)

Wednesday, February 4<sup>th</sup>  
Noon-1:30pm  
Lurie Research Center  
Gray Seminar Room

Topics Covered in this Informational and Q&A Session:

Small Business Innovation Research (SBIR) & Small Business Technology Transfer (STTR) Grants

- What these grants are
- Which agencies provide them & How to find SBIR/STTR topics
- Eligibility requirements
- Benefits from a business model perspective
- Best practices and tips from successful recipients
- Where to receive support before or during grant preparation

Presenters Include:

- Jeff Coney, Director of Economic Development, Innovation and New Ventures Office
- Barbara Goodman, Senior Vice President, PROPEL, iBIO Institute
- Anna Lisa Somera, Director of Quality Regulatory Affairs and Operations, Diagnostic Photonics, Consultant to Briteseed and Innoblative Design
- Samir Mayekar, Co-Founder and CEO, SiNode Systems (Evanston Location)
- Rebecca McNaughton, Project Manager, Infinitesimal (Chicago Location)

**Opportunities**

**The 7<sup>th</sup> Yao Yuan Biotech-Pharma Symposium**, to be held on April 18<sup>th</sup>, 2015 (Saturday) at College of Pharmacy Auditorium, University of Illinois at Chicago.

This is the seventh in a series of annual Yao Yuan conferences, and this year is co-sponsored with University of Illinois at Chicago, College of Pharmacy. With a theme of “At the Interface of Chemistry & Biology for Drug Discovery”, this year’s event is aimed at highlighting ground-breaking chemical biology approaches to dissect disease processes and impact drug discovery. Continuing with last year’s emphasis on students, there will be a poster session with SynChem, Inc.-sponsored awards and a panel discussion relevant to students hoping to find a future in drug discovery.

All poster presentations submitted before March 28, 2015 will be entered for selection for a “SynChem Award” that will be reviewed by a team of outstanding experts in pharmaceutical discovery. One 1<sup>st</sup> and two 2<sup>nd</sup> place award winners will be selected with an honorarium of \$500 and \$250, respectively. The 1<sup>st</sup> place winner will be invited to give an oral presentation.

Time: April 18, 2015 (Saturday)

Venue: University of Illinois at Chicago, College of Pharmacy Auditorium

Address: 833 South Wood St, Chicago, IL 60612

Deadline for Poster Submission: March 28, 2015

Registration: [http://yypharm.org/?q=Conf\\_7thSymposium](http://yypharm.org/?q=Conf_7thSymposium)

Parking Map: <http://yypharm.org/UICparkingMap.pdf>

Confirmed Speakers:

- Chuan He, John T. Wilson - Distinguished Service Professor and HHMI Investigator, The University of Chicago
- Neil L. Kelleher - Walter and Mary Elizabeth Glass Professor, Northwestern University
- Mark Murcko - Former CTO of Vertex, Co-inventor of Three Marketed Drugs (Agenerase, Lexiva, Incivek) and Many Drug Candidates; Principal at Disruptive Biomedical, LLC; Professor, Massachusetts Institute of Technology & Northeastern University.
- Andrew Myers - Amory Houghton Professor of Chemistry & Chemical Biology, Harvard University
- Ed Reilly - Sr. Research Fellow & Project Director, AbbVie, Inc.

This event will be a valuable opportunity for learning amongst professionals, academicians and students. The standard registration fee for this event is \$25 for professionals and \$10 for students, for covering lunch, snacks, and coffee. Please register at: [http://yypharm.org/?q=Conf\\_7thSymposium](http://yypharm.org/?q=Conf_7thSymposium) ASAP for early bird discount (\$15 before February 28, \$20 before March 31). Relevant discount options will be removed from a pull down menu at the registration site after these dates. Attached please find a conference flyer for your reference. Thank you and look forward to an exciting symposium.

**Summer research program in the process chemistry department at Bristol-Myers Squibb.** The primary focus of this program is to provide undergraduates with experience in the chemistry-focused areas of drug development. This is achieved by working with a mentor on projects involving synthetic route scouting, methodology development, and/or reaction mechanism. The students will conclude the program by presenting an oral summary their work in a research symposium. In addition to gaining valuable chemistry experience, this program also introduces the students to many parts of the drug development process, including process scale up, analytical chemistry, and drug formulation development. Projects are proposed and designed by chemists in the department based on ongoing research from our small and large molecule portfolio. This is a paid summer internship where the student's wage will be based on their years of undergraduate experience.

Any undergraduates (ideally with laboratory experience) that might be interested in this opportunity, should email their resumes to Greg Beutner at [Gregory.Beutner@bms.com](mailto:Gregory.Beutner@bms.com) no later than February 2, 2015.

**The Department of Energy's (DOE) Office of Science** is pleased to announce that the Office of Science Graduate Student Research (SCGSR) program is now accepting applications for the 2015 solicitation. Applications are due 5:00pm ET on Tuesday April 14, 2015.

The SCGSR program supports supplemental awards to outstanding U.S. graduate students to conduct part of their graduate thesis research at a DOE national laboratory in collaboration with a DOE laboratory scientist for a period of 3 to 12 consecutive months—with the goal of preparing graduate students for scientific and technical careers critically important to the DOE Office of Science mission.

The SCGSR program is open to current Ph.D. students in qualified graduate programs at accredited U.S. academic institutions, who are conducting their graduate thesis research in targeted areas of importance to the DOE Office of Science. The research opportunity is expected to advance the graduate students' overall doctoral thesis while providing access to the expertise, resources, and capabilities available at the DOE laboratories. The supplemental award provides for additional, incremental costs for living and travel expenses directly associated with conducting the SCGSR research project at the DOE host laboratory during the award period.

The Office of Science expects to make approximately 100 awards in 2015, for project periods beginning anytime between October 2015 and September 2016.

The 2014 program solicitation resulted in awards to 65 graduate students from 50 different universities to conduct thesis research at 15 DOE national laboratories. Detailed information about the program, including eligibility requirements and access to the online application system, can be found at: <http://science.energy.gov/wdts/scgsr/>.

The SCGSR program is sponsored and managed by the DOE Office of Science's Office of Workforce Development for Teachers and Scientists (WDTS), in collaboration with the six Office of Science research programs offices and the DOE national laboratories, and the Oak Ridge Institute of Science and Education (ORISE).

For any questions, please contact the SCGSR Program Manager, Dr. Ping Ge, at [sc.scgsr@science.doe.gov](mailto:sc.scgsr@science.doe.gov).

**Environmental Monitoring Conference** Organized jointly by the U.S. Environmental Protection Agency (EPA) and The NELAC Institute (TNI), the National Environmental Monitoring Conference (NEMC) This year's conference will be held in Chicago, IL from July 13-17, 2015. The NEMC Steering Committee is inviting abstracts for oral or poster presentations in Academic Research Topics from undergraduate and graduate students as well as young professionals.

- Presentations can take the form of a full (30 minute) Oral Presentation (30 minutes), an Abbreviated Oral presentations (10 minutes) or in Poster sessions which allow for display and 5 minute presentations of the Research Topic
- Research topics on any aspects of Environmental Measurement are welcome
- Conference attendance is only \$70 for students and free for student presenters
- Cash awards will be presented for best poster and podium presentation
- Attendance provides opportunity to network with other professionals in the Environmental Measurement community

Please provide your abstract by February 9, 2015. Abstracts received after the deadline are not guaranteed to be reviewed due to the number of available time slots and the high number of quality and timely submissions received. More information and submission instructions are on the NEMC website ([www.nemc.us](http://www.nemc.us)) or by contacting Robert Wyeth, Chair of the Academic Research Topics session of the conference ([rfwyeth@yahoo.com](mailto:rfwyeth@yahoo.com))

### **One-year Postdoctoral stipend in Organic Chemistry at the University of Gothenburg**

Project: Expanding the toolbox for organic synthesis – novel reactions utilizing divalent and trivalent lanthanide reagents

Our research is focused on the development of new lanthanide reagents for organic synthesis. We have previously developed a powerful reducing reagent based on samarium(II) iodide (SmI<sub>2</sub>), water and an amine. Currently we are developing processes for the substitution of aliphatic fluorines utilizing di- and/or tri-valent lanthanide reagents. The continuation of the project involves mechanistic investigations and further method developments towards catalytic processes.

Recent publications see *Angew Chem Int Ed* 2013, 52, 12073; *Chem. Commun.*, 2013, 49, 1826; *Chem. Eur. J.* 2015, in press.

Qualifications: Achieved PhD in organic chemistry

Criteria:

- Theoretical and practical knowledge and interest in synthetic organic chemistry are eligible qualifications.
- Experience from work under inert atmosphere is considered advantageous
- A PhD closely related to the project is considered an additional qualification as well as experience of experimental work in organic synthesis.
- The applicant's ability to work independently as well as in collaboration with other group-members, e.g. PhD and master students.
- Previous experience of fluorine chemistry as well as from the use of lanthanide reagents are not required

Period: 12 month starting in the spring of 2015

Net salary: 240 000SEK/year (approx. 2 000 euros/month)

Application deadline 15 February 2015

Attach attested documents including list of qualifications (CV), copy of examination certificates, a copy of the PhD thesis (or equivalent), service certificates, a personal letter, two letters of recommendations (could be sent directly to Göran Hilmersson) and other documents deemed important by the applicant. For further information please contact Professor Göran Hilmersson, Tel: +46 (0)31-786-9022 or [hilmers@chem.gu.se](mailto:hilmers@chem.gu.se)

**Merck Summer Internships in Chemistry** - We are pleased to announce the 2015 Merck Chemistry Summer Internship Program. This year's program provides internships in Analytical, Discovery, Process, and Structural Chemistry, and are available at the Boston (MA), Kenilworth (NJ), Rahway (NJ) and West Point (PA) research sites.

Merck Chemistry interns will each be paired with an experienced mentor, and will work side-by-side with the mentor on a cutting edge drug discovery program. During the course of the summer, interns will learn about drug discovery, make contributions to important programs, and generate results that may be included in future publications. They will also make many valuable contacts in the industry.

Internships typically start in early June, and run 9 – 11 weeks. Summer interns are paid a competitive stipend, and are also provided with a variety of additional benefits.

Students may apply at Merck's external career [website](#). In the search box, they should enter the following codes to find postings for specific areas. The job postings provide additional information on required qualifications, and on the details of the internships.

Analytical Chemistry – ADM006473  
Discovery / Process Chemistry – ADM006480  
Structural Chemistry – ADM006491

The application deadline is February 15<sup>th</sup>, 2015.

**The Department of Chemistry at the University of Texas at El Paso (UTEP)** invites applications for a tenure-track faculty position in Physical Chemistry (broadly defined including Physical Inorganic, Physical Organic, and Physical Biochemistry) at the Assistant Professor level with an anticipated appointment date for Fall 2015. The successful candidate is expected to develop a vigorous, energetic and externally funded research program, to be committed to teaching at undergraduate and graduate (master and doctorate) levels, to mentor students, and to serve the department, college, university, discipline, and community. The Department of Chemistry has top of the line facilities including NMR spectroscopy, mass spectrometry, EPR, x-ray crystallography (small molecule and protein), and cryo-electron microscopy located in the brand new state-of-the-art Chemistry and Computer Science Building. Candidates' research should have a strong potential for extramural funding and for the establishment of collaborations with other laboratories. Preference will be given to candidates whose research employs innovative approaches in areas including energy, environmental, and biosciences. Documents needed include letter of interest, curriculum vitae, research proposals, teaching statements, and a list of contact information for three references.

**ABOUT UTEP AND EL PASO:** Located on the culturally vibrant U.S.--Mexico border, The University of Texas at El Paso is an emerging national research university with more than 23,000 students. The University's rapidly growing research portfolio in the sciences, engineering, health fields, and other areas brings in more than \$83 million per year, ranking UTEP fourth in federal research expenditures among the public universities in Texas. El Paso is a highly livable, bicultural community of 800,000 people, which offers affordable homes and attractive neighborhoods. El Paso is also repeatedly ranked as the safest large city in the United States.

**REQUIRED QUALIFICATIONS:** Applicants must have a Ph.D. or equivalent degree, postdoctoral research experience, and a strong record of research accomplishments.

**APPLICATION PROCEDURES:** Review of applications will begin immediately and will continue until the position is filled. Candidates should send a letter of interest, curriculum vitae, statement of research interest, a brief description of teaching philosophy, and complete contact information for at least three references to the following address:

Physical Chemistry Search Committee Chair  
Department of Chemistry  
University of Texas at El Paso  
500 West University Avenue  
El Paso, TX 79968  
[mnarayan@utep.edu](mailto:mnarayan@utep.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).