

**2014 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**December 1, 2014**

Tuesday December 2<sup>nd</sup>:            *Faculty Lunch Seminar: Michael Wasielewski*  
Tech K140  
12:00 – 1:00pm

*Special Seminar: David Olson*  
Ryan Hall 4003  
4:00 – 5:00pm

Friday December 5<sup>th</sup>:            *Chemistry Colloquium: Colin Nuckolls, Columbia University*  
   *“From Molecules to Materials”*  
Tech LR3  
4:00 – 5:00pm

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

### **BIP**

Meets every Friday at 2:45pm in Tech K140

### **Arrivals**

There were not any new arrivals this week

### **Announcements**

**Science Fair judges needed. Ravenswood Elementary School (4332 Paulina Street, Chicago, IL 60013)** is hosting a middle school Science Fair for all Ravenswood 6th, 7th and 8th grade students the morning of December 9th . We need your help to ensure we have a successful Science Fair. We hope you can help with this event. Winners of the Ravenswood Science Fair will advance to the Regional Science Fair competition and may have the opportunity to compete at the City or State science fairs. If interested in helping out, please sign up at: <http://tinyurl.com/l4qmmk7>

**Info Webinar: Master of Science in Law Program** Friday, December 12 at 12:00pm

Join the webinar at [global.gotomeeting.com/join/229242453](http://global.gotomeeting.com/join/229242453) or call in using your telephone (dial [312-878-3080](tel:312-878-3080)). Access Code: 229-242-453

Northwestern Law School is offering a new degree program – the Master of Science in Law (MSL). The degree is designed for scientists and engineers who increasingly find themselves interacting with a myriad of legal and

regulatory structures and a complex intellectual property scheme. The MSL degree will provide STEM professionals with a set of skills and a body of knowledge that will give them an edge in pursuing their technical careers. The degree can be completed full-time in one academic year or part-time in up to four years. Learn more about the MSL program by joining our informational webinar; we will provide an overview of the curriculum, the scheduling, application procedure and deadlines, and answer your questions.

Anyone interested in the MSL program can also contact Susan Dennehy, Senior Program Coordinator, via email: [susan.dennehy@law.northwestern.edu](mailto:susan.dennehy@law.northwestern.edu). Or you can visit us online: [www.law.northwestern.edu/msl](http://www.law.northwestern.edu/msl).

## **Opportunities**

**The Department of Chemistry at the University of Texas at El Paso (UTEP)** invites applications for a tenure-track faculty position in Physical Chemistry (broadly defined including Physical Inorganic, Physical Organic, and Physical Biochemistry) at the Assistant Professor level with an anticipated appointment date for Fall 2015. The successful candidate is expected to develop a vigorous, energetic and externally funded research program, to be committed to teaching at undergraduate and graduate (master and doctorate) levels, to mentor students, and to serve the department, college, university, discipline, and community. The Department of Chemistry has top of the line facilities including NMR spectroscopy, mass spectrometry, EPR, x-ray crystallography (small molecule and protein), and cryo-electron microscopy located in the brand new state-of-the-art Chemistry and Computer Science Building. Candidates' research should have a strong potential for extramural funding and for the establishment of collaborations with other laboratories. Preference will be given to candidates whose research employs innovative approaches in areas including energy, environmental, and biosciences. Documents needed include letter of interest, curriculum vitae, research proposals, teaching statements, and a list of contact information for three references.

**ABOUT UTEP AND EL PASO:** Located on the culturally vibrant U.S.--Mexico border, The University of Texas at El Paso is an emerging national research university with more than 23,000 students. The University's rapidly growing research portfolio in the sciences, engineering, health fields, and other areas brings in more than \$83 million per year, ranking UTEP fourth in federal research expenditures among the public universities in Texas. El Paso is a highly livable, bicultural community of 800,000 people, which offers affordable homes and attractive neighborhoods. El Paso is also repeatedly ranked as the safest large city in the United States.

**REQUIRED QUALIFICATIONS:** Applicants must have a Ph.D. or equivalent degree, postdoctoral research experience, and a strong record of research accomplishments.

**APPLICATION PROCEDURES:** Review of applications will begin immediately and will continue until the position is filled. Candidates should send a letter of interest, curriculum vitae, statement of research interest, a brief description of teaching philosophy, and complete contact information for at least three references to the following address:

Physical Chemistry Search Committee Chair  
Department of Chemistry  
University of Texas at El Paso  
500 West University Avenue  
El Paso, TX 79968  
[mnarayan@utep.edu](mailto:mnarayan@utep.edu)

**The Department of Chemistry at Albion College** is taking applications for a tenure-track faculty appointment beginning in August 2015.

**QUALIFICATIONS:** A Ph.D. in Biochemistry or Chemistry is required and post-doctoral experience is preferred. The successful candidate should have a strong background in biochemistry or the chemistry of biological systems. The preferred candidate will also be able to contribute to either our inorganic or analytical chemistry curricula.

**RESPONSIBILITIES:** Teaching responsibilities include courses within our biochemistry and general chemistry programs and the opportunity to develop courses in one's specialty. In addition, Albion offers opportunities for faculty members to be involved in the First Year Seminar program or curricular involvement in the Honors Program and the Center for Sustainability and the Environment. The successful candidate will be expected to contribute to our undergraduate research program, including membership on thesis committees and the active direction of undergraduates in collaborative research projects. Support for developing an active research agenda is provided through start-up funds, departmental support, regular access to the College's Faculty Development funds, participation in Albion's Foundation for Undergraduate Research, Scholarship and Creativity (FURSCA), and through pursuit of external grants.

**DEPARTMENT:** The Chemistry Department at Albion College is certified by the American Chemical Society and provides a stimulating teaching environment. The eight faculty members have a long tradition of commitment to quality teaching of undergraduates. There are two majors: a chemistry major and a biochemistry major. The curriculum, although traditional in many respects, has some novel features including a systematic introduction to inorganic chemistry in the second semester of the first year and a second-year organic course emphasizing mechanism. Extensive use of discovery and research-based experiments is made throughout the laboratory curriculum. Departmental instrumentation includes a 400 MHz FT-NMR, GC-MS (2), GC, HPLC-MS (electrospray), HPLC, Biochromatography System, IC, FT-IR, digital polarimeter, scanning UV-Vis, diode array UV-VIS (3), UV/Vis-Fluorescence microplate reader, fluorescence spectrometer, and electroanalytical instruments. (See <http://www.albion.edu/chemistry/campus-facilities> for more information on our facilities including our recently completed Science Complex.)

**INSTITUTION:** Albion College is a private liberal arts college of approximately 1300 students. It is situated in a culturally diverse community in south-central Michigan within an hour's drive of the University of Michigan, Michigan State University, and Western Michigan University. Albion is dedicated to the highest quality in undergraduate education and committed to diversity as a core institutional value. The College is committed to a policy of equal opportunity and non-discrimination on the basis of sexual orientation and of race, color, national origin, religion, sex, age or disability, as protected by law, in all educational programs and activities, admission of students and conditions of employment. We are especially interested in candidates who will contribute to a campus climate that supports equality and diversity.

**APPLICATION:** To apply, e-mail a curriculum vitae, photocopies of both graduate and undergraduate transcripts, a statement of teaching philosophy, a statement of research interests and how they would be integrated into an undergraduate setting, and three letters of reference to [biochemistrysearch@albion.edu](mailto:biochemistrysearch@albion.edu). Review of applications will begin October 3, 2014 and will continue until the position is filled. For more information about the College or the Chemistry Department see [www.albion.edu/chemistry](http://www.albion.edu/chemistry)

**Clinton Health Access Initiative (CHAI)** is accepting applications for a Senior Associate East Africa Pharmaceutical Manufacture and Supply located in Nairobi, Kenya.

Founded in 2002 by President William J. Clinton, the Clinton Health Access Initiative (CHAI) is a global health organization committed to strengthening integrated health systems around the world and expanding access to care and treatment for HIV/AIDS, malaria and other illnesses. Based on the premise that business oriented strategy can facilitate solutions to global health challenges, CHAI acts as a catalyst to mobilize new resources and optimize the impact of these resources to save lives, via improved organization of commodity markets and more effective local management. By working in association with governments and other NGO partners, CHAI is focused on large-scale impact and, to date, CHAI has secured lower pricing agreements for treatment options

in more than 70 countries. In addition, CHAI's teams are working side-by-side with over 30 governments to tackle many of the largest barriers to effective treatment and care.

CHAI is undertaking a series of market shaping initiatives designed to strengthen the East African pharmaceutical industry's competitive position and market share of the health pharmaceutical market, while increasing access to international quality and affordable medicines. This role will involve engaging with senior private sector and government stakeholders across Burundi, Kenya, Rwanda, Tanzania, and Uganda. The ultimate goal is for at least two East African local manufacturers to produce international quality pharmaceuticals at a cost competitive price point, and for these products to be procured by international buyer(s) by year-end 2015. This test case will connect local manufacturers to international buyers, strengthen the long-term viability of industry, and provide a roadmap for other initiatives supporting local industry to drive broader transformation.

The Senior Associate must be able to function independently and flexibly as well as build strong relationships with government officials and partners across the public and private sectors. CHAI places great value on relevant personal qualities: resourcefulness, entrepreneurialism, flexibility, integrity, independence, humility, and a positive work ethic.

This is a challenging though rewarding position that directly impacts the quality and cost of pharmaceutical products in East Africa. Further, it will build local industry and technical capacity for continued advancement in the manufacturing sector. It is an opportunity to work on a unique market transformation, and collaborate closely with partner governments, private sector entities, and international agencies.

#### **Position Overview:**

CHAI is seeking a Senior Associate to lead technical and strategic assistance to local pharmaceutical manufacturers and government partners. A major component of the role will entail supporting to local manufacturers as they work to identify and implement cost reduction opportunities in all aspects of the production process. It is expected the Senior Associate will independently manage this work stream. The Senior Associate will also be actively involved in the quality improvement component of the project, coordinating the provision of support to local manufacturers to reach international cGMP (such as WHO PQ). This will involve working with GMP experts to undertake cGMP GAP assessments, assisting local manufacturers cost interventions and developing the business case for high-impact interventions. The Senior Associate will support the implementation of cost/quality interventions ensuring projects run to time and budget. Throughout this project, on a needs basis, the Senior Associate will engage national, regional and international bodies (such as the EAC, and WHO) in relation to this work, and broader adaption of project principles.

#### **Responsibilities:**

- Support East African pharmaceutical manufacturers to identify and implement production optimisation opportunities. Work with C-Level counterparts to develop business case for board approval.
- Assist technical experts undertaking cGMP diagnostic assessments of local manufacturers. Accelerate the adoption and implementation of recommendations by local manufacturers.
- Support relevant public/private sector entities within the EAC in undertaking operations focused assessments to improve efficiency and reach performance targets. This may include procurement entities, regulatory authorities, MoH, and private sector entities.
- Manage the development and maintenance of market intelligence database on the pharmaceutical industry in Kenya, including associated quantitative models and forecasts.
- Support evolving team priorities within a non-hierarchical structure.
- Qualifications:
- A Bachelor's Degree in Process/Industrial Chemistry, Pharmacy, Biochemistry, or related field.
- At 3-5 years' experience in a relevant industry with increasing levels of responsibility.
- Ability to work collaboratively and creatively with a wide range of stakeholders to influence change and achieve results.
- Ability to leverage data to create solution orientated analyses for C-Level stakeholders.

- Ability to handle multiple tasks simultaneously, set priorities and work with autonomy.
- Exceptional analytical, research and presentation skills of qualitative and quantitative data
- Excellent interpersonal skills, including the ability to communicate at all levels, and experience managing senior clients/sensitive relationships.
- Willingness to travel to focus countries and other locations with limited advance notice.

Advantages: Preference will be given to candidates with demonstrated experience in the pharmaceutical industry and an MBA or equivalent post-graduate qualification. Content experience, particularly roles supporting production optimisation opportunities will be a distinct advantage. Candidates with pharma industry experience through private equity, management consulting, or similar, will also be given serious consideration, as will be those with Government/Regulatory authorities experience in the pharmaceutical industry.

For more information about CHAI or to submit an application please visit the website

<http://www.clintonhealthaccess.org/>

**The Linus Pauling Distinguished Post-Doctoral Fellowship at Pacific Northwest National Laboratory** is accepting qualified candidate applications from recent and upcoming PhD Graduates in Science & Engineering, who wish to conduct research on a project of their choice.

Candidates will be required to submit the following items as one PDF uploaded attachment when applying to this position:

- Cover letter
- Current CV
- Statement of Research Interests (including reasoning on why PNNL is a good place to carry out your studies)
- Written Response to each of the following questions (please include views from your own research interests as well as a wider scope across your field):
  1. What is the most interesting/challenging problem in your field today? What intrigues you most about this problem?
  2. What do you think it will take to solve that problem (do we need to invent new tools, new algorithms, push the bounds of detection limits)? What will it take and how would you propose to engage or participate?
  3. If that problem were already solved, what would the impact be on you? On science? On society?

Unofficial Transcripts

#### Minimum Requirements

Candidates must have received a PhD within the past three years from an accredited college or university. All staff at the Pacific Northwest National Laboratory must be able to demonstrate the legal right to work in the United States.

#### Qualifications

Qualified Candidates must meet the following:

- Must have completed a PhD in a Science or Engineering field related to the mission areas of PNNL within the last three years, or by Summer 2015.
- Have submitted the PDF application packet as indicated above

For more information about the position or to apply please visit the website:

<http://pnnl.jobs/richland-wa/linus-pauling-distinguished-postdoctoral-fellowship-2015/632374A8421047B4B9EE515424DE8FD3/job/>

**The Department of Chemistry, Louisiana State University** is taking applications for the position of Assistant/Associate/Full Professor (Soft Matter Neutron Scattering/Tenure-track). August 2015 start.

Required Qualifications: PhD in Chemistry, Physics, or a related field; demonstrated excellence in teaching and research. Candidates must have experience in the use of neutron scattering to explore the structure and dynamics of soft matter systems.

Responsibilities: Establish a strong, well-funded, widely recognized research program; publish results of research in appropriate journals or other media; teach undergraduate and graduate level courses in Chemistry; direct/supervise graduate and undergraduate students. The successful candidate will work collaboratively with LSU faculty and may have opportunities for collaborations and/or an appointment at Oak Ridge National Laboratory (ORNL) to build the neutron scattering infrastructure in Louisiana through a funded US Department of Energy program (LaCNS). The DoE funding is intended to enhance the collaboration in neutron scattering between LSU and ORNL. For more information on LaCNS contact Professors Donghui Zhang, [dhzhang@lsu.edu](mailto:dhzhang@lsu.edu), or John DiTusa, [ditusa@phys.lsu.edu](mailto:ditusa@phys.lsu.edu). Review of applications will begin on December 5, 2014 and will continue until the position is filled. An offer of employment is contingent on a satisfactory pre-employment background check.

Benefits: LSU offers outstanding benefits to eligible employees and their dependents, including health, life, dental, and vision insurance, flexible spending accounts; retirement options; sick leave, paid holidays; wellness benefits; training and development opportunities; employee discounts; and more.

To Apply: Applications should consist of a cover letter, curriculum vitae, summary of proposed research, and statement of teaching philosophy, preferably as a single PDF document. A copy of transcript(s) may be attached to the application; note that original transcripts are required prior to hire. Please submit materials electronically (see below). Applicants should arrange to have a minimum of three recommendation letters e-mailed directly from evaluators to Ms. Vickie Thornton ([vthornton@lsu.edu](mailto:vthornton@lsu.edu)), *subject line*: LSU Chemistry Soft Matter Neutron Scattering Search.

LSU IS AN EQUAL OPPORTUNITY/EQUAL ACCESS EMPLOYER

Apply online at

<https://lsusystemcareers.lsu.edu/applicants/Central?quickFind=58423>

**The Department of Chemistry, Louisiana State University** is taking applications for Assistant Professor (Tenure-track), Inorganic Solid State Hard or Organic/Macromolecular/Biological Soft Materials Chemistry. August 2015 start.

Required Qualifications: PhD in Chemistry or a related field; demonstrated excellence in teaching and research. Candidates must have experience in materials, including possibly hybrid materials, for example inorganic/organic hybrids.

Responsibilities: Establish a strong, well-funded, widely recognized research program; publish results of research in appropriate journals or other media; teach undergraduate and graduate level courses in Chemistry; direct/supervise graduate and undergraduate students. The successful candidate will have access to state of the art facilities for chemical and materials research in a recently occupied Chemistry and Materials Building. Review of applications will begin on December 5, 2014 and will continue until the position is filled. An offer of employment is contingent on a satisfactory pre-employment background check.

Benefits: LSU offers outstanding benefits to eligible employees and their dependents, including health, life, dental, and vision insurance, flexible spending accounts; retirement options; sick leave, paid holidays; wellness benefits; training and development opportunities; employee discounts; and more.



To Apply: Applications should consist of a cover letter, curriculum vitae, summary of proposed research, and statement of teaching philosophy, preferably as a single PDF document. A copy of transcript(s) may be attached to the application; note that original transcripts are required prior to hire. Please submit materials electronically (see below). Applicants should arrange to have a minimum of three recommendation letters e-mailed directly from evaluators to Ms. Vickie Thornton ([vthornton@lsu.edu](mailto:vthornton@lsu.edu)), *subject line*: LSU Chemistry MATERIALS Search.

LSU IS AN EQUAL OPPORTUNITY/EQUAL ACCESS EMPLOYER

Apply online at

<https://lsusystemcareers.lsu.edu/applicants/Central?quickFind=58420>

**The Cain Department of Chemical Engineering at Louisiana State University** invites applications for up to two tenure-track faculty positions at the Assistant Professor level in the research area of Energy. The positions provide the opportunity to join a Department with a long-standing commitment to excelling in energy research, whether related to traditional fuels, renewable resources, or alternative technologies. Salary will be commensurate with experience. A doctoral degree in chemical engineering (or closely related field) from a recognized institution, and a proven record of academic accomplishment are required. Visit [www.eng.lsu.edu/employ](http://www.eng.lsu.edu/employ) to learn more or contact Dr. Krishnaswamy Nandakumar at [nandakumar@lsu.edu](mailto:nandakumar@lsu.edu). Closing date for applications is January 1, 2015.

**The Cain Department of Chemical Engineering at Louisiana State University** invites applications for up to two tenure-track faculty positions at the Assistant Professor level in the research area of the Environment. The positions provide the opportunity to perform research on today's environmental challenges – in the context of a Department with a strong record of impact-full environmental research in areas such as atmospheric chemical processes and pollutant transport in aqueous systems. Salary will be commensurate with experience. A doctoral degree in chemical engineering (or closely related field) from a recognized institution, and a proven record of academic accomplishment are required. Visit [www.eng.lsu.edu/employ](http://www.eng.lsu.edu/employ) to learn more or contact Dr. Krishnaswamy Nandakumar at [nandakumar@lsu.edu](mailto:nandakumar@lsu.edu). Closing date for applications is January 1, 2015.

**The Department of Chemistry and Biochemistry at Samford University** is seeking someone with a background in organic chemistry to fill a full-time (nine-month) tenure-track position at the Assistant Professor level. A Ph.D. is required for this position; postdoctoral and/or teaching experience is desirable.

Primary teaching responsibilities will be in organic chemistry, with additional duties in general chemistry. The normal teaching load in our department is twelve contact hours per week during both the fall and spring semesters. This load is usually met by teaching two lecture sections and two lab sections per week, each section meeting three hours per week. Class sizes are limited to 60 students per lecture section and 24 students per lab section. Opportunities also exist to teach during the summer for additional compensation.

The department is actively growing its undergraduate research program, and the successful applicant will be expected to develop an active research program involving undergraduates. Start-up funds are available.

For more specialized work, collaborative opportunities with researchers at the University of Alabama at Birmingham and Southern Research Institute (also in Birmingham) are also available. After a year or two, the candidate will be expected to begin sharing in committee work and other service activities.

The Department of Chemistry and Biochemistry at Samford University offers B.S. degrees in both chemistry and biochemistry. The successful candidate will become the seventh full-time faculty member in this department. The department currently advises 30-35 chemistry and biochemistry majors and is vigorously attempting to expand the research opportunities available to them. This is presently being achieved by (1)

offering students summer research stipends through our summer research program and (2) attracting external grant support for student research projects and new instrumentation.

Applicants should submit to [chemsrch@samford.edu](mailto:chemsrch@samford.edu) the following: a curriculum vitae, a statement of teaching philosophy, a statement of research plans involving undergraduates, undergraduate and graduate transcripts (unofficial copies will suffice), and names and contact information for three references.

Evaluation of applications will begin immediately and will continue until the position is filled.

*Candidates should be willing to contribute to and promote the school's mission as a Christian university. Samford University is an Equal Opportunity Institution that complies with applicable law prohibiting discrimination in its educational and employment policies and does not unlawfully discriminate on the basis of race, color, sex, age, disability, veteran status, genetic information, or national or ethnic origin.*

**Postdoctoral Fellow with the University of Houston** We are currently seeking postdoctoral researchers (Ph.D. in chemistry, biochemistry, or related field) to work on one of two major projects: (1) homogeneous olefin polymerization catalysis or (2) synthetic biocatalysis. For the former, candidates with extensive experience in synthetic inorganic/organometallic chemistry, polymer characterization, and mechanistic studies are preferred. For the latter, researchers with strong backgrounds in biochemistry and chemical biology are desired; candidates should be knowledgeable in mammalian cell culture techniques, fluorescent imaging and microscopy, and standard biological assays. Interested applicants should send a curriculum vitae to Professor Loi Do at the University of Houston at [loido@uh.edu](mailto:loido@uh.edu).

**The Department of Chemistry in the College of Liberal Arts and Sciences at the University of Connecticut** invites applications for an Assistant/Associate/Full Professor nine-month, tenure-track appointment starting in August, 2015. Applicants are sought with research experience in materials, biological chemistry, or surfactant structures, with preferred focus on applications of emulsions, micelles and surfactants. Candidates whose research complements or supports development of these areas will also be considered. The position will be in the Green Emulsions, Micelles and Surfactants (GEMS) Center, a new collaborative Center in the Department of Chemistry.

Successful applicants will be expected to develop well-funded, nationally and internationally recognized research programs and to be involved in GEMS collaborations. Simultaneous excellence in teaching at undergraduate and graduate levels is also required, as well as the ability to contribute through research, teaching and/or public engagement to the diversity and excellence of the learning experience. Salary and rank will be determined based on qualifications.

Minimum qualifications include: a Ph.D. or equivalent in chemistry or a closely related field in hand by the time the appointment begins; outstanding record of research accomplishments in Chemistry or a related field; and strong oral and written communication skills.

To apply, please visit the University's *Husky Hire* online application system at: <https://academicjobsonline.org/ajo/jobs/4369> to submit a cover letter, curriculum vitae, a detailed description of research projects and a brief statement of teaching philosophy and interest. Additionally, please follow the instructions in Academic Jobs Online to direct reference writers to submit letters of reference on your behalf.

Screening of applications will begin immediately. For full consideration please apply by January 1, 2015.

Please include the search number with all correspondence. Search # 2015046

All employees are subject to adherence to the State Code of Ethics which may be found at <http://www.ct.gov/ethics/site/default.asp>.



*The University of Connecticut is committed to building and supporting a multicultural and diverse community of students, faculty and staff. More than 100 research centers and institutes serve the University's teaching, research, diversity, and outreach missions, leading to UConn's ranking as one of the nation's top research universities. As an Affirmative Action/Equal Employment Opportunity employer, UConn encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.*

**The "Synthesis and Biological Recognition Stream" (SBRS) in the Freshman Research Initiative (FRI) at the University of Texas, at Austin** is uniquely designed to provide an organized platform for second-semester freshmen and first-semester sophomores to conduct original research at the exciting interface of chemistry and biology. Students are first taught routine and specialized laboratory and instrumental methods they will need to perform their research using a course manual that is complemented by online instructional videos and modules. Students learn to visualize molecular interactions between proteins and ligands using PyMOL. Small teams of students work together to design potential antagonists they believe will bind to a selected protein target from their analysis of crystallographic data of protein-ligand complexes. Once the small molecule target is identified, the students are trained to use Reaxys and SciFinder to search for reactions and precedent that will enable them to prepare the compound. After preparing the "rationally-designed" ligands, the students determine the thermodynamic binding parameters for its association with its target protein (*e.g.*, mouse major urinary protein, the Src and Grb2 SH2 domains, and HCV protease) using ITC. Interested students can learn the techniques of protein expression and purification, but these tasks are often performed by student "mentors", who have participated in the stream and help supervise new students in addition to performing their own independent research. Some ligands are selected for structural studies by X-ray crystallography, and students assist hanging drops in crystallization screens. Students are evaluated by formal written reports, a lab practicum, oral presentations, a research proposal, and a final research report. *The interdisciplinary curriculum is uniquely designed to provide undergraduates with an applied understanding of advanced laboratory techniques and computational tools in order to develop experimental, technical, writing, and presentation skills and knowledge that will be invaluable in preparing them to enter graduate or professional school or the workplace.*

### ***More Information and How to Apply***

The Texas Institute for Discovery Education in Science in the College of Natural Sciences is seeking a Specialist to teach Research Experience courses and conduct research at the interface of organic chemistry and biology as part of its innovative science education program, the Freshman Research Initiative (FRI) and specifically as a leader of the **Synthesis and Biological Recognition Stream (SBRS)**. FRI merges the teaching and research missions of the university by engaging undergraduates in conducting research project(s) related to a faculty member's ongoing research. For more information about the FRI, please visit: <http://cns.utexas.edu/fri> and for more information on the SBRS, see <http://sbrs.cm.utexas.edu/>

Responsibilities include teaching research-based courses, managing a fast-paced undergraduate research group, and coordinating research- and teaching-related activities in the *area of organic synthesis with a focus on applications in biological molecular recognition.* The position is renewable on an annual basis depending on job performance and class enrollments.

Applications will be reviewed and interviews conducted until position is filled. Start dates will be negotiated with the finalists, but preferred start date is between January 15 and April 1, 2015. Qualifications: A Ph.D. or equivalent is required in the field of chemistry, with doctoral or postdoctoral research in organic synthesis. The preferred applicant will also have experience with techniques in biochemistry/molecular biology, which may include testing of organic compounds in biological assays, protein expression, isothermal titration calorimetry, and/or protein crystallography. The preferred candidate will also have experience teaching or mentoring undergraduates.

Applicant Instructions: Please email a cover letter with the contact information for three references, a current CV or resume, and a statement of teaching experience and accomplishments. The official job posting can be found here:

[https://facultyjobs.utexas.edu/potential/view\\_job.cfm?jobID=2353](https://facultyjobs.utexas.edu/potential/view_job.cfm?jobID=2353)

All application materials should be submitted to:

Erin Dolan

Painter Hall 3.04

103 W. 24th Street, G2550

Austin, TX 78712 [edolan@austin.utexas.edu](mailto:edolan@austin.utexas.edu)

**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 \$45,000 - \$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: **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](http://www.nationalacademies.org/rap).