

**2016 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**December 12, 2016**

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

Tuesday December 13<sup>th</sup>:            *Faculty Lunch Seminar: Teri Odom*  
Tech K140  
12:00 – 1:00pm

Friday December 16<sup>th</sup>:            *ACS/Aldrich Award Seminar: Mercuri Kanatzidis*  
Tech LR5  
4:00-5:00pm

**BIP**

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

**Arrivals**

We did not have any new arrivals

**Announcements**

**25th Enzyme Mechanisms Conference**, January 4-7, St. Pete Beach, FL, chaired by Rick Silverman.  
See website for details: <http://www.enzymemechanismsconference.org>

**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 Medicinal Chemistry at the University of Minnesota** invites applications for a tenure-track faculty position at the rank of Assistant, Associate, or Full Professor level. The Department is housed in the College of Pharmacy (CoP), which is ranked #2 in the Nation as a Top Pharmacy School and #3 in research funding amongst its peers. The position will be a twelve-month full-time appointment, with expectations in teaching (in the areas of Medicinal Chemistry & Neuroscience) and service to both the PharmD professional curriculum and also the Departmental graduate education programs. Candidates are expected to establish, maintain, and direct a major research program addressing chemical neuroscience from a medicinal chemistry/chemical biology perspective to interface with other activities within the University of Minnesota, the CoP, and the Institute for Translational Neuroscience (<https://www.med.umn.edu/research/research-strengths-expertise/neuroscience/institute-translational-neuroscience>)

Emphasis is placed on research in neurodegenerative disorders, epilepsy, psychiatric diseases, neuroaddiction, and neuroendocrinology, but all neuroscience sub-disciplines are encouraged to apply.

With multiple centers focused on pain, Alzheimer's, epilepsy, neuroimaging and other areas of neuroscience; and with over 1,400 faculty in basic and applied biomedical disciplines, the University of Minnesota Academic Health Center (AHC) provides a rich environment for research and collaboration. The AHC units support such interdisciplinary programs as the Institute for Translational Neuroscience, the Institute for Therapeutics Discovery and Development, the Brain Sciences Center, the Blood Brain Barriers Research Center, the N. Bud Grossman Center for Memory Research and Care, Center for Magnetic Resonance Research and Imaging, and the Center for Translational Medicine. In addition, the Minnesota Partnership for Biotechnology and Medical Genomics promotes collaborations between the University and the Mayo Clinic.

Required qualifications include: an earned doctorate (Ph.D. or equivalent) in an area related to medicinal chemistry/chemical biology/chemistry; a record of research in chemical neuroscience; publication record commensurate with rank in peer-reviewed journals; eligibility for appointment at the appropriate rank at the time of employment; and commitment to a diverse environment.

Interested candidates are strongly encouraged to apply by December 15, 2016 for the first review; however, this position will remain open until filled. For specific questions about this position, please contact the search committee chair, Dr. Carrie Haskell-Luevano, Ph.D., at [chaskell@umn.edu](mailto:chaskell@umn.edu), telephone 612-626-9262. More information about this exciting opportunity and application information may be found at: [www.pharmacy.umn.edu/employment/](http://www.pharmacy.umn.edu/employment/).

*The University of Minnesota is an equal opportunity employer and educator*

**Department of Chemistry with the University of Wisconsin – Parkside** is accepting application for an Assistant Professor. Responsibilities include teaching undergraduate general chemistry, organic chemistry, and biochemistry courses. This position is expected to establish and maintain an active research program involving undergraduates and to secure external funds to support research. In addition, the position will be expected to contribute in the area of university service.

<https://www.uwp.edu/explore/employment/faculty-assistant-professor-of-chemistry-102116.cfm>

## Essential Duties and Responsibilities

### 80% Teaching:

1. Teaching; advising; supervising internships; enhancing program development; independent studies; and undergraduate research

### 20% Research and Service:

1. Maintain an active research program involving undergraduate students in area of specialization; publication of research findings; application for intra- and extra- mural funding; general service to the College and University; community service in the area of research

## Essential Knowledge and Abilities

- Knowledge and ability to teach undergraduate general chemistry, organic chemistry, and biochemistry courses
- Knowledge and ability to conduct research and scholarly activities
- Responsible for budgets and accounts originating from intramural and extramural funding generated
- Ergonomic requirements: extensive work at computer, laboratory workbench; sitting and standing for long periods of time; lifting and manual dexterity as needed for teaching and research; handling instructional models
- Knowledge and ability to work with a variety of laboratory chemicals, cleaning supplies, and hazardous waste

## Qualifications

### Education, Experience, Training and/or Certifications

#### Required

- Ph. D. in chemistry
- Demonstrated promise as an instructor of general chemistry, organic chemistry, and biochemistry
- Demonstrated promise as a scholar, including projects suitable for undergraduates

#### Preferred

- Post-doctoral experience
- Experience teaching organic chemistry and biochemistry at the college-level beyond serving as an assistant
- Excellent oral and written communication skills
- Experience working with culturally diverse populations
- 

## **The Stanford Neurosciences Institute (SNI) and the School of Engineering (SOE) at Stanford**

**University** invite applications for a junior faculty tenure track position (Assistant or untenured Associate Professor level) at the interdisciplinary interface between neuroscience and engineering, broadly defined. The appointment will be in one or more of the nine departments within SOE, as appropriate to the candidate's field of expertise. Applicants are expected to have a doctoral degree in any engineering field applicable to neuroscience, broadly defined, including bioengineering, biomedical engineering, materials science, chemical engineering, physics, chemistry, computer science, mechanical engineering, electrical engineering, or any related discipline.

The successful candidate will be expected to develop outstanding, highly interdisciplinary neuro-engineering research and teaching programs. We are open to applications from individuals working on a broad range of problems and experimental preparations. The research focus may range from fundamental bioscience to clinically motivated research to theory and computation. We encourage applications from physician-engineers. Ideal candidates will demonstrate strong communication and leadership skills, and will be able to actively contribute to our rapidly growing institute and engineering programs at Stanford.

A strong commitment to graduate and undergraduate teaching and advising is essential. Teaching responsibilities include participation in and the development of both undergraduate and graduate courses. The supervision of doctoral students and academic advising of students at all levels is expected.

Applications will be accepted only through an on-line process and should include a 3 page research statement, a one page teaching plan, complete CV (including publications list), and names and addresses of 3 suitable references. Applicants should visit our recruitment site at: <https://mse.stanford.edu/faculty-search>. This web site is currently open to receive applications until February 15th, 2017 or until the position is filled. Questions may be addressed to [neuroengineeringsearch@stanford.edu](mailto:neuroengineeringsearch@stanford.edu).

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. We welcome nominations of and applications from women, members of minority groups, protected veterans and individuals with disabilities, as well as from others who would bring additional dimensions to the university's research, teaching and clinical missions.

**The Chemours Titanium Technology facility located in New Johnsonville, TN** has a fulltime R&D chemist position available. This is a highly visible, key role within the Company and the R&D function. This position will report to R&D Manager.

The responsibilities of the position include, but are not limited to, the following:

- Develop new products and technology in support of our business' growth initiatives in a number of market spaces.
- Provide technology improvements associated with the TiO<sub>2</sub> production process.
- Work with site personnel, our global technical service and R&D organization to develop new technologies and offerings, and to support existing products.
- Provide technical support to production.
- Serve as product quality guardian for any number of DTT product offerings.
- Document work in technical reports and file new patent applications in accordance with business IP strategy

#### QUALIFICATIONS:

In order to be qualified for this role, you must possess the following:

No more than 8-10 "must possess" bullet points, avoid soft skills – Example:

- Ph.D. degree in Chemistry or Material Sciences (or related field)
- Strong background in chemistry and characterization techniques associated with metal oxides or other similar advanced materials.
- Experience in surface modification and surface coating of small particles.
- Experience in new product development.
- Excellent problem-solving as well as oral and written communication skills in English.
- Proven ability to work well in cross-functional, international and diverse teams.

The following skill sets are preferred by the business unit:

No more than 8-10 "preferred" bullet points – Example:

- Knowledge of colloid chemistry and particle-particle interaction theories.
- Work experience in industrial R&D environment or as Post Doctoral Fellow preferred.

Chemours is an equal opportunity employer. Chemours is an E-Verify employer.

Candidates must be able to perform all duties listed with or without accommodation. At Chemours, you will find sustainability in our vision, our business and your future. If you want to work on the leading edge of your field and have a desire to make a difference, join Chemours and discover what it means when we say "We Are Living Chemistry". <http://careers.chemours.com/jobsearch/job-details/rd-chemist/JR557/1/>

**The Department of Chemistry at the University of California – Davis** is accepting applications for a lecturer position for the Winter and Spring quarter 2017.

Qualifications: PhD in Chemistry (or related field) required; experience teaching at the college and/or university level preferred; previous experience with evidenced-based teaching methods preferred. Duties will include teaching in lower and/or upper division Chemistry lecture courses and labs and salary will be dependent upon candidate's training and experience.

Dates available: Winter quarter January 6 – March 24, 2017  
Spring quarter March 30 – June 15, 2017

Application deadline is December 9, 2016, or until positions are filled. Winter positions will be filled first.

Interested candidates should submit a cover letter, CV, Statement of Teaching, Statement of Contribution to Diversity, and names of two professional references via <https://recruit.ucdavis.edu/apply/JPF01358>

Submitting letters of recommendation is also strongly encouraged, but not required.

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**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 high efficiency solar-to-fuels and solar-to-electricity conversion through precise few-atom cluster synthesis and new perovskite halide solar absorbers. The appointee will advance the basic science of precision gas-phase surface synthesis (atomic layer deposition), simple solution chemistry, and in situ and ex situ chemical and materials characterization. This will be interdisciplinary and highly collaborative work (part of an Energy Frontier Research Center) that includes surface synthesis, physical and optoelectronic characterization, and electrochemical assessment. Must have demonstrated outstanding promise as a research scientist.

Strong applicants will exhibit strong basic science understanding, motivation, and an ability to originate, carry out, and publish significant original research. Strong written and verbal skills are required. Previous experience with atomic layer deposition, inorganic chemistry, surface characterization (ellipsometry, AFM, TEM), electrochemistry, and solar energy conversion are desirable but not required. A Ph.D. in Chemistry, Materials Science, Physics, or a related field received within the last three years is required.

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.

**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](mailto:steven.robey@nist.gov)