

2016 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
June 27, 2016

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

BIP

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

Arrivals

We did not have any new arrivals

Announcements

Congratulations to Nick Calta and Chuyang Cheng who are among the 45 finalists in the running for the 2016 Reaxys prize.

http://inspiringchemistry.reaxys.com/phdprize?utm_source=Press%20Release&utm_medium=referral&utm_campaign=45%20finalists%202016%20Reaxys%20PhD%20Prize#finalists2016

Selected from nearly 450 submissions from around the globe, these 45 talented chemists join the Reaxys Prize Club, a community of inspiring minds making meaningful contributions to chemistry. As part of this community, the finalists have the opportunity to share their work, connect with internationally recognized chemists and drive their research forward. Since its launch in 2010, the Reaxys PhD Prize has aimed to recognize chemistry PhD students and recent graduates, fostering creativity in ground-breaking chemistry by identifying tomorrow's chemistry leaders and empowering them to magnify the impact of their work.

Opportunities

Smith College is accepting applications for a Postdoctoral Fellow in the Chemistry Department to conduct research into the use of modified DNA molecules as chemical reagents to selectively modify one compound in a complex mixture. This is a full-time, 1 year grant-funded position in the laboratory of David J. Gorin with the possibility of renewal. The desired start date is February 1, 2017, but is negotiable.

Position Summary:

Conduct research into the use of modified DNA molecules as chemical reagents to selectively modify one compound in a complex mixture.

Duties and Responsibilities:

Conduct research within the framework of the NSF grant "CAREER: DNA-Catalyst Conjugates for Site-Selective Transformations in Biological Contexts," which includes stipend, fringe benefits, and professional development funds for this position

The goal of the proposed research is to develop DNA-based reagents for the selective chemical modification of one target molecule in a complex biological mixture. Specific experimental goals include the synthesis of hybrid molecules containing DNA and small molecule catalyst moieties, the development of fluorogenic assays for chemical reactions of interest, and the discovery of functional DNA molecules by SELEX.

Other responsibilities include participation in weekly lab meetings and mentoring of undergraduate researchers in the laboratory. Participation in undergraduate courses is possible.

Qualifications:

Education/Experience: Ph.D. in chemical biology, organic chemistry, or related discipline.

Skills: Experience working with biomolecules (nucleic acids or proteins) is an essential qualification for the position. Technical expertise in the evolution of functional nucleic acid (SELEX) is highly desirable as is familiarity with HPLC, ESI-MS, organic synthesis, DNA-linked chemical libraries, and/or fluorescence assays.

Additional Information:

Please attach your resume, cover letter, list of references and a 2-page research summary. This is a full-time, 1 year, grant-funded position with the possibility of renewal.

<https://smithcollege.hiretouch.com/job-details?jobID=32751&job=ad0901-postdoctoral-fellow>

McNeese State University invites qualified applicants and nominations for the position of Assistant Professor of Chemistry in the Department of Chemistry and Physics. This is a full time, 9-month, unclassified, tenure-track position. The appointment begins in August 2016.

Position Description and Responsibilities:

The assistant professor is required to perform duties in accordance with the department's needs. The successful candidate is responsible for functions related to teaching, advising, scholarly activity, and contributions to the development of the department and university. The standard teaching load is 12 credit hours per semester. The successful candidate will teach organic chemistry as well as organic chemistry laboratories. Teaching assignments include upper level courses in the area of the candidate's expertise and departmental instructional needs. In addition, the assistant professor is expected to be involved in the maintenance of the department's chemical instrumentation (NMR, GC, GC-MS, LC etc.). As a member of a cooperative and collegial campus community, the successful candidate will also serve on university-wide committees and is expected to be an active scholar to help successfully meet the goals of the department.

Qualifications:

Required:

- PhD with significant progress in organic chemistry or a closely related field
- Evidence of successful involvement with chemical instrumentation

Preferred:

- Involvement with the maintenance of chemical instrumentation
- Experience in and commitment to teaching
- A demonstrated record of research

Salary: \$51,000

Deadline:

Review of applications will begin immediately and will continue until position is filled.

Application Materials and Contact:

Applicants should electronically submit: Cover Letter, Curriculum Vitae, Research Plans, References (name, phone number, and e-mail address of at least three), and Unofficial Transcripts for the application process. Please electronically submit the required documents to: Chris Douvris at cdouvris@mcneese.edu

The University of Virginia Department of Chemistry invites applications for a Postdoctoral Research Associate position in the group of Professor Charles W. Machan. The field of study will be development of catalysts for the electrochemical activation of water and oxygen with a focus on bimetallic molecular electrocatalysts. This research project will include the design of new materials for immobilizing these catalysts on electrodes and photoelectrodes. The projects are highly interdisciplinary and focused on important energy-related problems. Further information about Professor Machan and his research can be found at cwmachan.com.

Questions should be addressed to Professor Machan at machan@virginia.edu.

More information about applying can be found [here](#).

The Camille and Henry Dreyfus Foundation seeks to further the development of scientific leadership in the field of environmental chemistry with a postdoctoral fellowship program. The Postdoctoral Program in Environmental Chemistry provides a principal investigator with an award of \$120,000 over two years to appoint a Postdoctoral Fellow in environmental chemistry.

Eligibility

The Postdoctoral Program in Environmental Chemistry is open to all academic and other not-for-profit organizations in the States, Districts, and Territories of the United States of America. Applications are accepted from **principal investigators** who have well-established research efforts in environmental science or engineering. These research activities need not be located in traditional departments in the chemical sciences, and collaboration across departments and institutions is encouraged. The postdoctoral fellow is usually not already identified nor in the principal investigator's lab at the time of application. Note: award recipients must wait two years from the conclusion of an award before being eligible to reapply.

Research Areas of Interest

Applications most likely to be of interest should describe innovative fundamental research in the chemical sciences or engineering related to the environment. The importance of the research should be explained. Examples include but are not limited to the chemistry associated with: the climate, the atmosphere, aquatic or marine settings, toxicology, soil or groundwater. Also of interest are chemistry-related energy research (renewable sources, sequestration, etc.), and new or green approaches to chemical synthesis and processing, both with a clearly stated relation to the environment.

Selection

Applications come from the principal investigator. Recommendations for awards are based on several factors: assessment of the proposed research, the arrangements for the interdisciplinary educational broadening of the Fellow, and an assessment of the ability to both attract the best young Ph.D. candidates and subsequently place them in high level independent starting positions. Applications are reviewed by distinguished scientists in the environmental and chemical sciences.

Budget

The Postdoctoral Program in Environmental Chemistry provides a \$120,000 award, payable in two \$60,000 installments. Funds are normally expended over a period of two years after the appointment of the Fellow. Charges associated with indirect costs or institution overhead are not allowed. Of the total annual award amount, the stipend support of the Fellow is no less than \$48,000 (stipends may be supplemented from institutional or other sources). Fringe benefits of the Fellow taken from this award may not exceed \$12,000 annually.

Application Procedure

All application materials must be received at the Foundation office by August 1st. Applications

recommended for approval are presented to the Foundation's Board of Directors in time for award announcements by early November.

Required Information:

Application package. The application should be formatted on 8 1/2 x 11-inch paper, using 12-point font size. Assemble it as:

1. The online application form ([HERE](#))
2. A research proposal that would be judged as likely to advance environmental science in important ways (limited to four pages, including references)
3. A CV (limited to five pages) for each of the key professional personnel that includes ten or fewer relevant publications
4. A one-page description of the educational opportunities and institutional strengths in environmental science, and how the Fellow would be involved in them

Send all above materials as a PDF to: programs@dreyfus.org.

Reports

The first-year award of \$60,000 will be paid after the Foundation has been provided with the Fellow's CV and anticipated start date. The second-year award of \$60,000 will be paid upon request, after completion of the first year. The request should be accompanied or preceded by a financial report and a progress report from the project director that contains highlights of accomplishments under the award and the research plan for the coming year.

Send all above materials as a PDF to: programs@dreyfus.org.

Cornell College, a private undergraduate liberal arts college, invites applications for The Anderson Natural Science Lecturer.

a semester-long sabbatical replacement position in its ACS-accredited Department of Chemistry for the spring of 2017. The successful candidate will teach two sections of Chemical Principles I (CHE 121, the introductory course for science majors) and team-teach the organic lab course (CHE 327). The maximum enrollment in each class is 25 students. As the Anderson Natural Science Lecturer, the candidate will give a public presentation and engage in outreach and/or research activities with students during a month-long non-teaching block. This position is eligible for benefits. Master's degree required; Ph.D. (or ABD) and college teaching experience preferred.

The Department seeks individuals who are committed to building a creative, dynamic and diverse workplace that celebrates the uniqueness of our faculty, staff and students. The College is committed to excellence in teaching and encourages interdisciplinary interests among its faculty.

Cornell College is a selective liberal arts college distinguished by its One Course At A Time calendar, under which faculty teach, and students take, one course at a time in month-long terms. Academic immersion and unparalleled flexibility attract an ambitious student body from 45 states and 18 foreign countries. A 1:11 faculty-student ratio enables faculty, who also act as mentors, to form transformative intellectual partnerships that bring out the best in their students. External endorsements include selection as one of the Colleges That Change Lives and an active chapter of Phi Beta Kappa. Founded in 1853, Cornell's picturesque hilltop campus contains a mix of historic and modern facilities. It is located in Mount Vernon, Iowa—an urban fringe community recognized by Frommer's as one of "America's Coolest Small Towns" and located in the heart of Iowa's Creative Corridor.

Letter of application, curriculum vitae, statement of teaching philosophy, three letters of reference, and graduate transcripts should be submitted electronically in Word or PDF format to employment@cornellcollege.edu. The statement of teaching philosophy should address the candidate's commitment to teaching a diverse student population. Formal consideration of applications begins June 30, 2016 and will continue until the position is filled.

For more information about the Department of Chemistry, including course descriptions, please visit the

website at <http://www.cornellcollege.edu/chemistry/index.shtml>

Cornell College is an Affirmative Action/Equal Opportunity employer and encourages applications from women and minority candidates. Cornell complies with Iowa's smoke free air act. Cornell utilizes E-Verify and requires satisfactory completion of a background check.

Pomona College , Claremont California General Chemistry Lab Instructor has a temporary position for a one-year Visiting Instructor or Visiting Assistant Professor, starting August 30, 2016, to teach laboratory courses in general chemistry. M.S. or Ph.D. in chemistry required. To apply for this position, email or mail a CV, a statement of teaching philosophy and career goals, a statement describing a demonstrated ability to mentor a diverse student body, undergraduate and graduate transcripts, and arrange for two letters of recommendation to be sent to: Professor Dan O'Leary (doleary@pomona.edu), Department of Chemistry, Pomona College, 645 North College Avenue, Claremont, CA 91711-6338. Complete applications received by July 15, 2016 will receive full consideration. Pomona College is committed to increasing excellence through diversity and welcomes applications from women and members of underrepresented groups.

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.

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.