

2014 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
November 24, 2014

Tuesday November 25th: *Faculty Lunch Seminar: Kenneth Poepelmeier*
Tech K140
12:00 – 1:00pm

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

BIP

Meets every Friday at 2:45pm in Tech K140

Arrivals

There were not any new arrivals this week

Announcements

Science Fair judges needed. Ravenswood Elementary School (4332 Paulina Street, Chicago, IL 60013) is hosting a middle school Science Fair for all Ravenswood 6th, 7th and 8th grade students the morning of December 9th . We need your help to ensure we have a successful Science Fair. We hope you can help with this event. Winners of the Ravenswood Science Fair will advance to the Regional Science Fair competition and may have the opportunity to compete at the City or State science fairs. If interested in helping out, please sign up at: <http://tinyurl.com/14qmmk7>

Info Webinar: Master of Science in Law Program Friday, December 12 at 12:00pm

Join the webinar at global.gotomeeting.com/join/229242453 or call in using your telephone (dial [312-878-3080](tel:312-878-3080)). Access Code: 229-242-453

Northwestern Law School is offering a new degree program – the Master of Science in Law (MSL). The degree is designed for scientists and engineers who increasingly find themselves interacting with a myriad of legal and regulatory structures and a complex intellectual property scheme. The MSL degree will provide STEM professionals with a set of skills and a body of knowledge that will give them an edge in pursuing their technical careers. The degree can be completed full-time in one academic year or part-time in up to four years. Learn more about the MSL program by joining our informational webinar; we will provide an overview of the curriculum, the scheduling, application procedure and deadlines, and answer your questions.

Anyone interested in the MSL program can also contact Susan Dennehy, Senior Program Coordinator, via email: susan.dennehy@law.northwestern.edu. Or you can visit us online: www.law.northwestern.edu/msl.

Opportunities

The Linus Pauling Distinguished Post-Doctoral Fellowship at Pacific Northwest National Laboratory is accepting qualified candidate applications from recent and upcoming PhD Graduates in Science & Engineering, who wish to conduct research on a project of their choice.

Candidates will be required to submit the following items as one PDF uploaded attachment when applying to this position:

- Cover letter
- Current CV
- Statement of Research Interests (including reasoning on why PNNL is a good place to carry out your studies)
- Written Response to each of the following questions (please include views from your own research interests as well as a wider scope across your field):
 1. What is the most interesting/challenging problem in your field today? What intrigues you most about this problem?
 2. What do you think it will take to solve that problem (do we need to invent new tools, new algorithms, push the bounds of detection limits)? What will it take and how would you propose to engage or participate?
 3. If that problem were already solved, what would the impact be on you? On science? On society?

Unofficial Transcripts

Minimum Requirements

Candidates must have received a PhD within the past three years from an accredited college or university. All staff at the Pacific Northwest National Laboratory must be able to demonstrate the legal right to work in the United States.

Qualifications

Qualified Candidates must meet the following:

- Must have completed a PhD in a Science or Engineering field related to the mission areas of PNNL within the last three years, or by Summer 2015.
- Have submitted the PDF application packet as indicated above

For more information about the position or to apply please visit the website:

<http://pnnl.jobs/richland-wa/linus-pauling-distinguished-postdoctoral-fellowship-2015/632374A8421047B4B9EE515424DE8FD3/job/>

The Department of Chemistry, Louisiana State University is taking applications for the position of Assistant/Associate/Full Professor (Soft Matter Neutron Scattering/Tenure-track). August 2015 start.

Required Qualifications: PhD in Chemistry, Physics, or a related field; demonstrated excellence in teaching and research. Candidates must have experience in the use of neutron scattering to explore the structure and dynamics of soft matter systems.

Responsibilities: Establish a strong, well-funded, widely recognized research program; publish results of research in appropriate journals or other media; teach undergraduate and graduate level courses in Chemistry; direct/supervise graduate and undergraduate students. The successful candidate will work collaboratively with LSU faculty and may have opportunities for collaborations and/or an appointment at Oak Ridge National Laboratory (ORNL) to build the neutron scattering infrastructure in Louisiana through a funded US Department of Energy program (LaCNS). The DoE funding is intended to enhance the collaboration in neutron scattering

between LSU and ORNL. For more information on LaCNS contact Professors Donghui Zhang, dhzhang@lsu.edu, or John DiTusa, ditusa@phys.lsu.edu. Review of applications will begin on December 5, 2014 and will continue until the position is filled. An offer of employment is contingent on a satisfactory pre-employment background check.

Benefits: LSU offers outstanding benefits to eligible employees and their dependents, including health, life, dental, and vision insurance, flexible spending accounts; retirement options; sick leave, paid holidays; wellness benefits; training and development opportunities; employee discounts; and more.

To Apply: Applications should consist of a cover letter, curriculum vitae, summary of proposed research, and statement of teaching philosophy, preferably as a single PDF document. A copy of transcript(s) may be attached to the application; note that original transcripts are required prior to hire. Please submit materials electronically (see below). Applicants should arrange to have a minimum of three recommendation letters e-mailed directly from evaluators to Ms. Vickie Thornton (vthornton@lsu.edu), *subject line*: LSU Chemistry Soft Matter Neutron Scattering Search.

LSU IS AN EQUAL OPPORTUNITY/EQUAL ACCESS EMPLOYER

Apply online at

<https://lsusystemcareers.lsu.edu/applicants/Central?quickFind=58423>

The Department of Chemistry, Louisiana State University is taking applications for Assistant Professor (Tenure-track), Inorganic Solid State Hard or Organic/Macromolecular/Biological Soft Materials Chemistry. August 2015 start.

Required Qualifications: PhD in Chemistry or a related field; demonstrated excellence in teaching and research. Candidates must have experience in materials, including possibly hybrid materials, for example inorganic/organic hybrids.

Responsibilities: Establish a strong, well-funded, widely recognized research program; publish results of research in appropriate journals or other media; teach undergraduate and graduate level courses in Chemistry; direct/supervise graduate and undergraduate students. The successful candidate will have access to state of the art facilities for chemical and materials research in a recently occupied Chemistry and Materials Building. Review of applications will begin on December 5, 2014 and will continue until the position is filled. An offer of employment is contingent on a satisfactory pre-employment background check.

Benefits: LSU offers outstanding benefits to eligible employees and their dependents, including health, life, dental, and vision insurance, flexible spending accounts; retirement options; sick leave, paid holidays; wellness benefits; training and development opportunities; employee discounts; and more.

To Apply: Applications should consist of a cover letter, curriculum vitae, summary of proposed research, and statement of teaching philosophy, preferably as a single PDF document. A copy of transcript(s) may be attached to the application; note that original transcripts are required prior to hire. Please submit materials electronically (see below). Applicants should arrange to have a minimum of three recommendation letters e-mailed directly from evaluators to Ms. Vickie Thornton (vthornton@lsu.edu), *subject line*: LSU Chemistry MATERIALS Search.

LSU IS AN EQUAL OPPORTUNITY/EQUAL ACCESS EMPLOYER

Apply online at

<https://lsusystemcareers.lsu.edu/applicants/Central?quickFind=58420>

The Cain Department of Chemical Engineering at Louisiana State University invites applications for up to two tenure-track faculty positions at the Assistant Professor level in the research area of Energy. The positions provide the opportunity to join a Department with a long-standing commitment to excelling in energy research, whether related to traditional fuels, renewable resources, or alternative technologies. Salary will be commensurate with experience. A doctoral degree in chemical engineering (or closely related field) from a recognized institution, and a proven record of academic accomplishment are required. Visit www.eng.lsu.edu/employ to learn more or contact Dr. Krishnaswamy Nandakumar at nandakumar@lsu.edu. Closing date for applications is January 1, 2015.

The Cain Department of Chemical Engineering at Louisiana State University invites applications for up to two tenure-track faculty positions at the Assistant Professor level in the research area of the Environment. The positions provide the opportunity to perform research on today's environmental challenges – in the context of a Department with a strong record of impact-full environmental research in areas such as atmospheric chemical processes and pollutant transport in aqueous systems. Salary will be commensurate with experience. A doctoral degree in chemical engineering (or closely related field) from a recognized institution, and a proven record of academic accomplishment are required. Visit www.eng.lsu.edu/employ to learn more or contact Dr. Krishnaswamy Nandakumar at nandakumar@lsu.edu. Closing date for applications is January 1, 2015.

The Department of Chemistry and Biochemistry at Samford University is seeking someone with a background in organic chemistry to fill a full-time (nine-month) tenure-track position at the Assistant Professor level. A Ph.D. is required for this position; postdoctoral and/or teaching experience is desirable.

Primary teaching responsibilities will be in organic chemistry, with additional duties in general chemistry. The normal teaching load in our department is twelve contact hours per week during both the fall and spring semesters. This load is usually met by teaching two lecture sections and two lab sections per week, each section meeting three hours per week. Class sizes are limited to 60 students per lecture section and 24 students per lab section. Opportunities also exist to teach during the summer for additional compensation.

The department is actively growing its undergraduate research program, and the successful applicant will be expected to develop an active research program involving undergraduates. Start-up funds are available.

For more specialized work, collaborative opportunities with researchers at the University of Alabama at Birmingham and Southern Research Institute (also in Birmingham) are also available. After a year or two, the candidate will be expected to begin sharing in committee work and other service activities.

The Department of Chemistry and Biochemistry at Samford University offers B.S. degrees in both chemistry and biochemistry. The successful candidate will become the seventh full-time faculty member in this department. The department currently advises 30-35 chemistry and biochemistry majors and is vigorously attempting to expand the research opportunities available to them. This is presently being achieved by (1) offering students summer research stipends through our summer research program and (2) attracting external grant support for student research projects and new instrumentation.

Applicants should submit to chemsrch@samford.edu the following: a curriculum vitae, a statement of teaching philosophy, a statement of research plans involving undergraduates, undergraduate and graduate transcripts (unofficial copies will suffice), and names and contact information for three references.

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

Candidates should be willing to contribute to and promote the school's mission as a Christian university. Samford University is an Equal Opportunity Institution that complies with applicable law prohibiting discrimination in its educational and employment policies and does not unlawfully discriminate on the basis of race, color, sex, age, disability, veteran status, genetic information, or national or ethnic origin.

Roosevelt University seeks two full-time, tenure track assistant professors for August 2015, one in organic chemistry and one in biochemistry. Teaching will be primarily in our BS Biochemistry and ACS-certified BS Chemistry programs, as well as in our interdisciplinary MS. Both will be located primarily at our Chicago campus.

Postdoctoral research and teaching experience are preferred. A PhD, commitment to undergraduate education and supervision of undergraduate and MS research are required. See <https://jobs.roosevelt.edu/> for details of each position, online application, and additional faculty positions in biology. Review of applications begins November 21 and continues until filled. Roosevelt University is an Equal Opportunity Employer and welcomes women, LGBTQ, disabled, veterans, international and minority-classified individuals as applicants for all positions.

Postdoctoral Fellow with the University of Houston We are currently seeking postdoctoral researchers (Ph.D. in chemistry, biochemistry, or related field) to work on one of two major projects: (1) homogeneous olefin polymerization catalysis or (2) synthetic biocatalysis. For the former, candidates with extensive experience in synthetic inorganic/organometallic chemistry, polymer characterization, and mechanistic studies are preferred. For the latter, researchers with strong backgrounds in biochemistry and chemical biology are desired; candidates should be knowledgeable in mammalian cell culture techniques, fluorescent imaging and microscopy, and standard biological assays. Interested applicants should send a curriculum vitae to Professor Loi Do at the University of Houston at loido@uh.edu.

The Department of Chemistry at Wright State University in Dayton, OH invites applications for a full-time tenure-track organic chemist at the ASSISTANT PROFESSOR level to begin Fall 2015. We are seeking candidates who can contribute to a growing interdepartmental cluster in the chemistry and physics of advanced materials. The successful candidate will be expected to establish a vibrant, extramurally funded program of research in organic chemistry that will complement existing expertise in surface, synthetic, environmental, and structural chemistry. Teaching may include contributing to the department's courses in introductory and intermediate organic chemistry, and the candidate's area(s) of expertise. A doctoral degree in chemistry with postdoctoral experience is required.

Departmental faculty participate in the Chemistry MSc program and the interdisciplinary Environmental Sciences and Biomedical Sciences PhD programs. Resources in support of research include state-of-the-art instrumentation, and opportunities to collaborate with individuals at numerous regional industrial, and research institutions, including the Air Force Research Laboratory at Wright Patterson Air Force Base.

A competitive start-up package will be tailored to the specific needs of the successful candidate. WSU has nearly 20,000 undergraduate and graduate students, and the Department of Chemistry graduates approximately 30 undergraduate students and 12 graduate students per year. More information about Wright State University, the Department of Chemistry, its graduate programs, and this open faculty position can be found at <http://chemistry.wright.edu>. Criteria for promotion and tenure in Chemistry at WSU can be found at <http://science-math.wright.edu/chemistry/about/bylaws>

Applicants should submit a letter of application, curriculum vitae, statements of research and teaching interests, and the names and contact information for three letters of reference via <http://jobs.wright.edu/postings/8090> by December 1, 2014 for first consideration.

Wright State University, an equal opportunity/affirmative action employer, is committed to an inclusive environment and strongly encourages applications from minorities, females, veterans and individuals with disabilities.

The Department of Chemistry in the College of Liberal Arts and Sciences at the University of Connecticut

invites applications for an Assistant/Associate/Full Professor nine-month, tenure-track appointment starting in August, 2015. Applicants are sought with research experience in materials, biological chemistry, or surfactant structures, with preferred focus on applications of emulsions, micelles and surfactants. Candidates whose research complements or supports development of these areas will also be considered. The position will be in the Green Emulsions, Micelles and Surfactants (GEMS) Center, a new collaborative Center in the Department of Chemistry.

Successful applicants will be expected to develop well-funded, nationally and internationally recognized research programs and to be involved in GEMS collaborations. Simultaneous excellence in teaching at undergraduate and graduate levels is also required, as well as the ability to contribute through research, teaching and/or public engagement to the diversity and excellence of the learning experience. Salary and rank will be determined based on qualifications.

Minimum qualifications include: a Ph.D. or equivalent in chemistry or a closely related field in hand by the time the appointment begins; outstanding record of research accomplishments in Chemistry or a related field; and strong oral and written communication skills.

To apply, please visit the University's *Husky Hire* online application system at:

<https://academicjobsonline.org/ajo/jobs/4369> to submit a cover letter, curriculum vitae, a detailed description of research projects and a brief statement of teaching philosophy and interest. Additionally, please follow the instructions in Academic Jobs Online to direct reference writers to submit letters of reference on your behalf.

Screening of applications will begin immediately. For full consideration please apply by January 1, 2015.

Please include the search number with all correspondence. Search # 2015046

All employees are subject to adherence to the State Code of Ethics which may be found at

<http://www.ct.gov/ethics/site/default.asp>.

The University of Connecticut is committed to building and supporting a multicultural and diverse community of students, faculty and staff. More than 100 research centers and institutes serve the University's teaching, research, diversity, and outreach missions, leading to UConn's ranking as one of the nation's top research universities. As an Affirmative Action/Equal Employment Opportunity employer, UConn encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.

Department of Pharmaceutical Sciences at The University of Maryland Baltimore School of Pharmacy

has an FDA funded postdoctoral position available in the Michel laboratory. The Michel laboratory is part of a team that is initiating a clinical trial focused on evaluating iron speciation in the blood plasma of patients who have been treated with generic and brand-named sodium ferric gluconate products to treat anemia. The postdoctoral fellow will lead the development of high-throughput assays to measure iron speciation in blood plasma utilizing cutting edge inductively coupled plasma mass spectrometry (ICP-MS) approaches. A second aspect of the project will involve the development of physical methods to characterize the physiochemical properties of the sodium ferric gluconate nanoparticle products utilized in the clinical trial. The postdoctoral fellow will also have the opportunity to collaborate with faculty and researchers from the UMB Mass Spectrometry Waters Center for Innovation to develop high throughput LC/MS assays to measure oxidative stress and toxicity in blood plasma.

The ideal candidate will have a strong background in bioinorganic chemistry and an interest in translational research in the area of metals in medicine. Interested candidates are asked to send a CV and have 2 letters of recommendation forwarded to Dr. Michel at smichel@rx.umaryland.edu. For more information on research in the Michel laboratory see: <http://faculty.rx.umaryland.edu/smichel/>

The "Synthesis and Biological Recognition Stream" (SBRs) in the Freshman Research Initiative (FRI) at the University of Texas, at Austin is uniquely designed to provide an organized platform for second-semester freshmen and first-semester sophomores to conduct original research at the exciting interface of chemistry and biology. Students are first taught routine and specialized laboratory and instrumental methods they will need to perform their research using a course manual that is complemented by online instructional videos and modules. Students learn to visualize molecular interactions between proteins and ligands using PyMOL. Small teams of students work together to design potential antagonists they believe will bind to a selected protein target from their analysis of crystallographic data of protein-ligand complexes. Once the small molecule target is identified, the students are trained to use Reaxys and SciFinder to search for reactions and precedent that will enable them to prepare the compound. After preparing the "rationally-designed" ligands, the students determine the thermodynamic binding parameters for its association with its target protein (*e.g.*, mouse major urinary protein, the Src and Grb2 SH2 domains, and HCV protease) using ITC. Interested students can learn the techniques of protein expression and purification, but these tasks are often performed by student "mentors", who have participated in the stream and help supervise new students in addition to performing their own independent research. Some ligands are selected for structural studies by X-ray crystallography, and students assist hanging drops in crystallization screens. Students are evaluated by formal written reports, a lab practicum, oral presentations, a research proposal, and a final research report. *The interdisciplinary curriculum is uniquely designed to provide undergraduates with an applied understanding of advanced laboratory techniques and computational tools in order to develop experimental, technical, writing, and presentation skills and knowledge that will be invaluable in preparing them to enter graduate or professional school or the workplace.*

More Information and How to Apply

The Texas Institute for Discovery Education in Science in the College of Natural Sciences is seeking a Specialist to teach Research Experience courses and conduct research at the interface of organic chemistry and biology as part of its innovative science education program, the Freshman Research Initiative (FRI) and specifically as a leader of the **Synthesis and Biological Recognition Stream (SBRs)**. FRI merges the teaching and research missions of the university by engaging undergraduates in conducting research project(s) related to a faculty member's ongoing research. For more information about the FRI, please visit: <http://cns.utexas.edu/fri> and for more information on the SBRs, see <http://sbrs.cm.utexas.edu/>

Responsibilities include teaching research-based courses, managing a fast-paced undergraduate research group, and coordinating research- and teaching-related activities in the *area of organic synthesis with a focus on applications in biological molecular recognition.* The position is renewable on an annual basis depending on job performance and class enrollments.

Applications will be reviewed and interviews conducted until position is filled. Start dates will be negotiated with the finalists, but preferred start date is between January 15 and April 1, 2015. Qualifications: A Ph.D. or equivalent is required in the field of chemistry, with doctoral or postdoctoral research in organic synthesis. The preferred applicant will also have experience with techniques in biochemistry/molecular biology, which may include testing of organic compounds in biological assays, protein expression, isothermal titration calorimetry, and/or protein crystallography. The preferred candidate will also have experience teaching or mentoring undergraduates.

Applicant Instructions: Please email a cover letter with the contact information for three references, a current CV or resume, and a statement of teaching experience and accomplishments. The official job posting can be found here:

https://facultyjobs.utexas.edu/potential/view_job.cfm?jobID=2353

All application materials should be submitted to:

Erin Dolan

Painter Hall 3.04

103 W. 24th Street, G2550

Austin, TX 78712 edolan@austin.utexas.edu

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 \$45,000 - \$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: **August**; Opens June 1; Closes August 1
Review Cycle: **November**; Opens September 1; Closes November 1
Review Cycle: **February**; Opens December 1; Closes February 1
Review Cycle: **May**; Opens March 1; Closes May 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.