

2016 WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
August 15, 2016

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

Tuesday August 16th: *Myron L. and Muriel S. Bender Distinguished Summer Lectures In Chemistry:*
Chuan He, University of Chicago
Tech L211
4:00-5:00pm

Wednesday August 17th: *Myron L. and Muriel S. Bender Distinguished Summer Lectures In Chemistry:*
Chuan He, University of Chicago
Tech L211
4:00-5:00pm

BIP

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

Arrivals

Kang Cai joined the Stoddart Group
SungYong Seo joined the Marks Group

Opportunities

The Department of Chemistry at Wayne State University will be holding the 18th Annual Chemistry Graduate Research Symposium on October 22nd, 2016.

The symposium is a unique student organized event of graduate students to present their research to fellow students, faculty and the regional scientific community.

This event also serves to introduce new graduate students to cutting edge research in the department and acquaint prospective graduate students and their faculty advisors from regional institutions with our department.

The deadline for submitting a poster abstract in October 1st and the deadline for registration is October 15th. If you would like additional information, the symposium website can be found at www.chem.wayne.edu/symposium

Western Washington University (WWU) invites applications for a tenure-track assistant professor position in analytical chemistry beginning September 15, 2017. The Chemistry Department and the College of Sciences and Engineering are committed to WWU's strategic goal of recruiting and retaining diverse faculty, and welcome applications from diverse candidates.

About the College/Department: WWU is a primarily undergraduate state institution (about 15,000 students) in Bellingham, WA, 60 miles south of Vancouver, British Columbia and 90 miles north of

Seattle. The Chemistry Department serves about 300 majors and offers M.S., B.S., and B.A., degrees in Chemistry and Biochemistry, and a combined B.A. with Education degree. The B.S. Chemistry degree is approved by the American Chemical Society. More than half of all undergraduate chemistry majors are active in faculty-mentored research projects. Many of these students present their work regionally and nationally and are co-authors on peer-reviewed publications.

Position Responsibilities: The successful candidate will be required to teach quantitative analysis and instrumental analysis as well as general chemistry and appropriate special topics courses. Successful candidates must be committed to quality undergraduate education and will be expected to develop and maintain an active research program involving undergraduate students.

Required Qualifications:

An earned Ph.D. in analytical chemistry or closely related field from an accredited institution is required at time of appointment

Record of or potential for high quality undergraduate teaching

Record of high quality scholarship in the chemical sciences

Ability to work effectively with a diverse student body

Commitment to establishing a vigorous research program involving undergraduate students

The focus of an individual's research specialization is open to all relevant areas of analytical chemistry.

Preferred Qualifications:

Post-doctoral research experience

Industrial experience in analytical chemistry

Ability to initiate or participate in cross-disciplinary collaborations

Academic Emphasis: Analytical Chemistry

Job Location: Western Washington University, Bellingham, WA

Salary: Commensurate with experience and qualifications

Bargaining Union: United Faculty of Western Washington

Application Instructions and Requested Documents:

Interested candidates must apply online via WWU's Electronic Application System for Employment. To submit your application, please go to : www.wwu.edu/jobs .

You must attach the following documents:

A cover letter addressing all the of the required and preferred qualifications

A curriculum vitae

Undergraduate and graduate transcripts

A detailed statement of research plans (max. length of four pages, not including references)

A one-page statement of teaching philosophy and interest

In addition, please arrange to have three letters of recommendation electronically submitted to chemistry.search@wwu.edu .

Other Information: Inquiries about the position may be addressed to Prof. Steven Emory at (360) - 650-7437 or steven.emory@wwu.edu.

Closing Date Notes: Application review begins September 15, 2016; position is open until filled

Postdoctoral positions are available for enzymologists in enzyme and pathway discovery as part of a new multidisciplinary Program Project (P01GM118303, Novel Strategies for the Discovery of Microbial

Metabolic Pathways) that “replaces” the Enzyme Function Initiative (EFI). We are especially interested in applicants with demonstrated expertise in mechanistic enzymology.

Like the EFI, the Program Project will develop sequence/structure-based strategies for facilitating assignment of in vitro enzymatic and in vivo metabolic roles of widely conserved enzymes of unknown function discovered in genome projects, a crucial limitation in microbial genomic biology. These strategies will be directed toward deciphering both the extra- and intracellular metabolomes of the human gut microbiome, using the ligand specificities of transport systems and transcriptional regulators to guide the discovery of novel enzymes and metabolites in novel pathways.

The Program Project integrates bioinformatics, genetics, metabolomics, structural biology, and computation with enzymology. The components of the Program Project are located at the University of Illinois (enzymology and microbiology; J. E. Cronan and J. A. Gerlt), Albert Einstein College of Medicine (structural biology and ligand screening; S. C. Almo), and University of California, San Francisco (modeling, docking, pathway prediction; M. P. Jacobson, A. Sali, and B. K. Shoichet). Due to the collaborative and multidisciplinary environment, the Program Project provides an opportunity to receive training in several areas.

To apply or request details, please send an e-mail to enzymes@igb.illinois.edu

Stanford ChEM-H is an independent institute at Stanford University, formed in partnership with the Schools of Medicine, Humanities and Sciences, and Engineering. More information about the institute can be found on <https://chemh.stanford.edu/>. The Institute is seeking applicants for a tenure-track faculty position at the junior level (Assistant or untenured Associate Professor). Applicants are expected to have earned a Ph.D. or M.D. degree in any discipline of science, engineering or medicine.

We will consider applicants knowledgeable in any frontier area of research at the interface between chemistry, biology, engineering, and medicine. In general, we give higher priority to the overall originality and promise of the candidate's work than to the sub-area of specialization.

The successful candidate will have his/her primary appointment in a department within the School of Medicine, Humanities and Sciences, or Engineering. He/she will be expected to teach and/or perform clinical service within this department in a manner that is consistent with standard practices for tenure-track faculty within that department. The candidate will also be expected to develop a world-class research program in chemical biology. Applicants should be seeking a stimulating interdisciplinary environment in which to pursue teaching and research. We anticipate that the faculty member will develop interactions with faculty not only in his/her home department but also in other departments and Schools at Stanford and at the Stanford Synchrotron Radiation Laboratory.

Applications should be addressed to Professors Justin Du Bois and Chaitan Khosla, Search Committee Co-Chairs, and include a curriculum vitae (including research accomplishments, teaching experience, and publications), a description of future research plans, a teaching statement, and at least three letters of reference. All materials should be submitted online at <https://academicjobsonline.org/ajo/jobs/7456>. To ensure full consideration, applications should be submitted by October 3, 2016. Questions should be addressed to Professors Du Bois and Khosla at chemh_info@stanford.edu.

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes 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 School of Basic Sciences at EPFL invites applications for a tenure track assistant professor of experimental physics of biological systems in the Institute of Physics.

The successful candidate must demonstrate innovative research interests within biophysics, broadly defined as the investigation of the structure, dynamics and function of biological systems, from molecules to organisms. The open position will be embedded in a collaborative environment of both theoretical and experimental research at the interface between physical and biological sciences. Unique research platforms are available on campus and elsewhere in Switzerland, including the Swiss Light Source/SwissFEL, the Center for Biological Imaging (CIBM), the Center for Micronanotechnology (CMI) and the Center for Electron Microscopy (CIME). The appointed Professor will also enjoy close contacts with the other EPFL Schools, such as Life Sciences, Engineering, as well as the nearby Universities and University Hospitals.

Candidates must hold a PhD in physics or biophysics and possess a strong experimental background as well as an excellent publication record.

The appointee is expected to initiate an independent, creative research program and be committed to excellence in teaching physics at all levels. We offer internationally competitive salaries, benefits, and start-up resources for scientific equipment, as well as annual resources for PhD students, staff and consumables.

Applications including cover letter with a statement of motivation, curriculum vitae, publications list, concise statements of research and teaching interests as well as the names and addresses (including email) of five references should be submitted in pdf format via the website:

<https://academicjobsonline.org/ajo/jobs/7454> by September 30, 2016.

For additional information about this call for applications, please contact:

Prof. Benoit Deveaud
Director of the Institute of Physics
Email: benoit.deveaud@epfl.ch

More information about EPFL and the Institute of Physics can be found at: <http://www.epfl.ch/>
and <http://iphys.epfl.ch>

The Department of Biomolecular Sciences at the University of Mississippi School of Pharmacy is currently seeking a highly motivated postdoctoral fellow who has experience in organic synthesis, especially total synthesis or multistep synthesis, or medicinal chemistry and like to transition these skills and learn how to apply enzymology towards discovering novel therapeutics agents. The position is available immediately in the laboratory of Professor Hoang V. Le, and the appointment is for two years.

Applications must be submitted through the University of Mississippi's online employment site at <https://jobs.olemiss.edu>. Review of applications will begin immediately and continue until the position is filled or until an adequate applicant pool has been established. Qualified applicants should submit a cover letter, a CV, a personal research statement, and a list of three references. The University of Mississippi is an EOE/AA/Minorities/Females/Vet/Disability/Sexual Orientation/Gender Identity/Title VI/Title VII/Title IX/504/ADA/ADEA employer.

Must be able to design and implement research plans as well as follow existing experimental protocols and procedures. Must be able to perform chemical reactions to synthesize organic compounds. Must learn

how to perform molecular modeling and biological evaluation of organic compounds. Knowledge of analytical tools and techniques such as NMR, IR, mass spectrometry, and HPLC, is required for the assignments of chemical structures. Also, knowledge of separation and purification techniques is required. Need to be able to cooperate and collaborate with other laboratory researchers and scientists. Attendance at weekly meetings to communicate results of experiments is required.

Candidates must have a Ph.D. degree in Organic Chemistry or Medicinal Chemistry by the time of the appointment and a record of publications in peer-reviewed journals.

About The University of Mississippi, School of Pharmacy

Founded in 1908, the University of Mississippi School of Pharmacy is the state's only pharmacy school. Through its education, research, and service missions the school aims to improve the health of our state citizens as well as the nation and the world. The school is comprised of four academic departments (BioMolecular Sciences, Pharmaceutics and Drug Delivery, Pharmacy Administration, and Pharmacy Practice). Graduate degrees are offered by three departments. The Research Institute of Pharmaceutical Sciences (RIPS) is also housed within the School of Pharmacy. RIPS was established to discover and disseminate knowledge of natural drug products, develop and commercialize new products, improve public health, and stimulate the economy. Within RIPS are the Pii Center for Pharmaceutical Technology, Center for Pharmaceutical Marketing and Management and the National Center for Natural Products Research. The Pii Center is devoted to research related to hot-melt extrusion and other pharmaceutical processing technologies. The CPMM advances research, teaching, and service in the areas of medication use and health outcomes, management of health care organizations, and the marketing and utilization of cost-saving and appropriate medications in all segments of the health care industry. The NCNPR is the nation's only university research center devoted to improving human health and agricultural productivity through the discovery, development and commercialization of pharmaceuticals and agrochemicals derived from plants, marine organisms and other natural products. Continuing education opportunities are offered through the Division of Pharmacy Professional Development. Live CE programs are available to pharmacists at various locations throughout the state.

Postdoctoral Positions in Synthetic Inorganic Chemistry Los Alamos National Laboratory (LANL):

Seeking two outstanding candidates with extensive inorganic, organic or organometallic chemistry experience to support emerging/growing programs focused on the fields of actinide chemistry and nuclear security. Candidates will be performing synthetic chemistry to prepare, isolate and characterize novel compounds including those of the transition metals, or the actinides. Study and optimization of metal catalyzed decomposition of organic compounds to generate gas pressure at low temperatures will also be pursued. Candidates must be willing and able to work with an interdisciplinary team of scientists from multiple organizations including Chemistry, Materials Science, Engineering, Theoretical and Weapons Divisions.

Minimum Job Requirements:

A strong background and extensive hands-on experience in synthetic chemistry. The ability to work creatively and independently. Demonstrated excellence in written and oral communication skills as evidenced by a strong publication and presentation record.

Desired Skills:

Experience with standard wet- and air-sensitive chemistry techniques for molecular synthesis and characterization (chromatography, Schlenk, drybox, chromatography, NMR and optical spectroscopy, etc.) Knowledge of ligand design. Additional experience in structural analysis (XRD) is a plus.

- Demonstrated ability to work independently and with minimum supervision
- Demonstrated ability to plan and organize assignments so that schedules are met on time

· Ability to obtain a DOE “Q” clearance for one of the programs.

Education:

Ph.D. in chemistry within the last five years or soon to be completed is required

Where You Will Work

Located in northern New Mexico, Los Alamos National Laboratory (LANL) is a multidisciplinary research institution engaged in strategic science on behalf of national security. LANL enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health, and global security concerns.

Notes to Applicants:

If interested, please send a CV with the names of three references to Jim Boncella at Boncella@lanl.gov For additional technical details, contact Dr. Jim Boncella at Boncella@lanl.gov

Q Clearance:

Applicants selected to proceed with Q Clearance will be subject to a Federal background investigation and must meet eligibility requirements*.

***Eligibility requirements:**

To obtain a clearance, an individual must be at least 18 years of age; US citizenship is required except in very limited circumstances. See DOE Order 472.2 for additional information.

Pre-Employment Drug Test:

The Laboratory requires successful applicants to complete a pre-employment drug test and maintains a substance abuse policy that includes random drug testing.

Candidates may be considered for a Director’s Fellowship and outstanding candidates may be considered for the prestigious Marie Curie, Richard P. Feynman, J. Robert Oppenheimer or Frederick Reines Fellowships.

For general information on the LANL Postdoc Program go to

<http://www.lanl.gov/careers/career-options/postdoctoralresearch/index.php>.

Equal Opportunity:

Los Alamos National Laboratory is an equal opportunity employer and supports a diverse and inclusive workforce. We welcome and encourage applications from the broadest possible range of qualified candidates. The Laboratory is also committed to making our workplace accessible to individuals with disabilities and will provide reasonable accommodations, upon request for individuals to participate in the application and hiring process. To request such an accommodation, please send email to applyhelp@lanl.gov or call 1-505-665-5627.

The Chemistry Department of Johns Hopkins University, Baltimore, Maryland

(www.chemistry.jhu.edu) invites applications from outstanding individuals in search of a tenure-track position in the area broadly defined as chemistry at the interface of biology with an anticipated starting date of July 1, 2017.

Applicants at the Assistant and Associate Professor level are preferred but exceptional candidates at the Full Professor level will also be considered. Applicants should submit a curriculum vitae, a statement of teaching interests and philosophy, and a description of research plans through Interfolio (<http://apply.interfolio.com/36258>). Consideration of applications will begin on October 17, 2016.

Applicants should send requests for recommendation letters from their Interfolio account to their three references. For questions about Interfolio, call (887) 997-8807 or email help@interfolio.com.

Johns Hopkins University is committed to active recruitment of a diverse faculty and student body. The University is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans and individuals with disabilities and encourages applications from these and other protected group members. Consistent with the University's goals of achieving excellence in all areas, we will assess the comprehensive qualifications of each applicant.

The Department of Chemistry at Johns Hopkins University is made up of internationally recognized faculty involved in all areas of contemporary chemical science, including many interdisciplinary areas interfacing chemistry with the fields of biology, medicine, physics and materials. There are currently ongoing research programs in analytical chemistry, atmospheric chemistry, environmental chemistry, bioorganic chemistry, biophysical chemistry, inorganic chemistry, bioinorganic chemistry, synthetic organic chemistry, organometallic chemistry, physical organic chemistry, physical chemistry, chemical physics, surface chemistry, and theoretical chemistry. Achievements of the faculty in the department are highlighted by the many awards won each year by various faculty members, including prestigious NSF CAREER awards, Dreyfus Teacher-Scholar Awards, Dreyfus New Faculty Awards, Young Investigator Awards from the American Cancer Society, Department of Energy, DuPont and Eli Lilly, fellowships from the Sloan and Guggenheim Foundations, and Arthur C. Cope Scholar Awards.

The Amherst College Department of Chemistry

(<https://www.amherst.edu/academiclife/departments/chemistry>) invites applications for a full-time tenure-track appointment in inorganic chemistry at the rank of assistant professor beginning in July 2017.

Amherst College is one of the most diverse liberal arts colleges in the country. Forty-four percent of our students identify as domestic students of color, and another 10 percent are international, with non-U.S. citizenship; 17 percent are the first members of their families to attend college. Fifty-one percent of our students are women. Amherst is committed to providing financial aid that meets 100 percent of every student's demonstrated need, and 58 percent of our students receive financial aid. Our expectation is that the successful candidate will excel at teaching and mentoring students who are broadly diverse with regard to race, ethnicity, socioeconomic status, gender, nationality, sexual orientation, and religion. The position requires a Ph.D. in chemistry and calls for teaching general chemistry and advanced inorganic chemistry at the undergraduate level. Opportunities for teaching electives and interdisciplinary courses are also available. The successful candidate will be expected to establish a vigorous research program in experimental inorganic chemistry in which undergraduates can substantively participate. Applicants with expertise in any sub-discipline of inorganic chemistry—for example, bioinorganic, environmental, materials, or organometallic chemistry—are encouraged to apply.

Applicants should submit electronically to <https://apply.interfolio.com/35694> a curriculum vitae; a statement of teaching philosophy, including philosophy of teaching a diverse student body; a detailed description of research plans; and the contact information for three confidential references. Applicants should also arrange for the forwarding of official undergraduate and graduate transcripts to Ms. Catherine Stillerman, Academic Department Coordinator, Department of Chemistry, Amherst College, P.O. Box 5000, Amherst, MA 01002-5000.

Review of applications will begin September 19, 2016, and will continue until the position is filled. Amherst College is an equal opportunity employer and encourages women, persons of color, and persons with disabilities to apply. The college is committed to enriching its educational experience and its culture through the diversity of its faculty, administration, and staff.

The Department of Chemistry and Biochemistry at the University of Maryland Baltimore County invites applications for a one-year visiting, non-tenure track faculty position in physical and analytical chemistry beginning August 2016. Primary teaching responsibilities will include instruction and oversight of advanced chemistry laboratories. The successful candidate will have a strong background in chemical instrumentation and methodologies with a desire to teach at the undergraduate level. Applicants possessing a Ph.D. in chemistry or related field are preferred; qualified candidates with an M.S. degree and relevant experience will be considered. Applications should include cover letter, curriculum vitae, statement of teaching philosophy, and three letters of recommendation and be sent electronically to apply.interfolio.com/35719. Applications will enter the review process as soon as they are received and consideration of applications will continue until the position is filled.

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.