2017 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
January 23, 2017

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

Tuesday January 24th: *Faculty Lunch Seminar: Milan Mrksich*
Tech K140
12:00 – 1:00pm

BIP

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

Arrivals

We did not have any new arrivals

Opportunities

United States Army Research Laboratory In order to stay on the leading edge of science and technology, a laboratory must have a constant influx of new ideas and fresh perspectives. The ARL brings in recent Ph.Ds or Sc.Ds to conduct high impact basic and applied research under the guidance of an ARL advisor through several postdoctoral research programs. The ARL has over 100 postdocs located at facilities in Adelphi, MD; Aberdeen Proving Ground, MD; White Sands, NM; and Orlando, FL.

There are several ARL-wide postdoctoral research programs available to both U.S. citizens and non-U.S. citizens. More information is available on the Program Specifics page.

https://www.arl.army.mil/www/default.cfm?page=177

Pacific Northwest National Laboratory is accepting applications for a postdoctoral researcher
Job Description:
A postdoctoral researcher is needed in the Catalysis Science Group for experimental research. The position will be focused on the reduction of CO2 using catalysts based on inorganic and organometallic complexes. The planned research will involve the design, synthesis, and characterization of new metal complexes, including thermochemical and mechanistic studies, leading to new molecular catalysts in the area of reduction of CO2 to fuels.
https://pnnl.jibeapply.com/jobs/306182/Post+Doctorate+RA+-++Catalysis+Science?lang=en-US

Minimum Qualifications
Candidates must have received a PhD within the past five years (60 months) or within the next 8 months from an accredited college or university.

Preferred Qualifications
Experience in synthetic and mechanistic organometallic/inorganic chemistry and handling air-sensitive materials is required. Excellent oral and written communications skills are mandatory. Proficiency with a range of spectroscopic techniques, particularly NMR, is essential. Experience in electrochemical measurements is desirable but not required. Must have the ability to work in a highly collaborative environment

The perfect candidates would have these 3 characteristics:
Expertise in preparing and handling highly air-sensitive complexes
Experience in NMR and electrochemistry
Independent and highly motivated

Preferred Education/Credential:

Ph.D. in organometallic chemistry or inorganic chemistry

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.

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 TiO2 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 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 at 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*