

2017 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
February 20, 2017

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

Tuesday February 21st: *Faculty Lunch Seminar: Ken Poeppelmeier*
Tech K140
12:00 – 1:00pm

Friday February 24th: *Department of Chemistry Colloquium:*
Dean Tantillo, University of California Davis
Ryan 4003
4:00-5:00pm

BIP

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

Arrivals

We did not have any new arrivals

Opportunities

Inaugural Bioorganic Chemistry Gordon Research Seminar June 10-11th The GRS is a two-day seminar precursor to the GRC and will feature work from graduate students and postdoctoral scientists with an emphasis on research at the interface of chemistry and biology. In addition, the GRS and GRC provide a unique setup to maximize interactions and networking opportunities with other conference attendees. For additional GRS details, updates, and application, visit <https://www.grc.org/programs.aspx?id=17413>

The Shepherd Color Company is seeking a bachelors-level chemist for its Research and Development team. As a member of that team you'll work in a creative and collaborative atmosphere developing new colored inorganic pigments or other mixed-metal-oxide materials. The Shepherd Color Company is a privately-owned company in Cincinnati, Ohio. Although it's principally a supplier of mixed-metal oxides used as colored pigments, Shepherd Color is also a leader in the manufacture of inorganic materials used for other chemical and physical properties.

Applicants should have a B.S. or B.A. in chemistry or materials science with a particular interest in inorganic materials. The job is a research and development job. Prior research experience is not required, but it is valuable, as it can help establish the applicant's capabilities for research. Most important is that the applicant is excited about inorganic materials research, which involves lab experimentation, scaling-up of synthetic methods, and literature research; and constantly expanding his/her knowledge base. The applicant needs to be intelligent, a good learner, highly motivated, and adept at collaborating with others.

The work atmosphere in the Research and Development group at Shepherd Color is one where the chemists are exposed to a variety of tasks and responsibilities, interact regularly with other departments, and are challenged to advance technology, improve existing products, and develop new products that will

ensure the future success of the company. Research Chemists at Shepherd Color are able to handle multiple projects and changing priorities. They enjoy developing new technologies and applying them in new, technically-advanced products and the reward of following the impact of their developments on the marketplace.

To apply, please provide a resume and a cover letter explaining why you believe you are a good fit for the position. Applications can be made by following this link:

https://workforcenow.adp.com/jobs/apply/posting.html?client=shep&jobId=183266&lang=en_US&source=CC2 or through the company website at www.shepherdcolor.com.

The Department of Chemistry and Biochemistry at Swarthmore College invites applications for a full-time faculty member at the level of Visiting Assistant Professor for the 2017-2018 academic year. The successful candidate will participate in the organic chemistry lecture and laboratory curricula as well as in general chemistry. PhD is required; teaching experience is preferred.

The submission of applications will occur electronically through Academic Jobs Online, which can be accessed on the following site: <https://academicjobsonline.org/ajo/jobs/8871>

Once on the Academic Jobs site you will be asked to submit a cover letter, CV, and scanned PDF copies of your undergraduate and graduate transcript(s). Please address qualifications for teaching organic and general chemistry in your cover letter, and arrange to have 3 letters of recommendation sent to the Academic Jobs Online link above. Consideration of applications will begin on February 20, 2017 and will continue until the position is filled. Additional information about Swarthmore College and the Department of Chemistry and Biochemistry can be found at <http://www.swarthmore.edu>.

Swarthmore College is a highly selective liberal arts college, located in the suburbs of Philadelphia, whose mission combines academic rigor with social responsibility. Swarthmore has a strong institutional commitment to inclusive excellence through diversity, and actively seeks and welcomes applications from candidates with exceptional qualifications, particularly those with demonstrable commitments to a more inclusive society and world and who can work effectively with students from diverse educational backgrounds. Applicants from traditionally underrepresented groups are strongly encouraged to apply. For more information on Faculty Diversity and Excellence at Swarthmore, see <http://www.swarthmore.edu/faculty-diversityexcellence/information-candidates-new-faculty>.

The Department of BioMolecular Sciences in the School of Pharmacy at The University of Mississippi is seeking qualified applicants for a full time, 12-month, tenure-track position at the rank of Assistant, Associate, or Full Professor. We seek candidates with expertise in the field of medicinal chemistry or the application of organic synthesis to drug discovery who possess a record of distinguished and innovative research (as evidenced by a significant publication record and the potential to secure extramural funding) and a commitment to excellence in education. Applicants applying for the higher ranks should have a nationally recognized research program with recurrent success in securing extramural funding and excellent teaching credentials.

The University of Mississippi is the flagship university for the State of Mississippi. A world-class public research university, the institution has a long history of producing leaders in public service, academics and innovative research. The School of Pharmacy is on the main campus in Oxford, a community of approximately 19,000 residents that has been recognized nationally as one of America's best places to live. *The Chronicle of Higher Education* has named The University of Mississippi as one of the "Great Colleges to Work For." The Department of BioMolecular Sciences has 13 full-time faculty with research emphases in medicinal chemistry, pharmacognosy, pharmacology, and environmental toxicology. The faculty have affiliations with the Research Institute of Pharmaceutical Sciences and collaborative opportunities in the National Center for Natural Products Research. The department has teaching

responsibilities in several degree programs, including the Pharm.D (Doctor of Pharmacy) as well as M.S. and Ph.D programs in Pharmaceutical Sciences.

The review of applications will begin immediately and continue until a suitable pool of applicants is established. Applicants must have a Ph.D. degree in Medicinal Chemistry, Chemistry, Organic Chemistry, or a related field in the pharmaceutical sciences as well as post-doctoral experience. Applicants should provide a cover letter outlining qualifications for the position, a detailed description of research plans, a one-page executive summary of the research plan, a statement of teaching philosophy, a curriculum vitae, and the name and contact information of four references through The University of Mississippi's online employment site at <https://jobs.olemiss.edu>. For additional information please contact, Prof. David A. Colby, Search Committee Chair, 662-915-1766, dacolby@olemiss.edu.

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 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](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.