

**2018 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**April 30, 2018**

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

- Tuesday May 1<sup>st</sup>:      *Faculty Lunch Seminar: Emily Weiss*  
Tech K140  
12:00-1:00pm
- Wednesday May 2<sup>nd</sup>:    *3<sup>rd</sup> Year Student Organic Lectures:*  
*Diego Alzate Sanchez and Mark Maskeri*  
Ryan 4003  
11:00am – 12:00pm
- 3M/Department of Chemistry Lectures: Guy Joly and Michael S. Arnold*  
Tech L211  
3:00 – 5:00pm
- Thursday May 3<sup>rd</sup>:      *Department of Chemistry Industrial Associates*  
Ryan 4003  
All Day
- Friday May 4<sup>th</sup>:        *Department of Chemistry Colloquium:*  
*Patrick Holland, Yale University*  
Tech LR3  
4:00-5:00pm

**Announcements**

**The American Chemical Society's Division of Organic Chemistry is pleased to announce tha Ryan Evenson** has been selected as the ACS Division of Organic Chemistry Outstanding, Senior Organic Chemistry Student by the Northwestern University faculty. This award is intended to recognize senior students who have displayed a significant aptitude for organic chemistry as evidenced by their formal course work as well as their research accomplishments during the course of their undergraduate studies.

**BIP**

BIP meets every Friday in Tech K140 at 10:00am

**Arrivals**

We did not have any new arrivals

## Opportunities

**Western Illinois University Department of Chemistry** is accepting applications for a tenure track Assistant Professor – Physical Chemistry position for August 2018. The successful candidate must have a commitment to excellence in teaching and student research at the undergraduate and graduate (M.S.) level. Teaching responsibilities include upper division physical chemistry including quantum mechanics, and graduate level physical chemistry courses, and either general chemistry, or lower division non-majors chemistry courses, as well as other courses as appropriate to the incumbent's area of specialization.

**RANK & SALARY:** Tenure-Track Assistant Professor. Salary is competitive. Negotiable, commensurate with experience. Western Illinois University offers a competitive benefits package including domestic partner benefits. For full benefit information visit: [http://www.wiu.edu/vpas/human\\_resources/benefits/](http://www.wiu.edu/vpas/human_resources/benefits/).

Applicants should have a Ph.D. in chemistry or related sciences with experience in physical chemistry. Applicants must also have excellent written and oral communication skills.

**PREFERRED QUALIFICATIONS:** Teaching experience in physical chemistry and post-doctoral research experience in physical chemistry preferred. Applicants with experience mentoring undergraduate physical chemistry research are preferred.

For a degree to be considered, it must be conferred from a regionally accredited degree-granting institution of higher education (or equivalent from an international accrediting body).

For more information about the position or the application process please visit: <https://wiu.interviewexchange.com/jobofferdetails.jsp?JOBID=94258>

**The Mund-Lagowski Department of Chemistry and Biochemistry at Bradley University** is seeking an individual with a strong commitment to excellence in teaching for a one-year appointment as a sabbatical replacement at the rank of Visiting Assistant Professor beginning in August 2018.

Bradley University is a top-ranked, prestigious, private university in Peoria, Illinois, offering 5,400 undergraduate and graduate students the opportunities, choices and resources of a larger university and the personal attention and exceptional learning experience of a smaller university. Bradley offers a comprehensive array of undergraduate and graduate academic programs in business, communications, education, engineering, fine arts, health sciences, liberal arts and sciences, and technology. The University is located on an 85-acre campus in Peoria, the largest metropolitan area in Central Illinois.

Candidates must have a Ph.D in Chemistry or Biochemistry. ABD candidates will be considered for the position, but completion of the doctoral degree is required by the start date. Teaching responsibilities will include introductory chemistry courses and advanced chemistry laboratories. Successful candidates must be able to: clearly communicate chemistry concepts, maintain good chemical hygiene in a laboratory setting, and supervise student assistants.

Qualified candidates must send, as a single PDF file: (1) a letter of application, which includes a brief summary of qualifications and motivation for pursuing a career in academics, (2) curriculum vitae, (3) copies of undergraduate and graduate transcripts, and (4) the names and contact information for three professional references to [chmsearch@bradley.edu](mailto:chmsearch@bradley.edu). Information regarding how the candidate will contribute to promoting diversity and equal opportunity should be provided either within the letter of application or in a stand-alone diversity statement.

To ensure full consideration, all application materials must be received no later than April 1st; however, review of applications begins immediately and will continue until the position is filled. Employment with

Bradley University is contingent upon satisfactory completion of a criminal background check. Visa sponsorship is not available for this position. The Department is ACS certified; see [www.bradley.edu/las/chm](http://www.bradley.edu/las/chm) for general information about the Department.

Bradley University is an Equal Opportunity/Affirmative Action Employer. The administration, faculty and staff are committed to attracting qualified candidates from underrepresented groups.

**The inorganic & materials chemistry laboratory (IMCL) at the Technion – Israel Institute of Technology (<http://www.deruiterlab.com>)** is looking for excellent students at all levels.

Research within the laboratory focusses on supramolecular surface chemistry, and in particular, the self-assembly of inorganic metal complexes on conductive surfaces for electrocatalysis. Using non-covalent interaction to self-assemble supramolecular materials is an attractive approach towards addressing challenging problems pertinent to global energy concerns. Highly structured materials will be generated via a sequence dependent Layer-by-Layer (LbL) assembly strategy with various inorganic building blocks. By using LbL assembly, materials of variable thickness can be generated, vastly increasing the surface area for catalytically relevant transformations. The LbL assembly is facilitated by non-covalent interactions that involve pyridine-metal coordination chemistry, cyclodextrin host-guest interactions, and hydrogen bonding. The used molecular catalysts are based on first-row transition metals that are modified with supramolecular connectors, enabling their incorporation into larger supramolecular architectures. Successful candidates will work in a multi-disciplinary team within the inorganic & materials chemistry laboratory (<http://www.deruiterlab.com>) or within some of the excellent research centers present on the

Technion Campus:

1. Grand Technion Energy Program center (GTEP; <https://gtep.technion.ac.il/>) .
2. Russel Berry Nanotechnology Institute (RBNI; <https://rbni.technion.ac.il/>)

The aim the project will be developing new self-assembled materials suitable for water oxidation, oxygen reduction, hydrogen evolution, and carbon dioxide. Electrocatalytic reduction to ammonia is also within the scope of the program but is one of the future targets.

Accordingly, we are looking for excellent candidates (M.Sc., Ph.D, and Post-Doctoral) to fulfill three positions within our laboratory:

1. Synthetic Inorganic Chemists. We are looking for students with a background or interest in synthetic inorganic and organometallic chemistry. Emphasis is on the synthesis and characterization of first-row transition metal complexes that are modified with supramolecular connectors. A background with manipulation air-sensitive compounds is preferred, as well as with modern spectroscopic techniques.
2. Electrocatalysis Expert: Experience with various electrochemical techniques – both in solution and on the surface – is preferred. Quantitative analysis of gas evolution during electrocatalysis and benchmarking of surface-confined supramolecular catalysts is envisioned. The project is highly multidisciplinary and involves cooperating with synthetic, surface, and materials chemists.
3. Supramolecular Chemist: Students experienced with self-assembly and supramolecular chemistry are encouraged to apply, preferably with experience in surface characterization techniques such as AFM, XRR, and XPS. A background in synthetic (in)organic chemistry is highly desirable for modification of the molecular catalyst and surface modification of the inorganic substrates.

Students that fit any of these requirements are encouraged to apply directly to Assist. Prof. Graham de Ruiter ([graham@technion.ac.il](mailto:graham@technion.ac.il)). Applications should include a CV, a list of grades (M.Sc. or Ph.D.), and a desired starting date. The search will continue until all positions are filled.

**Georgia Institute of Technology College of Engineering/GWW School of Mechanical Engineering**

postdoctoral researcher position available. The postdoctoral researcher is primarily expected to work on developing Kinetic Monte Carlo simulations of the growth and morphology of oxide particles. In addition, the researcher is expected to have knowledge of molecular dynamics and ab initio methods. The selected candidate will work with Dr. Chaitanya Deo at Georgia Institute of Technology on a project funded by Savannah River National Laboratory to develop morphological and physicochemical properties of oxalate and oxide production. The project will provide a better understanding of crystallization and calcination dynamics at plant-scale operating conditions. A multi-scale modeling approach will provide the most accurate description of the crystallization and agglomeration phenomena for the plutonium oxalate precipitation process and of the calcination mechanism.

Applications are available through: <https://apps.itos.uga.edu/ach/position/37937>

**Northland College in Ashland, Wisconsin** is accepting application for an Assistant Professor of Chemistry. This is a tenure track position .

Northland College is an environmentally-committed college on the shores of Lake Superior. The Environmental Science Program at the College invites dynamic and proven educators to apply for a tenure track assistant professor position in chemistry. A PhD or ABD-status in chemistry, or related field, is required. <https://my.northland.edu/job/assistant-professor-chemistry-tenure-track/>

**EcoLab in Naperville, Illinois** has an opening for a Lead Chemist: Surface Characterization, Research Analytical, RD&E

Research Analytical, located at Ecolab's Naperville campus, part of Ecolab's Global Analytical and Microbiological Services, has an opening for a Lead Chemist focused on surface characterization.

The successful candidate must have a background in Materials Science, Chemistry, or related fields. In addition, a good understanding of analytical and characterization techniques like IR, Raman, optical spectroscopy and mechanical properties and/or electrochemical characterization are necessary to succeed in this position. The Lead Chemist will work in teams with associates across Ecolab RD&E to provide surface characterization expertise in product development, manufacturing, intellectual property and regulatory support.

For more Ecolab news and information, visit [www.ecolab.com](http://www.ecolab.com).

Follow us on Twitter [@ecolab](https://twitter.com/ecolab), Facebook at [facebook.com/ecolab](https://facebook.com/ecolab) or LinkedIn at [linkedin.com/company/ecolab](https://linkedin.com/company/ecolab).

community. Communicates relevant findings to external parties/customers as appropriate. Generates and provides Voice of Customer and Industry trends back into the Business Unit (BU). Provides the Voice of Tech to the 3M Sales force. May establish and leverage a multi-country technical network.

Corporate Initiatives. Leads application of key corporate initiatives and appropriate tools.

Strategic Planning. May participate in technical strategic planning at the business level, providing input on customer needs and direction.

Basic Qualifications:

- Master's degree or higher in Chemistry from an accredited institution
- Minimum of one (1) year laboratory experience
- Minimum of one (1) year organic chemical synthesis experience

Preferred Qualifications:

- Ph.D. in Chemistry from an accredited institution

- Experienced fluorine synthetic chemist
- Knowledge and experience of Fluoropolymer synthesis
- Experience contributing as a team member on a global cross-functional team
- Experience with application engineering where rapid solutions and a quick turnaround are required on limited scope projects
- Successful record of customer interaction, excellent technical presentation skills, interpersonal abilities, and multi-tasking skills
- Proven behavior of combining technical requirements with commercially viable solutions to result in winning business strategy
- Excellent verbal communication skills at multiple levels of internal as well as external customer and supplier organizations
- Industry expertise, ideally with a record of publications/patents
- Microsoft Office proficient

Location: Maplewood, MN Travel: May include up to 15% domestic and international

<https://3m.wd1.myworkdayjobs.com/Search/job/US-Minnesota-Maplewood/Sr-Synthetic-Chemist--Maplewood--MN- R00927545-1>