# 2016 WEEKLY BULLETIN DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY EVANSTON, ILLINOIS February 8, 2016

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

Tuesday February 9 <sup>th</sup> :	Faculty Lunch Seminar: Emily Weiss Tech K140 12:00 – 1:00pm
Friday February 12 <sup>th</sup> :	Department of Chemistry Colloquium: Ray Schaak, Pennsylvania State University Tech LR3 4:00 – 5:00pm

# <u>BIP</u>

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

## **Arrivals**

Kentaro Mase joined the Hupp Group

## **Opportunities**

The Department of Chemistry at the University of California, Irvine invites applications for a Lecturer position with potential security of employment. This position parallels the tenure track research faculty series and will involve both administration of upper-division laboratory courses in analytical and physical chemistry and teaching undergraduate lecture courses in general and physical chemistry. The Lecturer with Security of Employment series requires, in addition to excellent teaching and service, that the candidate makes outstanding and recognized contributions to the development of his or her specific discipline and/or of pedagogy. We seek outstanding Ph.D.s, with a strong commitment to undergraduate chemistry education, to develop high-quality educational experiences in both laboratory and lecture settings. Grant-writing in support of the acquisition of modern instrumentation and other innovative instructional initiatives will be an important component of this position.

Successful candidates will have demonstrated excellence in the communication of scientific concepts, competitive grant writing, and scholarly publications. Applications should be submitted electronically, and should include a cover letter, curriculum vitae, a list of publications, and a description of the applicant's university-level teaching background and philosophy. A separate statement that addresses past and/or potential contributions to diversity, equity and inclusion is also required. Additionally, applicants should arrange to have three letters of recommendation submitted on their behalf.

Application instructions can be found at <u>https://recruit.ap.uci.edu/apply/JPF03182</u>. Review of applications will begin February 15, 2016. To ensure full consideration, applications and all supporting materials should be received by this time. The position will remain open until filled. Information about the department can be found at http://www.chem.uci.edu or you may contact the Chemistry Lecturer

Search Committee, Department of Chemistry, 1102 Natural Sciences II, University of California, Irvine, Irvine, CA 92697-2025; e-mail: <u>sltibbet@uci.edu</u>.

The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected categories covered by the UC nondiscrimination policy.

**The University of Central Florida (UCF)** is hiring 100 new faculty members in Fall 2016. As part of this hiring campaign, UCF recently established six interdisciplinary clusters to strengthen its academic offerings and research mission. In support of this effort, we are hiring five tenure-earning faculty members at the level of assistant, associate or full professors into a newly established cluster: Rational Design of Catalysts for Energy Applications and Propulsion (www.ucf.edu/research/energy ). These positions will build on our existing strengths especially in atomic-scale computational physics and chemistry. Applications of interest to the cluster include, but are not limited to, fuel cells, batteries, supercapactitors, biomimetic catalysis, artificial photosynthesis, thermo-chemical processing of biomass, photocatalytic production of fuels, and combustion catalysts. Ideal candidates must have a Ph.D. in an appropriate field related to the cluster and will have a strong background and track record of experimental research in one or more of the following areas:

- Synthesis of alternative fuels
- Chemical or bio-catalysis at the nanoscale
- · Chemical or bio-catalysis for large-scale reactor design
- Photocatalysis
- Electrochemistry/electrochemical engineering

Faculty in these interdisciplinary positions will be expected to strengthen both the research cluster and their tenure home department (physics, chemistry, mechanical and aerospace engineering).Both individual and interdisciplinary infrastructure and startup are expected with these 5 new positions. Each new faculty member will have a unique interdisciplinary mentoring team to foster intellectual breadth and to facilitate integrative capacity to strengthen the success of the cluster.

Candidates must apply online at <u>http://www.jobswithucf.com/postings/36402</u> (Position #36402) and attach the following materials: 1) a cover letter; 2) a curriculum vitae; 3) a statement of research plans and goals; 4) a statement of teaching philosophy including any experience/familiarity with student-centered learning approaches; and 5) reprints of 2-3 recent key publications. In the cover letter candidates should address their background in catalysis, synthesis of catalyst materials, photocatalysis and/or alternate fuels, as appropriate. While majority of the five positions will be offered as tenure-track assistant professors; commensurate with the prior experience and record candidates may be considered for associate, or full professor.

Candidates will have the option of choosing their tenure home department.

The search committee will begin reviewing applications December 15, 2015 and continue to accept applications until the positions are filled.

The University of Central Florida, the nation's second-largest university with more than 61,000 students, has grown in size, quality, diversity, and reputation in its first 50 years. Today, the university offers more than 200 degree programs at its main campus in Orlando and more than a dozen other locations. UCF is an economic engine attracting and supporting industries vital to the region's future while providing students with real-world experiences that help them succeed after graduation. For more information, visit

<u>http://ucf.edu</u>. UCF is an Equal Opportunity and Affirmative Action employer. All applicants are encouraged to apply, including minorities, women, veterans, and individuals with disabilities. For more information about these positions please contact Dr. Talat S. Rahman, the Cluster Search Chair, at <u>talat.rahman@ucf.edu</u>

#### The Advanced Photon Source (APS) at the U.S. Department of Energy's Argonne National

**Laboratory** provides ultra-bright, high-energy storage ring-generated x-ray beams for research in almost all scientific disciplines. The X-Ray Science Division (XSD) enables world-class research using x-rays by developing cutting edge x-ray instrumentation and techniques; pursues research in the physical, chemical, environmental, and materials sciences.

XSD invites you to apply for a Postdoctoral Appointee position to develop in-situ/operando, timeresolved X-ray spectroscopy and diffraction techniques on surfaces and solid/liquid interfaces. Research will be focused on tracking electronic and structural evolutions in photochemical and electrochemical processes initiated by ultrafast laser or electrical pulses. Position Requirements

We expect you should have:

- Knowledge of time-resolved physical chemistry is required.
- Working experience with ultrafast lasers or experience on synchrotron X-ray experiment is desired.
- The level of scientific sophistication required is that normally associated with a PhD.

For more information or to apply please visit: <u>http://www.anl.gov/careers/apply-job/postdoctoral-applicants</u>

**The Department of Chemistry at the University of California, Irvine is** searching for a postdoctoral fellow. The candidate should be highly motivated, creative, and independent, with strong synthetic skills. Experience with electrochemistry is a plus. The project will likely require the development and evaluation of new experimental apparatuses and may involve collaborations with other groups. A start date in the Spring or Summer would be ideal, but the Fall would work as well. The position is funded for 2 years by the Camille and Henry Dreyfus Foundation. As a result, the candidate can be offered a salary of \$48,000 a year and additional funds for travel.

Interested students should send their CV to Jenny Y. Yang, Assistant Professor, Department of Chemistry at j.yang@uci.edu.

The Department of Chemistry and Biochemistry at Washington and Lee University seeks to fill a full-time Visiting Position to teach Organic Chemistry and the associated lab. The position is for one year and is renewable for a second year upon satisfactory performance. The position starts in August 2016 and requires a Ph.D. in Chemistry and relevant teaching experience. Summer research opportunities are available. Review of applications will begin immediately and continue until the position is filled. W&L is a highly selective, independent, co-educational, liberal arts college of 1800 students located in Lexington, VA, three hours southwest of Washington, DC. W&L is an equal opportunity employer. Applicants should send a CV, a letter of application, a one page statement of teaching philosophy, unofficial graduate and undergraduate transcripts, and three letters of reference to: Lisa Alty, Chemistry@wlu.edu.

<u>The University of California Riverside</u> is embarking on a major new hiring initiative that will add 300 tenure-track positions in 33 cross-disciplinary areas selected through a peer-reviewed competition. Over the next three years, we will hire multiple faculty members in each area and invest in research infrastructure to support their work. This initiative will build critical mass in vital and emerging fields of scholarship, foster truly cross-disciplinary work and further diversify the faculty at one of America's most diverse research universities. We encourage applications from scholars committed to excellence and seeking to help redefine the research university for the next generation. For more information about UCR's hiring initiative please go to <a href="http://clusterhiring.ucr.edu">http://clusterhiring.ucr.edu</a>

This announcement aims to fill an appointment in the area of Genome Stability and Human Health at the senior level. This is the first of four cluster hires in this area, with the successful senior candidate expected to help lead the three subsequent searches in this area at the junior level. The placement of the senior level candidate may be in the College of Natural and Agricultural Sciences or in the School of Medicine, depending on the preferences of the candidate and the host departments. The candidate must have a demonstrated record of success, team building, and leadership in the area of genome stability and human health and have a doctorate in a relevant field (such as Biochemistry, Chemistry, Molecular Biology, Genetics, Genomics) and be strongly committed to both undergraduate and graduate teaching. We are particularly interested in those whose research seeks to address relationships between genome stability and neurodegenerative diseases, cancer, ageing or diseases of the immune system. Preference will be given to applicants whose research interests complement those of existing faculty within the College of Natural and Agricultural Sciences or the School of Medicine and those in our interdepartmental graduate programs in Genetics, Genomics and Bioinformatics, Cell, Molecular and Developmental Biology, Neuroscience, Environmental Toxicology and Biochemistry and Molecular Biology, and strengthen our initiative to develop an extramurally funded research center in environmental health and toxicology. Preference also will be given to applicants who have the potential or demonstrated ability to successfully work with and benefit a diverse student body.

Applications should include a full *curriculum vitae*, cover letter, a description of proposed research, teaching philosophy and provide five names and contact details for confidential references. A statement addressing potential contribution to academic diversity must be included. Applicants should apply through <a href="http://aprecruit.ucr.edu/apply/JPF00528">http://aprecruit.ucr.edu/apply/JPF00528</a> in Genome Stability and Human Health. For full consideration applications should be received by February 28, 2016. Applications will be accepted until the positions are filled. Anticipated start date is June 30, 2016. Salary is commensurate with education and experience.

UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification. Advancement through the faculty ranks at the University of California is through a series of structured, merit based evaluations, occurring every 2-3 years, each of which includes substantial peer input.

The University of California is an Equal Opportunity / Affirmative Action Employer with a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

For more information about the position, please contact Dr. Peter Atkinson at <u>peter.atkinson@ucr.edu</u>. For questions on application procedures and requirements, please contact Margi Burnett at <u>margi.burnett@ucr.edu</u>. <u>**Gustavus Adolphus College**</u> invites applications for two full-time one-year positions of Visiting Assistant Professor in the Department of Chemistry to begin September 1, 2016.

Minimum Required Qualifications: We seek candidates who have an earned doctorate, but will consider candidates who have achieved ABD status. Candidates must have demonstrated excellence in teaching. A commitment to undergraduate teaching is essential; in their application candidates should discuss their commitment to teaching a student-centered undergraduate chemistry curriculum in a liberal arts environment.

Preferred Qualifications: We are interested in applicants who will complement our commitment to students and faculty from diverse cultural groups, and who will diversify the expertise and experiences represented in the department.

#### Major/Essential Functions:

Biochemistry Position: The teaching load will be seven course equivalents. Primary teaching responsibilities will include biochemistry lecture and labs (200-level) and contributions to general education, including teaching during our interim January term (a one-month short course) as determined by the candidate and appropriate to the candidate's expertise and interests. The department anticipates a continued vacancy in this area, and the successful candidate may be considered for continuation into the 2017-18 academic year, contingent upon favorable review and the continuing needs of the College. Biochemistry at Gustavus is an interdisciplinary program with direct ties to both the Departments of Biology and Chemistry.

Organic Position: The teaching load will be seven course equivalents. Primary teaching responsibilities will include Organic II lecture and labs (200-level), Organic I lecture and labs (100-level), and contributions to general education, including teaching during our interim January term (a one-month short course) as determined by the candidate and appropriate to the candidate's expertise and interests. Application and Institution Information: Electronic application is required; email application materials as separate PDFs to <u>chem-search@gustavus.edu</u> (NOTE: Please indicate in the email subject line which position you are applying for). The application materials must include a letter of application, curriculum vitae, statements of teaching philosophy and research interests, undergraduate and graduate transcripts (scanned copies acceptable), and three confidential letters of professional recommendation (sent directly from the reference or letter service). The cover letter and letters of recommendation should be addressed to:

Department of Chemistry Gustavus Adolphus College 800 W College Ave Saint Peter, MN 56082-1498

Application information is also available at <u>www.gustavus.edu/jobs</u>. For more details, visit the College's website at <u>www.gustavus.edu/provost/newfaculty/</u> or email <u>chem-search@gustavus.edu</u>. Review of applications will begin on February 22, 2016, and continue until the position is filled.

The Gustavus Department of Chemistry graduates approximately 30 chemistry and biochemistry/molecular biology majors each year. The Department prepares students for continuing education in post-graduate professional programs in chemistry, environmental or health-related fields. Students are engaged in research experiences both within and outside of classes. Gustavus Adolphus College is a coeducational, private, Lutheran (ELCA), residential, national liberal arts college of 2400 students. The College maintains a longstanding commitment to excellence through diversity with a special emphasis on global engagement and service. Additionally, we strive to be a community supportive of all kinds of individuals and families. As an Affirmative Action employer, it is the policy and practice of Gustavus Adolphus College to provide equal employment opportunities for all. EOE Employer/Disabled/Vet

<u>The Department of Chemistry at Kalamazoo College</u> invites applications for a full-time Visiting Assistant Professor position for one year—September 2016 through June 2017. The successful applicant will contribute to teaching in Organic Chemistry. A Ph.D. in chemistry or the equivalent is required (or evidence of imminent completion). Prior teaching experience is desirable. Candidates must demonstrate an interest in undergraduate teaching. The Departmental website can be viewed at: <a href="http://www.kzoo.edu/chem">http://www.kzoo.edu/chem</a>.

Kalamazoo College is a highly selective, nationally known liberal arts college of approximately 1450 motivated students, offering an integrated undergraduate experience that weaves a traditional liberal arts curriculum into domestic and international educational experiences (www.kzoo.edu). Approximately 10% of students major in Chemistry. Graduates of the Chemistry Department pursue studies in the health care field, graduate-level work in the discipline, or move directly into industrial positions. The campus is located midway between Chicago and Detroit, and the Kalamazoo area encompasses a community of 225,000, which supports several college and university campuses along with numerous civic arts and cultural associations. Thirty-five miles from Lake Michigan, the area offers many opportunities for outdoor activities.

Review of applications will begin immediately and will continue until the position is filled. A cover letter, curriculum vitae, statement of teaching philosophy, undergraduate and graduate transcripts (unofficial is acceptable), and three letters of recommendation addressed to Laura Lowe Furge, Chair, Department of Chemistry, Kalamazoo College, 1200 Academy Street, Kalamazoo, MI 49006-3295, should be submitted electronically in pdf format to the administrative assistant, Lauryn Kindle at Lauryn.Kindle@kzoo.edu.

Kalamazoo College encourages candidates who will contribute to the cultural diversity of the College to apply and to identify themselves if they wish. Equal Opportunity Employer

<u>The C. Eugene Bennett Department of Chemistry at West Virginia University</u> seeks a strong leader to serve as Department Chair in the Eberly College of Arts and Sciences. The College has invested heavily in the hiring of new faculty in Chemistry, and is looking for a Chair to lead this successful department to greater national prominence. This is a tenured faculty position at the rank of Professor or Associate Professor, depending on background and experience of the applicant.

The Department Chair is part of the leadership team of the Eberly College of Arts and Sciences. The Chair will be expected to promote principles of shared faculty governance, foster a transparent culture that values and seeks input from all stakeholders, and facilitate professional development of faculty, students, and staff and guide the department to increased research activity and competitiveness. The Chair will provide responsible and professional leadership in managing the day-to-day operational needs of the department, including fiscal management, hiring and supervision of staff, evaluating faculty, and allocating facilities and equipment for teaching, research, and service activities.

The Department of Chemistry consists of 21 tenured and tenure-track faculty, 9 teaching faculty, 13 staff members, and about 70 graduate students. The department is divided into four divisions representing the traditionally defined fields of chemistry: Organic, Inorganic, Analytical, and Physical. Current department research interests include mass spectrometric characterization of proteins and peptides, supramolecular systems, micro-fluidics, fuel cells, synthesis of novel organic and inorganic molecules, catalysis, medicinal chemistry, formation and manipulation of nanostructures, toxicology, disease related protein aggregation, separations, heavy metals in the environment, chaotic systems, nonlinear systems, surface characterization, chemical education, and forensic science.

WVU is a comprehensive land grant research institution located within 1 hour of Pittsburgh and 3 1/2 hours of the Washington/Baltimore area. Morgantown has been recognized as one of the most livable small cities in the U.S. There are extensive recreational opportunities, affordable housing, and a supportive environment to develop a visible and productive career. The Department website http://chemistry.wvu.edu/ contains further information regarding research and the undergraduate and graduate programs. We welcome the opportunity to work with candidates to identify suitable employment opportunities for spouses or partners.

Qualifications include a Ph.D. or equivalent degree in chemistry or a relevant related field; evidence of successful administrative leadership; knowledge of research and educational trends in the discipline of chemistry; ability to work collaboratively in a diverse environment with a range of students, faculty, administrators, and external constituents; ability to manage budgets and establish fiscal priorities; strong written and oral communication skills; and an established record of successful teaching and externally funded research that will merit a grant of tenure at WVU.

To apply for this position, visit http://jobs.wvu.edu, navigate to the position title listed above, and submit (as a single PDF document) (a) a letter of application outlining your administrative experience and interest in this leadership position, your approach to managing your leadership role relative to research and teaching, and your philosophy of graduate and undergraduate education; (b) curriculum vitae: and (c) contact information for at least three references who may speak to your skills in leadership and management. Applications will be processed until the position is filled but those received by February 15, 2016 will receive priority consideration. Preferred start date of July 1, 2016 is negotiable. For further information, contact Associate Dean Tracy.Morris@mail.wvu.edu.

WVU is an EEO/Affirmative Action Employer and welcomes applications from all qualified individuals, including minorities, females, individuals with disabilities, and veterans.

<u>Brewer Science</u> would like to share two positions we have open . Applicants can apply at www.brewerscience.com

Brewer Science, Inc., a major innovator of high-technology solutions for the semiconductor / microelectronics markets is currently seeking a highly motivated and energetic candidate's to fill an open position for an Analytical Research Associate II. This position is located in Rolla, MO.

**Summary:** Designs and conducts laboratory experiments, analyses, and processes to support research and development projects.

## **Responsibilities:**

- Takes ownership of small development sub-projects as assigned.
- Designs and conducts experiments, including synthesis, sample preparation, and performance characterization, under minimal supervision.
- Processes data and provides analysis summary and may present results at group meetings.
- Creates new testing processes and improves upon current processes.
- Knowledge and understanding of safety and housekeeping standards and practiced in daily activities.
- Learn and keep familiar with lab procedures.
- Keep a well-documented laboratory notebook and have it co-signed within two weeks.
- Responsible for communicating with supervisor and team members, also may be assigned to cross-functional teams.

## **Credentials and Education**

- Bachelor's Degree preferred or
- Equivalent combination of education and related experience.
- Familiarity and experience with HPLC, GC, FTIR, UV-VIS, and/or TGA, DSC,

Application Process: To apply for this position, please complete the online application. This position is open until filled, screening will begin immediately.

Equal Employment Opportunity - M/F/Disability/Veterans

**The National Research Council of the National Academies** sponsors a number of awards for graduate, postdoctoral and senior researchers at <u>participating federal laboratories and affiliated institutions</u>. These awards include generous stipends ranging from \$42,000 - \$80,000 per year for recent Ph.D. recipients, and higher for additional experience. <u>Graduate</u> 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 <u>how to apply</u> and a <u>list of</u> <u>participating laboratories</u>, is available on the NRC Research Associateship Programs <u>Website</u> (see link above).

Questions should be directed to the NRC at 202-334-2760 (phone) or <u>rap@nas.edu</u>. 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 <u>www.nationalacademies.org/rap</u>.