# 2014 WEEKLY BULLETIN DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY EVANSTON, ILLINOIS August 25, 2014

Tuesday, August 26: The Malcolm Dole Distinguished Summer Lectures in Physical Chemistry

Emily Carter: Running Combustion Backwards: Fuels from Sunlight, From

First Principles

Tech L2 4:00 – 5:00pm

Wednesday, August 27: The Malcolm Dole Distinguished Summer Lectures in Physical Chemistry

Emily Carter: Quantum Mechanics without Wavefunctions

Tech L2 4:00 – 5:00pm

Thursday, August 28: The Malcolm Dole Distinguished Summer Lectures in Physical Chemistry

Emily Carter: (Photo)electrocatalysis: Theory and Mechanisms of Charge

Transfer at Metal Surfaces

Tech LR5 10:00 – 11:00am

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

#### **BIP**

Meets every Friday at 3:00pm in Tech K140

### **Arrivals**

Gulimina joined the Hupp Group Konstantinos Stoumpos joined the Kanatzidis Group

#### **Opportunities**

Elon University and the Department of Chemistry invite applicants for a tenure-track Assistant Professor position in Inorganic Chemistry beginning August 2015. The position is opened for all areas of Inorganic Chemistry, but seeks candidates whose interests include bioinorganic, organometallics, materials or nanotechnology. A Ph.D. in Inorganic Chemistry or closely-related area is required and post-doctoral experience is preferred. Successful candidates must demonstrate the potential for excellence in undergraduate teaching and the commitment to sustained research involving undergraduate students. Teaching responsibilities include Inorganic Chemistry, General Chemistry I and II, and the associated lab courses along with the development of courses for non-majors. Additional upper-level elective courses may be possible depending on faculty expertise. Further, all tenure-track faculty members are expected to contribute to Elon's Core

Curriculum. Elon is a dynamic private, co-educational, comprehensive institution that is a national model for actively engaging faculty and students in teaching and learning. To learn more about Elon, please visit us at <a href="https://www.elon.edu">www.elon.edu</a>

Candidates must submit a PDF file via email to include the following documents for full consideration:

- A statement of interest in the position
- A complete curriculum vitae
- A summary (one page) of proposed research
- Detailed description of planned research (< 5 pages) with instrument needs and plans to include undergraduates
- A statement of teaching philosophy
- Unofficial undergraduate and graduate transcripts

Send the above information and three letters of recommendation to: Dr. Daniel Wright, Chemistry Search Chair, at <a href="mailto:ChemInorganic@elon.edu">ChemInorganic@elon.edu</a>, including your full name in the subject field. Review of completed applications will begin October 15, 2014, and will continue until position is filled. Elon University is an equal opportunity employer committed to a diverse faculty, staff and student body.

<u>Department of Chemistry, Harold Washington College</u> One of the City Colleges of Chicago (<u>www.ccc.edu</u>), Harold Washington College is looking for adjunct faculty members for three chemistry courses in Fall 2014:

- Chem 121 (prep chem with Lab) -day
  - W: 8:45am-12:20pm and F: 8:45am-12:20pm
- Chem 201 (Gen Chem 1 with Lab) -evening
  - W: 5:30pm-9:15pm and F: 5:30pm-9:15pm
- Chem 203 (Gen Chem 2 with Lab) –evening
  - T: 5:30pm-9:15pm and Th: 5:30pm-9:15pm

The semester begins on Monday, August 25 and runs for 16 weeks.

The qualifications to teach are a Master's Degree in Chemistry or 18 semester graduate hours in chemistry. If you are interested and available to teach any of these courses, please contact Dr. Thomas Higgins at <a href="mailto:tbhiggins@ccc.edu">tbhiggins@ccc.edu</a>. Official copies of graduate transcripts will be required.

<u>Department of Biological, Chemical, and Physical Sciences at Roosevelt University</u> has an opening for an Adjunct **Instructor** for Fall 2014 Semester (August 23 – December 12) to teach two courses in Biochemistry.

Lecture topics include electron transport chain, protein structure, enzyme kinetics, biosynthesis and intermediary metabolism of biologically important molecules, including amino acids, and carbohydrates and lipids.

Laboratory covers biochemical techniques including enzyme and lipid assays, and the isolation and analysis of biomacromolecules.

Responsibilities include:

- Teach courses using provided syllabi and course materials, including organizing, modifying if needed, and delivering all course materials
- Provide effective, engaging lecture and laboratory instruction
- Use appropriate technology for communicating with students, including Blackboard LMS and e-mail.
- Ensure that the content and level of material included on exams or other assessments corresponds to the
  course objectives, and demonstrate consistency and fairness in the preparation and grading of
  assessments.

- Work with laboratory manager and undergraduate teaching assistant to ensure smooth implementation of laboratory experiments and projects.
- Provide direct, hands-on laboratory instruction to students, including modelling and reliably enforcing safe laboratory practices
- Grade lecture and laboratory assignments in a timely fashion, and provide constructive feedback to students.
- Set clear expectations for students, and provide clear and timely communication to students regarding their course progress.
- Maintain accurate records of student progress including timely submission of midterm and final grades.

**Application Instructions:** Apply at <a href="www.jobs.roosevelt.edu">www.jobs.roosevelt.edu</a> Completed applications require upload of the following documents:

- Brief statement of teaching philosophy, experience and interests
- Current curriculum vita or resume
- Names, telephone numbers, and email addresses of three current professional references, to be contacted at the time of interview
- Copy of unofficial academic transcripts
- Syllabi from previous teaching assignments.

Please upload the requested documents to jobs.roosevelt.edu

\*\*Note\*\* In order to upload, Individual documents must be under 2 MB in size.

#### **Requirements:**

- Thesis-based MS or PhD in Biochemistry or closely related discipline (ABD considered), postdoctoral experience preferred.
- Minimum of two years of graduate teaching assistantship experience required; prior experience as instructor of record is preferred.

Address questions to: Prof. Kristen Leckrone, Department of Biological, Chemical, and Physical Sciences, Roosevelt University, 430 S. Michigan, Chicago, IL 60605, kleckron@roosevelt.edu, 312-341-3514

Applications will be considered until the position is filled.

Roosevelt University is an institution dedicated to social justice that serves a diverse population of students. Roosevelt has a campus in Chicago's South Loop and a second major campus in suburban Schaumburg.

<u>Department of Chemistry at DePaul University</u> is accepting applications for adjunct faculty positions to teach two lab sections for the autumn quarter. Please contact Linhua Jin, Associate Professor and Chair, Department of Chemistry, DePaul University – Chicago ljin1@depaul.edu

<u>Department of Chemistry at the University at Buffalo (UB)</u> invites applications for a tenure-track faculty position in theoretical & computational chemistry at the Assistant Professor level. All relevant research areas will be considered; candidates with interests in materials research, structure and dynamics of bio-organic or bio-inorganic systems, electron dynamics, multi-scale modeling of complex systems down to the quantum level, or development of new electronic structure methods, are particularly encouraged to apply. An assistant professor is expected to develop a vigorous, externally funded research program, to be committed to teaching at undergraduate and graduate levels, to mentor students, and to serve the department, university, and discipline.

Applicants should upload their application package (in PDF format) to <a href="https://www.ubjobs.buffalo.edu/applicants/Central?quickFind=57304">https://www.ubjobs.buffalo.edu/applicants/Central?quickFind=57304</a> including: cover letter, Curriculum Vitae,

teaching statement, research proposals (ten page limit), and names and contact information (including address, email, phone numbers) for three references. References will be asked to submit letters online at <a href="https://www.UBJobs.buffalo.edu">www.UBJobs.buffalo.edu</a>

Review of applications will begin on October 1, 2014 and will continue until the position is filled. Questions may be addressed to <a href="mailto:tcsearch@buffalo.edu">tcsearch@buffalo.edu</a>

The University at Buffalo is an Affirmative Action/Equal Opportunity Employer/Recruiter (AA/EOE) and encourages women, minorities, and persons with disabilities, and veterans to apply.

AbbVie in Shanghai As part of anticipated hiring in chemistry globally in 2014 and 2015, I wanted to let you know that AbbVie is opening searches for *multiple entry-level Ph.D. job positions in synthetic and medicinal chemistry at our state-of-the-art facility in Shanghai*. We are looking for candidates who have a solid background in organic synthesis as part of their Ph.D./postdoctoral training, are fluent in both English and Chinese, and are willing to relocate to China. We have the openings posted on our company website, but also want to get the word out to academic institutions and research groups from which we would like to see applicants. I hope you will bring them to the attention of your groups and also your colleagues who might have students or postdocs interested in the positions.

Applicants are encouraged to send a CV and research summary to Dr. Xueqing Wang by e-mail at <a href="mailto:Xueqing.Wang@abbvie.com">Xueqing.Wang@abbvie.com</a> so these applications can get in front of the recruiting committee. More information about available positions can be found at <a href="https://www.abbvie.com">www.abbvie.com</a>

## New Department of Material Design and Innovation, University at Buffalo, the State University of New York

The University at Buffalo, The State University of New York, is seeking an outstanding researcher and visionary leader to chair the new Department of Material Design and Innovation (MDI). The department is a joint undertaking between the School of Engineering and Applied Sciences (SEAS) and the College of Arts and Sciences (CAS). We invite applications and nominations for the position of Professor and founding Department Chair.

The Chair will lead the Department in the development and implementation of a strategic plan for educational, research, service and engagement programs. The Chair is expected to attract and mentor an interdisciplinary group of new faculty as well as build the Department into a nationally recognized academic unit. The Chair will foster and grow an environment of teamwork and collaboration across disciplinary and decanal areas and with external partners. The Chair will promote the MDI department to government, industry, not-for-profit organizations and academia.

The new Department will build on UB's considerable faculty expertise in material science and engineering, and in computing and informatics, to lead the campus effort in designing new materials. MDI together with the recently announced Center for Excellence in Material Informatics will lead the campus response to national and state needs in materials innovation and advanced manufacturing. MDI will partner with the Computer and Data Science and Engineering initiative in advancing UB's effort related to the White House Materials Genome initiative. As Chair, the candidate will provide strategic and academic leadership at the undergraduate/graduate educational levels, interdisciplinary research areas, service and engagement activities. The Chair is expected to integrate new and existing intellectual and physical resources to grow materials science and engineering research and educational programs across the disciplines. As the Department's chief administrative officer, candidates will provide effective management for all academic, administrative, budget and personnel decisions, as well as the vision and desire to steer the Department through a period of growth and expansion.

As Professor, the selected candidate will be expected to teach courses at the graduate and undergraduate level,

mentor graduate students and junior faculty, advise students at all levels and maintain an active research program. An endowed chair was created for the inaugural MDI Department Chair. The selected candidate will be given this endowed chair position known as the Erich Bloch Chair. Candidates must have a Ph.D. in engineering or science. He/she should have demonstrated expertise in an area of material science and/or engineering. Candidates are expected to have a sustained track record of significant scholarship as evidenced by peer reviewed publications as well as a productive and well-funded program of basic or applied research. He/she should have international stature and recognition commensurate with the rank of Professor. All candidates must have a strong commitment to graduate and undergraduate education.

To apply, please submit a cover letter, curriculum vita, statements of teaching philosophy, statement of research goals and contact information for references via the UB Jobs posting at: www.ubjobs.buffalo.edu/applicants/Central?quickFind=57222.

Further information on the new department can be found at www.mdi.buffalo.edu

For questions regarding the search, please contact Ms. Laura Dombrowski at lauradom@buffalo.edu

The Department of Chemistry and Biochemistry at New Mexico State University (NMSU), Las Cruces, invites candidates with a Ph.D. in Chemistry or a closely related area to apply for a full-time, nine-month non-tenure-track lecturer position at the College Assistant Professor level (Position #718317) beginning either January 2015 or August 2015. Primary teaching assignments will include general chemistry and undergraduate-level organic chemistry, both lecture and laboratory. Successful candidates must have demonstrated excellence in teaching undergraduate lecture or laboratory courses and be committed to providing quality undergraduate education. Applicants must submit three letters of reference, a cover letter, CV, copy of transcripts with degree posted, statement of professional goals and teaching philosophy, and evidence of teaching effectiveness. NMSU is a public, land grant, minority-serving institution recognized by the Carnegie Foundation as a RU/H (Research University with high research activity) institution.

For more information see: http://www.chemistry.nmsu.edu/

Applications should be submitted on-line at: <a href="https://jobs.nmsu.edu/">https://jobs.nmsu.edu/</a> New Mexico State University is an Equal Opportunity/Affirmative Action Employer; Minorities, Females, Veterans, and those with a Disability are encouraged to apply. To begin Searching for Job Openings, please click "Search Jobs" in the left navigation section (Quicklink: <a href="http://jobs.nmsu.edu/postings/18404">http://jobs.nmsu.edu/postings/18404</a> ).. To apply for Job Openings, please create an account by clicking the "Create Account" link. If you need assistance, please contact Human Resource Services at (575) 646-8000.

Review of applications will begin October 1, 2014. NMSU is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and underrepresented minority candidates. All university positions are contingent upon availability of funding. All offers of employment, oral and written, are contingent on the university's verification of credentials and other information required by federal law, state law, and NMSU policies/procedures, and may include the completion of a criminal history check.

<u>Pharmaceutical Sciences group at Merck & Co. Inc.</u> has several exciting Sr. Scientist openings. The positions will be located at our Rahway NJ or West Point PA sites. We are seeking talented chemists with backgrounds in analytical, organic, physical organic, organometallic, inorganic, physical, bioanalytical, biophysical or polymer chemistry. In this role, the Sr. Scientist will work in an interdisciplinary team supporting new product development activities. Example activities include:

- Solving challenging drug development problems
- Developing innovative analytical approaches to characterize small molecules and peptides in formulation
- Elucidate drug degradation mechanisms and develop mitigation strategies
- Characterize chemical and physical properties of excipients

• Support a variety of solid oral and parenteral dosage form development from a fundamental chemistry perspective

Interested applicants should send their resume to Yun Mao, PhD, Director, Analytical Sciences, Pharmaceutical Sciences at yun\_mao@merck.com.

The Georgia Institute of Technology, School of Chemistry and Biochemistry seeks to fill a tenure-track faculty position in the development of any aspect of chemistry or biochemistry related to feedstocks from renewable and sustainable sources. Research areas of interest include, but are not limited to, functional biomaterials, catalysis, energy harvesting and storage, efficient syntheses and processes, and plant bioengineering and synthetic biology. Opportunities for significant interaction with and support from the Institute for Paper Science and Technology at Georgia Tech (ipst.gatech.edu) will be available. Candidates with interdisciplinary research programs may be considered for joint appointments with other campus units.

Exceptional candidates at all levels are encouraged to apply. Assistant Professor candidates should submit a cover letter, curriculum vitae, description of research plans, description of teaching interests and philosophy, and arrange for the submission of three letters of recommendation. Candidates at advanced levels should submit a cover letter, curriculum vitae, and the names and contact information of three references. All materials and requests for information should be submitted electronically, as per the instructions found at:

#### https://academicjobsonline.org/ajo/jobs/4045

The application deadline is September 15, 2014, with application review continuing until the position is filled. Georgia Tech is an equal education/employment opportunity institution.

<u>The National Research Council of the National Academies</u> 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 \$45,000 - \$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> 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 <a href="mailto:rap@nas.edu">rap@nas.edu</a>. 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.