**2016 WEEKLY BULLETIN**
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**
**EVANSTON, ILLINOIS**
**November 14, 2016**

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

Tuesday November 15th: *Faculty Lunch Seminar: Tamar Seideman*
Tech K140
12:00 – 1:00pm

Friday November 18th: *Department of Chemistry Colloquium:*
*Michael Fayer, Stanford University*
Tech LR3
4:00-5:00pm

**BIP**

BIP meets every Friday 10-11:00am in Tech K140

**Arrivals**

We did not have any new arrivals this week

**Announcements**

**Medicinal & Bioorganic Chemistry Foundation Winter Conference:**
The Medicinal & Bioorganic Chemistry Foundation (MBCF) are pleased to announce our **"13th Winter Conference on Medicinal & Bioorganic Chemistry"** (13th WCMBC) will be held **January 22nd-26th 2017** in the beautiful Steamboat Springs Resort, Colorado.

The topics and speakers for the 2017 conference are now available to view - please view PROGRAMME here

If you would like to make an oral or poster presentation at this event - please e-mail Claire Francis **Registration is now OPEN** - you will be directed to our partners at Scientific Update to complete this process - please click here:

The MBCF also recognizes the contributions that prominent individuals have made to the advancement of medicinal and bioorganic chemistry. At each Winter Conference, an individual is honored as a keynote speaker.

The MBCF strongly encourages participation by graduate students in the Winter conferences. The Foundation will provide a limited number of awards of free registration and $600 towards travel and board and lodging to partially offset the associated costs of attending. Graduate students from the USA or Canada who wish to apply should submit a 1 page summary of their research accomplishments and two letters of support, one of which must be from the student's research mentor. These should be sent to Dr Claire Francis. Awardees will be selected by Foundation Board members and will be invited to present their work as a poster during the conference.

## Opportunities

**The Department of Chemistry & Biochemistry in the College of Science and Engineering (COSE) at St. Cloud State University** has an opening for a full-time, tenure-track Assistant/Associate Professor of Inorganic Materials Chemistry. The program has 13 full-time chemistry faculty positions and offers American Chemical Society approved undergraduate degree programs and a Professional Science Master's program in materials science and instrumentation (PSM-MSI). The department is well equipped with major instrumentation and research facilities, including access to the Integrated Science and Engineering Laboratory Facility (ISELF). More information about the College, the Department, the PSM-MSI program, and facilities can be found at http://www.stcloudstate.edu/cose/, http://www.stcloudstate.edu/chemistry/, http://www.stcloudstate.edu/graduate/psm-msi/default.aspx, and http://www.stcloudstate.edu/iself/

Responsibilities:
Primary duties include teaching undergraduate lecture and laboratory courses in inorganic chemistry, master's level courses in materials science, and introductory chemistry courses. Candidates will be required to support the recently established PSM-MSI program. These activities may include curriculum development, marketing and recruiting, and industrial outreach. Successful candidates will be expected to engage in collaborative research involving undergraduate and master's students and academic advising. In order to be considered for tenure and promotion, the candidate will demonstrate the ability to: teach effectively and/or perform effectively in other assignments, produce a record of scholarly or creative achievement or research, participate in continuing preparation and study, contribute to student growth and development, and provide service to the university and community.

Qualifications:
Required:

- Ph.D. in inorganic chemistry or materials science with chemistry emphasis is required at the time of appointment, while candidates with a Ph.D. in related fields may be considered.
- Experience teaching lecture and laboratory courses at undergraduate and graduate level.
- Ability to work with persons from culturally diverse backgrounds

Preferred:

- Teaching experience in inorganic chemistry, materials science, and introductory chemistry courses.
- Candidates who can contribute and support the Professional Science Master's program in materials science and instrumentation (PSM-MSI).
- Strong research background
- Experience with academic advising

Supplemental Information:
Founded in 1869, St. Cloud State is an award-winning regional public university and proud member of the Minnesota State Universities & Colleges system. The 100-acre campus is about an hour northwest of Minneapolis and St. Paul, along the oak-crowned west bank of the Mississippi River. St. Cloud State students prepare for life, work and citizenship by exploring the world around them and making it better. St. Cloud State employees value active and applied learning, community engagement, sustainability, and global and cultural understanding. These commitments complement more than 200 majors, minors and pre-professional programs, 60 graduate programs and 250 student clubs and organizations. St. Cloud State began as a normal school in 1869 and became St. Cloud State Teachers College in 1921. Bachelor's degrees were first offered in 1925. Master's degrees debuted in 1957. In 1975, the institution became St. Cloud State University. In recent years, the University added applied doctoral programs in Higher Education Administration and Educational Administration and Leadership. A diverse mix of students

from Midwestern towns and U.S. metropolitan areas are learning alongside more than 1,000 international students from about 80 nations.

Additional information on St. Cloud State University can be found at: http://www.stcloudstate.edu

To apply for this position use the website:
http://agency.governmentjobs.com/stcloudstate/default.cfm (click "Apply" within this posting to complete application)

The completed application must include:
· Cover letter
· Curriculum vitae/resume
· Contact information for three (3) current, professional references
· Copies of undergraduate and graduate transcripts
· Statement of teaching philosophy
· Description of proposed research involving undergraduate and master's students
· Statement of support of PSM-MSI program

Contact Information:
Search Committee Chair: Sarah Petitto
E-mail: inorganicmaterials@stcloudstate.edu

Application review begins on November 27, 2016; position is open until filled. Materials received after this date cannot be guaranteed consideration. All finalists will be required to give a seminar on their research and teach an undergraduate-level course during the interview process. Official transcripts will be required from the finalists at the time of interview.

*Employment for this position is covered by the collective bargaining agreement for the Inter Faculty Organization, which can be found at: http://www.hr.mnscu.edu/contract_plans/index.html

**National Institute of Standards and Technology, US Department of Commerce *Post-doctoral opportunity:*** *Dynamics in emerging materials for advanced energy and electronic applications*
Developing new measurements to probe the dynamics of excitonic decay, charge transport, and charge transfer in evolving materials systems, including organics, 2D materials, complex oxides, etc. and at their interfaces, is vital to advance applications in electronics and optoelectronics and for renewable energy applications seeking to improve electrocatalytic performance or photovoltaic efficiency. The Energy and Sustainability group at NIST invites post-doctoral applications in this area, with a starting date of approximately June, 2017. Our recent efforts have focused on interrogating exciton and charge separation dynamics at organic donor-acceptor interfaces for organic photovoltaics (OPV) applications using time-resolved two-photon photoemission (TR-2PPE). Probing dynamics in additional novel systems applicable in advanced electronics and solar energy/fuels, including nanostructured and 2D layered materials, and in the development and application of new measurement capabilities to investigate dynamics/charge transfer with nanosecond to sub-picosecond resolution are also of interest. Complementary techniques of one-photon photoemission, inverse photoemission, and, through collaboration, scanning tunneling microscopy and spectroscopy (STM, STS), allow access to interfacial molecular structure, nanoscale phase separation, and local electronic structure. Positions are funded through the prestigious National Research Council postdoctoral fellowship program. The next application deadline for this fellowship program is Feb. 1, 2017. If interested, please follow the contact information below as soon as convenient to ensure ample time for assembling the application information by the deadline. NRC fellowships at NIST require US citizenship. *For further information, contact: steven.robey@nist.gov*

**The Department of Chemistry at Smith College** invites applications for a non-tenure-track, full-time position at the rank of Visiting Assistant Professor of Chemistry, to begin July 2017. The initial term of appointment is for two years, with the possibility of an additional reappointment for up to one year, conditional on performance and the needs of the College. The successful candidate will be prepared to offer a total of five courses per year in areas suited to the candidate's field of expertise. Specializations may include but are not limited to: General, Organic, Inorganic and Physical Chemistry, as well as Biochemistry and Environmental Chemistry. A Ph.D. in Chemistry is expected by the time of appointment and candidates with postdoctoral experience are encouraged to apply.

We seek a colleague engaged in learning, developing, and maintaining a dynamic curriculum that is responsive to the needs of Smith's diverse and talented student body. The Department of Chemistry has state-of-the-art facilities and instrumentation, and its faculty is dedicated to active research programs with undergraduate students. Research and mentoring of students is not required for visiting faculty, but visitors are welcome to participate. Details about the Department of Chemistry at Smith may be found at http://www.smith.edu/chemistry.

Located in the vibrant community of Northampton, MA, Smith College is the largest independent women's college in the country and is dedicated to excellence in teaching and research across the liberal arts. A faculty of outstanding scholars interact with students in small classes, as advisors, and through student-faculty research projects. The Five College Consortium, comprised of Smith, Amherst, Mount Holyoke, and Hampshire Colleges and the University of Massachusetts, Amherst, provides a rich intellectual and cultural life and broad collegial opportunities.

Submit application at http://apply.interfolio.com/39001 with a cover letter, curriculum vitae, statement of teaching philosophy, unofficial copies of graduate and undergraduate transcripts, and three confidential letters of recommendation. Review of applications will begin November 15, 2016.

Diversifying the student body, faculty, administration, staff, and curriculum is crucial to the mission and vision for the College. We are committed to providing access and reasonable accommodation in the application process for individuals with disabilities and encourage applicants to request any needed accommodation(s). We value and are committed to a host of diverse populations and cultures, including, but not limited to, those based on ability, age, ethnicity, gender, gender identity, national origin, race, religion, sexual orientation, and veteran status.

Smith College is an EO/AA/Vet/Disability Employer. Women, minorities, veterans and individuals with disabilities are encouraged to apply.

**The Department of Biological and Environmental Engineering at Cornell University** invites applicants for a tenure-track position at the rank of Assistant Professor in the field of biological engineering. The position is open to all biological engineers with an interest in developing advanced technologies for monitoring and understanding biological and environmental systems to meet the challenges of unprecedented climate change and diverse social economic landscape. The appointee will establish a strong research program in the area of applied measurement science for a range of applications related to biological, agricultural, and environmental systems. Some examples include, but are not limited to, detection of pathogenic organisms as epidemics emerge from toxins in our food and water supplies, monitoring plant and animal responses to various environmental stressors, and agro-ecosystem responses to different management decisions. Strong skills in two or more of the following areas are preferable: electronics, microfluidics, synthetic biology, molecular biology, plant or animal physiology, biogeochemistry, electrochemistry, and ecology.

The appointee is expected to teach a bioinstrumentation course for biological engineers at the junior level. This course will address advanced tools that engineers use to quantitatively analyze biological systems at the molecular, cellular and tissue scales. A second course will be at the graduate level associated with the appointee's research area. Advising undergraduate students and mentoring postdocs and graduate students is also expected. This individual would contribute primarily to our biological engineering BS program but would also be open to participating in our environmental engineering BS program and CALS initiatives in Environmental Science and Sustainability.

This position is offered in a rich environment of many university wide centers at Cornell including Atkinson Center for a Sustainable Future, the Nanobiotechnology center, the Center for Materials Research, and the Center for Nanoscale Science and Technology. Collaboration within and outside the department is encouraged and expected. This position requires a balanced effort between research (50%) and teaching (50%) on a 9-month academic year basis.

*Qualifications:*
A Ph.D. in an appropriate discipline is required with demonstrated capability and success in developing research and teaching programs at the interface of engineering and biological sciences. A strong background in engineering and biology is required and an engineering degree is preferred.

*Applications and Starting Date:* Anticipated starting date is July 2017. Applications including a CV, statements of research and teaching interests, copies of relevant publications, three reference letters, and unofficial transcripts should be submitted online at: https://academicjobsonline.org/ajo/jobs/6220 . Applications will be accepted and reviewed until this position is filled. Applications will be reviewed beginning November 2016.

To strengthen an already diverse faculty, the department encourages women and underrepresented minorities to apply for this position.

**The Division of Chemical Biology and Medicinal Chemistry at The University of Texas at Austin College of Pharmacy** invites applications for a full-time tenure-track faculty position at the Assistant Professor level, effective August 2017. The division (http://sites.utexas.edu/medchem/)is a highly interdisciplinary and interactive group engaged in cutting edge research.
The successful applicant will engage in productive interdisciplinary research, provide high-quality teaching, and actively participate in university service. The candidate will be expected to establish a vigorous and externally funded research program focusing on chemical and molecular mechanisms of high biomedical significance. All highly qualified candidates will be considered, but those with research interests related to cancer or infectious diseases will be viewed more favorably. Teaching in the professional (Pharm.D.) program and development of graduate courses in the area of research expertise are expected. The position carries a highly competitive salary, benefits, and start-up package.

Qualifications
Ph.D. in a relevant field.
Application Instructions
Applicants should submit a cover letter, curriculum vitae, research plan, and a list of 3 references. Applications received before December 1, 2016 will receive first consideration, but applications will be accepted until the position is filled. https://apply.interfolio.com/36240

**The School of Engineering (STI) of EPFL** invites applications for a tenure-track assistant professor position in inorganic materials within the Institute of Materials. We seek exceptional individuals who will develop and drive a research program at the forefront of the discipline, who have a strong dedication to

teaching at the undergraduate and graduate levels, and who will be proactive members of a vibrant Materials community.

Top-level applications are invited in all areas related to the design, synthesis, processing and haracterization of functional inorganic materials including, but not limited to: materials for energy harvesting, conversion or storage; novel semiconductors; electronic, catalysis or photonic materials as well as materials for information technology or devices.

As a faculty member of the School of Engineering, the successful candidate will be expected to initiate an independent and creative research program and participate in undergraduate and graduate teaching. Internationally competitive salaries, start-up resources and benefits are offered.

EPFL, with its main campus located in Lausanne, Switzerland, is a dynamically growing and well funded institution fostering excellence and diversity. It has a highly international campus at an exceptionally attractive location boasting first-class infrastructure. As a technical university covering essentially the entire palette of engineering and science, EPFL offers a fertile environment for research cooperation between different disciplines. The EPFL environment is multi-lingual and multi-cultural, with English often serving as a common interface.

Applications should include a cover letter with a statement of motivation, curriculum vitae, list of publications and patents, concise statement of research and teaching interests, and the names and addresses of at least five referees. Applications must be uploaded in PDF format to the recruitment web site: www.go.epfl.ch/imx-search

Formal evaluation of candidates will begin on December 1st, 2016 and continue until the position is filled.
Enquiries may be addressed to:
Prof. Harm-Anton Klok; Search Committee Chair; E-mail: imx-search@epfl.ch
For additional information on EPFL, please consult the web site: www.epfl.ch
*EPFL is committed to increasing the diversity of its faculty, and strongly encourages women to apply.*

**The Getty Conservation Institute's (GCI)** postdoctoral fellowship is a two-year program designed to provide recent PhDs in chemistry and the physical sciences with experience in conservation science. The 2017-2019 Postdoctoral Fellow will be an integral part of the GCI Science's Technical Studies research area, and as such will work closely with conservation and curatorial colleagues from across the Getty, gaining experience in cultural heritage research as conducted within a museum environment. (http://www.getty.edu/conservation/about/science/index.html ).

The Technical Studies research group focuses on the study of works of art to answer questions related to an artist's materials and techniques, workshop practice, attribution/provenance, and how the constituent materials might have altered or degraded over time. Projects vary widely in size and scope, and emphasis is given to projects that benefit the conservation field more broadly. Some projects may focus on a single artist, or school of artists, to examine trends in the development of artistic practice; others may examine a broad class of objects in order to elucidate historic technologies; and others may concentrate on a specific artist's material to better understand its properties or use, or to identify ways of assessing geographic provenance. As such, the scientific studies that form the foundation of this research are necessarily multi-faceted, employing a wide variety of analytical techniques, ranging from whole object imaging technologies to the examination of materials at the nano-scale.

The Postdoctoral Fellow is expected to engage with, and be involved in, both new and existing projects and research partnerships being conducted in the area of Technical Studies Research; the primary focus of

the Fellow's research activities will be the area of implementing/developing advanced imaging technologies (including both visual and spectroscopic imaging) and data visualization. The Fellowship thus will be particularly suited to candidates having a strong background in imaging and computer science at the graduate level. In addition to working on existing or nascent research projects, there is scope for the Fellow to pursue independent research on a topic of their own choosing, and to take full advantage of the diverse research facilities available at the Getty. Professional development will be encouraged and assisted through participation in professional meetings, conferences or workshops. It is hoped that the Fellow's research outcomes will be disseminated through publications and conference presentations, both to the scientific community and to art conservation practitioners.

Applicants should have a recent (2010 or later) PhD in a relevant field, including but not limited to, computer/imaging science, analytical/physical chemistry, optical/electrical engineering or materials science. Experimental research experience and strong instrumental analysis skills are also desirable. Demonstrable aptitude for self-directed learning and for working across academic disciplines is critical, as are excellent written and verbal communication skills. Candidates should have an interest in the visual arts and a serious interest in pursuing a career in conservation science within the museum environment. The fellowship runs from September 2017 to August 2019. In addition to an annual stipend, the fellow will be provided an annual study trip allowance and generous benefits including travel to, and housing in, Los Angeles and full health benefits.
DEADLINE: November 15, 2016
HOW TO APPLY: A completed online application (which includes uploading a Statement of Interest; Doctoral Dissertation Plan or Abstract; Curriculum Vitae; Writing Sample; and Confirmation of Degree) must be received by the deadline. Two Confidential Letters of Recommendation must be sent separately to GCIPostDoc@Getty.edu.
Interested candidates should apply through the Getty's Job Opportunities webpage:
https://jobs-getty.icims.com/jobs/2835/gci-postdoctoral-fellow/job

**Northwestern University Office for Research Safety** is looking for a Chemical Hygiene Officer. This position will serve as the campus-wide Chemical Hygiene Officer (as required by OSHA) and function as the ORS resident expert on chemical safety, toxicology and risk assessment involving the safe use and storage of hazardous chemicals in teaching and research. This position will also work in cooperation with the EHS function in Risk Management to ensure a common approach to chemical safety across NU. The individual will ensure OSHA compliance with the "Laboratory Standard" (29 CFR 1910.1450) by ensuring that a key compliance document—the Chemical Hygiene Plan—meets the needs of the campus and is kept current.

This position performs risk and compliance assessments, and promotes safe work practices within Northwestern University managed research laboratories—specifically the Chemistry Department. The incumbent will work with the principal investigators, researchers and administrators in assigned departments to prepare and update standard operating procedures and policies. Safety support services include laboratory safety inspections, development of training content, response to laboratory emergencies, incident investigations and other services.

*Please note*: Candidate must carry a cell phone, pager at all times while at work. May be required to wear a pager during off-hours. Incumbent must be physically capable of hazardous materials response: wearing chemical protective clothing and a self-contained breathing apparatus during emergency response.

**Specific Responsibilities:**

- Serves in the official capacity of Chemical Hygiene Officer for NU as the ORS residential expert on chemical safety, toxicology and risk assessment involving the safety use and storage of hazardous chemicals in teaching and research.
- Works with principal investigators and researchers to integrate safety procedures into laboratory operations. Promotes safe work practices based on regulatory requirements, incident experience, best management practice, and University policy. Performs the more complex risk and industrial hygiene assessments and safety audits, and drafts performance reports. Acts as the subject matter expert to make recommendations on appropriate laboratory safety practices and exposure control.
- Collaborates with principal investigators, safety designates, students, staff and contractors. Leads the development of guidelines, training content and standard operating procedures for the more complex or novel safety operations involving inhalation toxicity, chemical reactions under high pressure, highly reactive chemicals, hazardous energy lock-out, electrical safety, and engineered nanomaterials. Assists researchers with the management of chemical inventory processes.
- Under limited direction, develops contingency plans for emergency response and drills with all stakeholders. Serves as one of ORS's field deployed safety and health representatives and certified hazardous materials shippers.
- Reviews new regulatory requirements for applicability to research safety and assess the impact of new or proposed regulations on laboratory safety resource needs. Researches scientific publications and other academic safety programs for innovative approaches to safety operations and develops recommendations for improvements or simplification.
- Improves own professional skills through outreach, training and acquiring certification.
- Performs other duties as assigned.

**Minimum Qualifications:**

- Successful completion of a full course of study in an accredited college or university leading to a master's degree in chemistry, physics, biology, environmental science or equivalent and five or more years of relevant research safety experience.
- OR appropriate combination of education and experience.
- Must pass pre-employment physical screening. Fit to carry 50lbs, walk extensively, and be medically approved to wear chemical protective clothing including respirators. Must have no medical condition that would interfere with performing essential job functions.
- Must be able to respond to potential emergencies of the Evanston campus, off hours and weekends within one hour.
- Excellent interpersonal skills, ability to work with individuals from many cultural backgrounds and varying language skills.
- Demonstrated written and oral presentation skills, ability to keep careful records, complete assigned forms, follow up as necessary to meet identified needs.
- Self-motivated to work independently following established policies and procedures.

**Preferred Qualifications:**

- PhD degree in chemistry, physics, biology, environmental science or equivalent and three to five years' experience managing laboratory safety programs.

https://nuhr.northwestern.edu/psp/hr91prod_er/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_JOB_DTL&Action=A&JobOpeningId=29372&SiteId=1&PostingSeq=1