

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

- Monday, February 24:            *2014 L. Carroll King Memorial Lectures presented by Anne McCoy*  
Tech M345  
4:00 – 5:00pm
- Tuesday, February 25:        *2014 L. Carroll King Memorial Lectures presented by Anne McCoy*  
Tech L211  
11:00am – 12:00pm
- Third Year Organic Seminar: Ryan McClure (Thomson/Kelleher Group)*  
Ryan Hall 4003  
11:00am – 12:00pm
- Faculty Lunch Seminar: Alexander Statsyuk*  
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 3:00pm in Tech K140

**Arrivals**

JiWon Ha joined the Odom Group

**Opportunities**

**Analytical Chemistry** **Chemistry Department at Gustavus Adolphus College** invites applications for a full time position of Visiting Assistant Professor in the Department of Chemistry with specialization in analytical chemistry to begin September 1, 2014.

We seek candidates who have an earned doctorate, but will consider candidates who have achieved ABD status. In their application candidates should discuss their commitment to teaching a student- centered undergraduate chemistry curriculum in a liberal arts environment. We are interested in applicants who complement our commitment to students and faculty from diverse cultural groups, and who will diversify the expertise and experiences represented in the department.

The teaching load will be seven course equivalents. Responsibilities will include: a 300-level instrumental analysis lecture and associated lab, a 200-level quantitative chemical analysis lecture and associated lab, 100-level Principles of Chemistry laboratories, and a possible January Term experiential course determined by candidate and appropriate to the candidate's expertise.

The Gustavus Department of Chemistry graduates approximately 30 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.

To apply, please email (as separate as PDF files) a letter of application, curriculum vitae, statements of teaching philosophy and research interests, undergraduate and graduate transcripts (scanned PDFs/photocopies acceptable), and three confidential letters of professional recommendation (sent directly from the reference) to: [chem-search@gustavus.edu](mailto:chem-search@gustavus.edu).

The cover letter and letters of recommendation should be addressed to:

Dr. Brenda Kelly, Chair Department of Chemistry Gustavus Adolphus College  
800 W College Ave  
Saint Peter, MN 56082-1498

Application information is also available at: [www.gustavus.edu/jobs](http://www.gustavus.edu/jobs). For more details, contact Dr. Brenda Kelly at 507-933-7320 or [chem-search@gustavus.edu](mailto:chem-search@gustavus.edu). Review of applications will begin immediately, and continue until the position is filled.

Gustavus Adolphus College is a coeducational, private, Lutheran (ELCA), residential, national liberal arts college of 2500 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/M/F/V/D

**Immediate Postdoctoral Research Fellow position opening in Chen Group:** Conducts basic research on structural dynamics of photoactive systems (transition metal complexes, conducting polymers and hybrid systems) in solar energy conversion. This work will involve using linear and nonlinear ultrafast laser spectroscopies to obtain structural and dynamic information. Please contact Prof. Lin Chen for more details, phone: 847-491-3479, e-mail: [l-chen@northwestern.edu](mailto:l-chen@northwestern.edu).

**The Leiden Institute of Chemistry (LIC), Theoretical Chemistry group,** is recruiting for a:  
Tenure Track Position in Theoretical Chemistry

**Duties and responsibilities**

Theoretical reaction dynamics and electronic structure theory form a broad area of intense, competitive research activities and rapid scientific developments. Electronic structure theory has developed to the extent that very accurate potential energy surfaces can be computed for systems of small molecules interacting with one another, while accurate results can also be obtained for, for instance, reactions of molecules with metal surfaces. Developments in the methodology of quantum dynamics and ab initio molecular dynamics are rapidly pushing up the size of systems for which accurate reaction probabilities or rates can be obtained. A topic of intense research at the cross roads of these methods is to what extent reactions of molecules with metal surfaces are affected by electronically non-adiabatic effects. Another topic of intense research is the energetics and dynamics of surface electrochemical reactions and the extent to which they are affected by the solvent.

The selected candidate will perform research on one of the above two topics, or on a related topic. Additionally, the selected candidate will contribute to the teaching programme of the LIC, and will actively raise funds for his or her own research.

## Requirements

This position is open to energetic scientists who have shown their talent and scientific potential, 'out-of-the-box' thinkers with a clear view on a challenging research program.

- You have a Ph.D. degree in chemistry or physics and several years of experience at the postdoctoral level.
  - In parallel with your research, you are expected to be successful in raising research funds, teaching undergraduate (and graduate) chemistry courses, and to provide an administrative contribution.
  - We are particularly interested in candidates with research interests in:
    - Energetics and dynamics of reactions at the liquid-solid interface;
    - Electronically non-adiabatic dynamics in reactions at surfaces.
- Candidates with research interests in other fast developing areas are also encouraged to apply.

## What we offer

Our tenure track program provides a well-supported career path aimed at growth towards a full professor appointment for successful academics. The track consists of a temporary appointment for a period of six years maximum with a detailed agreement about tenure track conditions such as how to meet research and educational targets, awarded research facilities, evaluation moments etc. and is expected to lead to a promotion to a position as an associate professor.

A promotion to a position as full professor can be expected within the next 3 to 5 years.

The gross monthly salary at assistant professor level is between € 3,259 and € 5,0701, depending on your level of experience. An appointment with Leiden University includes a pension build-up and other benefits; these include an annual holiday premium of 8% and an end-of-year premium of 8.3%.

Candidates from outside the Netherlands may be eligible for a substantial tax break.

## More information

For more information on this position, please contact: Prof. G.J. Kroes ([g.j.kroes@chem.leidenuniv.nl](mailto:g.j.kroes@chem.leidenuniv.nl), phone +31-71-5274396 or the Scientific Director of the LIC: Prof. J. Brouwer ([brouwer@chem.leidenuniv.nl](mailto:brouwer@chem.leidenuniv.nl), phone +31-71-5274755

General information about the research at the Chemistry Department at Leiden University can be found at [www.chem.leidenuniv.nl/licmain/Engels/Onderzoek/Frameset.htm](http://www.chem.leidenuniv.nl/licmain/Engels/Onderzoek/Frameset.htm).

More information on working at the University can be found on: [www.personeel.leidenuniv.nl/](http://www.personeel.leidenuniv.nl/) (Dutch site only)

## How to apply

Written applications using the vacancy number and including a brief description of a research plan, a full vitae, a list of publications, as well as the names and addresses of at least four persons that can be contacted for references (who have agreed to be contacted), should be submitted (preferably by email) before

**1 March 2014** to:

Leiden University

Faculty of Science / LIC

Attn. Prof. G.J. Kroes: [g.j.kroes@chem.leidenuniv.nl](mailto:g.j.kroes@chem.leidenuniv.nl)

Gorlaeus Laboratories

P.O. Box 9502

2300 RA Leiden

The Netherlands

**National Institute of Standards and Technology** We are seeking post-doctoral researchers to study electronic structure and ultrafast interfacial dynamics at organic heterojunctions. One focus is the use of time-resolved two-photon photoelectron spectroscopy (TR-2PPE) to follow exciton and charge dynamics at the donor-acceptor interfaces. In conjunction with this effort we also apply scanning tunneling microscopy and spectroscopy (STM, STS) to measure interfacial molecular structure, nanoscale phase separation, and local electronic structure. We are also interested in new methods to follow charge transfer and photovoltage at interfaces with nanosecond to picosecond resolution. Finally, we also have interests in the application and further development

of THz measurement techniques. Experience with ultrafast laser systems, UHV techniques, photoelectron spectroscopy, and/or STM is desirable but not a requisite. We welcome inquiries from applicants with interests in any of these areas. Positions will be funded through the National Research Council postdoctoral program. *For further information contact:* Dr. Steven Robey [Steven.robey@nist.gov](mailto:Steven.robey@nist.gov) or Dr. Edwin Heilweil [Edwin.heilweil@nist.gov](mailto:Edwin.heilweil@nist.gov)

**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](mailto: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](http://www.nationalacademies.org/rap).