## 2018 WEEKLY BULLETIN DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY EVANSTON, ILLINOIS September 4, 2018

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

#### **Upcoming Recruiting Events**

#### **PPG Info Session**

Sept. 10, 2018 Tech K140 6-7:30 pm

#### **DuPont Info Session**

Sept. 13, 2018 Tech L211 10:30-12 noon **Interested PhD students:** To be considered for interviews, candidates must apply at <u>http://careers.dupont.com/jobsearch/job-details/new-college-graduate-research-development-phd/RES00004269/471590/</u> AND email your resume and 2-page research summary to Dr. Michael Vagnini at MTVagnini@dow.com

## **Pfizer Essential Health Info Session**

Sept. 14, 2018 Tech L440 12-1:30 pm Through McCormick Engineering Career Development

#### **Arrivals**

Francesca Arcudi joined the Weiss Group Benjamin Elling joined the Dichtel Group Yongping Fu joined the Harel Group Yang Jiao joined the Stoddart Group Tamara Kosikova joined the Stoddart Group Kaikai Ma joined the Farha Group Kwan Woo Nam joined the Stoddart Group Tyler Whittemore joined the Meade Group

#### <u>BIP</u>

BIP will be returning soon. Stay tuned for details.

# **Opportunities**

<u>The University of Iowa Chemistry Department is</u> accepting applications for tenure-track positions in organic chemistry (broadly defined), physical chemistry (broadly defined), and radiochemistry, all with expected starting dates in August, 2019. The radiochemistry position is at the assistant professor level, but applicants at both the assistant and associate professor level are welcomed for the organic and physical chemistry positions. We are also seeking applications for at least two instructional track positions.

Links to each position description and the procedure for submitting applications are as follows:

Physical Chemistry search:https://jobs.uiowa.edu/faculty/view/73244Organic Chemistry search:https://jobs.uiowa.edu/faculty/view/73192Radiochemistry search:https://jobs.uiowa.edu/faculty/view/73167Instructional Track search:https://jobs.uiowa.edu/faculty/view/73345

<u>The Department of Chemistry at Indiana University</u> invites applications for an administrative assistant chair position. A Ph.D. in chemistry, biochemistry, or a related field is required. Five years management-level experience in a large multifaceted organization or scientific/research-oriented enterprise is preferred.

For candidates with extensive experience in managing complex academic science departments, M.S. or M.E. degrees will also be considered. Responsibilities will include technical/scientific facilities oversight, advising the technical/scientific components of the annual budgets in consultation with the head of business and the chair, oversight of the academic office, and overseeing the department's general day-to-day operations. Applications completed by Oct. 1, 2018 will receive full consideration, but review of applications will continue until the position is filled. Interested candidates should submit a complete curriculum vitae, and arrange to have three letters of recommendation be sent to: <a href="http://indiana.peopleadmin.com/postings/6399">http://indiana.peopleadmin.com/postings/6399</a>

Questions regarding the position or application process can be directed to: Professor Lane Baker, Chair, Administrative Assistant Chair Search Committee, Department of Chemistry, Indiana University, 800 E. Kirkwood Ave., Bloomington, IN 47405, chemchr@indiana.edu. The Department of Chemistry and College of Arts and Sciences are committed to building and supporting a diverse, inclusive, and equitable community of students and scholars. Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status, or protected veteran status.

For best consideration submit application before October 1, 2018

<u>The Department of Chemistry at the Colorado School of Mines</u> has an opening for a tenured/tenuretrack faculty member at the Assistant/Associate/Full Professor level (any discipline). Information on the position can be found here.

The Chemistry faculty tend to work collaboratively and successful candidates are expected to interact with multiple researchers in the department and across the Mines campus. The Chemistry department has strengths in multiple areas including materials, environmental chemistry, biochemistry, and nuclear chemistry. The department faculty collaborate extensively with the National Renewable Energy Laboratory, located minutes from Mines, as well as several other regional federal laboratories involved in energy research and development. Centers, such as <u>Mines Polymers and Complex Fluids (MPAC) and Nuclear Science & Engineering (NUSEC)</u>, and interdisciplinary programs, such as Materials Science,

Geochemistry, Quantitative Bioscience and Engineering and Nuclear Science & Engineering, facilitate cross disciplinary interactions. For more information about the Chemistry Department please visit <a href="http://chemistry.mines.edu">http://chemistry.mines.edu</a>

Applicants will be asked to complete an online application (personal information, demographic information, names and contact information for three professional references from whom letters may be subsequently requested, veterans status) and upload the following: 1) a cover letter stating area of interest; 2) curriculum vitae; 3) statement of research; 4) statement of teaching philosophy; 5) a 1-page statement on contributions to diversity and inclusion, describing your past experiences and proposed activities to advance access, inclusion and diversity at Mines. Incomplete applications will not be accepted. Early responses are encouraged but applications will be accepted until the position is filled. Review of applications will begin on September 24.

Inquiries regarding this position should be directed to the search co-chairs Jenifer Shafer (jshafer@mines.edu) and Brian Trewyn (<u>btrewyn@mines.edu</u>).

# <u>The Lilly Technology Center in Indianapolis is accepting applications for Research Scientist-</u> <u>Process Chemistry http://bit.ly/43770LLY ).</u>

# Responsibilities

Small Molecule Design and Development (SMDD) is an innovation-focused organization in Lilly striving to identify, develop and apply the most cutting-edge technologies to deliver maximum benefit to our patients. Within SMDD, the process chemistry group is essential to establishing a robust and sustainable supply chain for small molecule active pharmaceutical ingredients (API), which are being developed for clinical evaluation and potential commercialization. The process chemistry capability is necessary to identify the challenges within a given small molecule route and identify innovative solutions to address the key risk points (i.e., yield, impurity based, hazardous unit operations, etc.).

Our team is looking for a creative and energetic synthetic organic chemist to participate in the route design, development, and manufacture of small molecule drug candidates to support active clinical trials and product commercialization efforts. Our dynamic group is made up of chemists, pharmaceutical scientists, analytical chemists, and engineers. Top candidates for this position will be expected to:

- Possess fluent knowledge in modern synthetic organic chemistry methods with the drive to challenge existing methods; create and apply cutting edge technology to the synthesis of active pharmaceutical ingredients in a time constrained environment.
- Demonstrate high learning agility with regard to grasping and exploiting new scientific concepts and methods across multiple disciplines such as continuous processing, automated reaction screening, and digital design; be able to apply these learnings to a portfolio of small molecule and peptide assets.
- Demonstrate the ability to define clear goals, critical success factors and timelines; make decisions and solve problems at the individual and team level.
- Demonstrate teamwork and consistently build collaborative and productive cross-functional relationships.
- Collaborate with external manufacturing partners to develop robust chemical process that are readily amenable to efficient drug substance manufacturing.
- Collaborate closely with Discovery Chemistry to provide SAR and candidate selection guidance to the discovery core team.
- Embrace diverse thought, background and experience to deliver innovative solutions.
- Possess strong communication (oral, written), organizational, and leadership skills; demonstrate the ability to understand and communicate scientific issues and strategy at the project/ program level

#### **Basic Qualifications**

• PhD in synthetic organic chemistry

Additional Information

- Potential exposure to chemicals, allergens and loud noises.
- Lilly is an EEO/Affirmative Action Employer and does not discriminate on the basis of race, gender, protected veteran status, disability or any other legally protected status
- Travel: 0 to 10%
- Position Local: Indianapolis, IN; Lilly Technology Center-North (LTC-N)

Additional Skills/Preferences

- Strong technical skills to supply business value.
- Knowledge and experience with management of a technical project.
- Demonstrated leadership capabilities especially in a team environment.
- Good interpersonal skills and a sustained tendency for collaboration.
- Ability to prioritize multiple activities and manage ambiguity.
- Ability to influence others to promote a positive work environment.
- Demonstrated initiative and risk-taking.
- Demonstrated technical proficiency and ability to create ideas for future work plans.
- Demonstrated success in persuasion, influence and negotiation.

#### The Chemistry Division of Brookhaven National Laboratory (http://www.bnl.gov/chemistry )

performs research in the area of catalysis for production of solar fuels using transition-metal-containing molecular complexes in solution and at interfaces of electrodes or semiconductors.

**Position Description** 

The successful candidate will conduct basic research toward the development of such catalysts through focusing on: design, synthesis and characterization of metal complex catalysts/photosensitizers; characterization of excited-state photophysics and their coupling to electron transfer and/or catalytic processes for solar fuels production; immobilization of catalysts on electrodes or semiconductors; studies of catalytic activity evaluation and mechanistic understanding of catalytic performance including transient spectroscopy and electrochemistry.

The successful candidate will collaborate with a team of scientists including theoretical chemists owing to the interdisciplinary nature of our work, and will be supervised by Etsuko Fujita.

**Position Requirements** 

- Ph. D. in chemistry or a related field, and a strong background in synthesis/characterization of transition-metal molecular complexes, physical chemistry and photochemistry.
- Expertise in one or more of the following areas is desirable: synthesis and handling air-sensitive compounds, electrochemistry, time-resolved spectroscopy, stopped flow, radiolysis, mechanistic and kinetic studies in solution and at interfaces.

BNL policy requires that research associate appointments be made to individuals who have received their doctorate within the past 5 years.

#### https://jobs.bnl.gov/job/upton/postdoctoral-res-assoc/3437/8823419

<u>Chemical Biology Program at the Memorial Sloan Kettering Cancer Center (MSK)</u> is accepting applications for a tenure-track position. We seek candidates with strong research accomplishments in organic chemistry or chemical biology and interests in bringing chemical approaches to bear upon problems at the interface with biomedical research, including basic and translational research and across all disease areas.

MSK has a rich history in chemical research spanning over 70 years, and we are continuing our recent expansion in this area. We provide a unique and collaborative scientific environment, exceptional

research facilities and resources, and generous startup packages. Faculty are eligible to hold appointments in and to recruit students from multiple outstanding graduate programs, including the Tri-Institutional PhD Program in Chemical Biology, Tri-Institutional MD-PhD Program, Gerstner Sloan Kettering Graduate School of Biomedical Sciences, and Weill Cornell Graduate School of Medical Sciences.

The application deadline is October 15, 2018. Interested candidates should visit

https://facultysearch.ski.edu to access the online application and to obtain important information on required application materials and deadlines. Applicants must have a PhD degree in chemistry, biochemistry, chemical biology, or a closely related discipline, and a strong track record of scientific achievement. Inquiries may be sent to Jocette Marquez, Program Coordinator at <u>marquezj@mskcc.org</u> or to Prof. Derek Tan, Chairman, Chemical Biology Program at <u>tand@mskcc.org</u>. Women and minority candidates are encouraged to apply. A copy of the search advertisement is below.

# The Surface Chemistry and Catalysis Group in the Chemical Sciences Division at Oak Ridge

**National Laboratory (ORNL) is** seeking a catalytic chemist with a strong background in reaction kinetics and mechanism to perform research on heterogeneous catalysis involving complex reactions of oxygenates and alkanes over oxides such as perovskites, and supported metal catalysts. The primary focus will be on the use of quantitative kinetic methods and in situ/operando techniques including X-ray photoelectron spectroscopy (XPS), X-ray absorption spectroscopy (XAS), optical spectroscopy and neutron scattering to interrogate the structure – function relationships in reactions over ternary oxides and supported metal catalysts. The incumbent will work in close collaboration with other researchers in both experiments and computations involved in this fundamental research project. Research Staff Member-Catalytic Chemist

#### **OVERVIEW**

The Surface Chemistry and Catalysis Group conducts research into chemical transformations relevant to the conversion of energy resources, such as oxygenates and alkanes, over oxides and metals supported on oxides with a focus on understanding the reaction mechanisms and kinetics to enable the identification and control of the catalytic active site and optimization of the selectivity and conversion. Primary research interests are focused on understanding and controlling the fundamental synergism among various catalytic sites on oxide and supported metal surfaces that control the reaction pathways and selectivity in dehydration, dehydrogenation, coupling and oxidation reactions. Approaches include experimental and computational studies of reaction mechanism and kinetics, spectroscopic identification of surface reactants under in situ and operando conditions, and surface science approaches to synthesis of model catalysts and study the surface chemistry to understanding structure-function relationships in catalysis. An array of techniques for characterizing the physical and catalytic properties are in place or are currently being developed within the group. This research program also takes advantage of resources at ORNL including the Center for Nanophase Materials Sciences and the Spallation Neutron Source, for neutron scattering, as well as other national user facilities such as synchrotron light sources. The environment at ORNL is highly collaborative and crosscutting research exists between the Chemical Sciences Division and other Divisions at ORNL.

#### Major Duties/Responsibilities

- Perform reaction kinetics and mechanistic studies over oxides and supported metal catalysts using micro-reactor systems.
- Perform and develop in situ/operando studies of reaction mechanisms by a variety methods, including steady-state isotopic transient kinetic analysis (SSITKA) combined with optical spectroscopy (IR and Raman), synchrotron-based X-ray and neutron scattering techniques.
- Collaborate with ORNL postdocs and staff who are involved in the synthesis, characterization and catalytic testing of catalysts and train new postdocs and student in catalytic chemistry.
- Independently formulate research strategies and collaborate with experimentalists and computational

chemists to guide the design of new catalytic materials with superior properties.

- Participate in the development of new research directions and proposals for funding.
- Present and report research results at scientific meetings and to sponsors.
- Publish scientific results in high impact peer-reviewed journals in a timely manner.
- Ensure compliance with environment, safety, health, and quality program requirements.
- Maintain strong commitment to the implementation and perpetuation of values and ethics.

## Qualifications Required

**Basic Qualifications:** 

• A PhD in Chemistry, Chemical Engineering or a closely related science discipline, with at least two years of catalysis research experience.

Preferred Qualifications:

- A strong background in the study of heterogeneous catalysis and catalytic reactions.
- Strong expertise in studying kinetics and mechanisms of heterogeneous catalytic reactions.
- Experience in synchrotron-based X-ray and electron spectroscopy including XPS and XAS (EXAFS and XANES) and neutron scattering to study heterogeneous catalysts and catalytic reactions.
- Experience in studying reaction mechanisms with multimodal in situ/operando approaches.
- Experience in synthesis and characterization of oxide and supported metal catalysts by a variety of techniques including scattering and spectroscopy approaches.
- An excellent track record of productive and creative research demonstrated by publications in peerreviewed journals.
- Must be a self-starter and be able to set priorities, work independently and participate creatively in a collaborative team effort.
- Experience in leading and contributing to the preparation of highly innovative proposals in basic and applied catalysis.
- Excellent written, oral, and interpersonal skills, as well as the ability to communicate in English to an international scientific audience.
- Motivated and safety conscious.

#### OTHER INFORMATION:

Please provide a list of publications when applying for this position. Three letters of reference are required and can be uploaded to your profile or emailed directly to <u>PSDrecruit@ornl.gov</u>. Please include the title of the position in the subject line.

This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

<u>The Department of Chemistry, Yale University, New Haven, CT</u> invites applications for a tenure-track position at the ASSISTANT PROFESSOR level to commence 1 July 2019. We seek creative teacher-scholars to develop outstanding experimental or theoretical research programs in biophysical chemistry, broadly defined. We are especially interested in applicants whose research focuses on chemical aspects of biomolecular structure, function, organization, engineering, and/or dynamics. Applicants should send their curriculum vitae, a statement of research plans, and arrange for the submission of three letters of recommendation. Please submit all materials through Interfolio at <a href="http://apply.interfolio.com/53419">http://apply.interfolio.com/53419</a>. A review of applications will begin October 1, 2018.

# <u>Abbvie is accepting applications for a Postdoctoral Fellow: Application of Novel Synthetic</u> <u>Methodologies for Fragment Based Drug Discovery</u>

The Postdoctoral Program is designed for true investigational and experimental research. Participants will be mentored by renowned industry scientists and collaborators at AbbVie and focused on delivering cutting-edge advancements in Discovery, Development Sciences and BioPharma. The enriching training

program offers a balance of structured learning and work experience which fosters a learning environment to advance individual development with accessibility to high-level knowledge building across the drug development continuum

Technical expert that will investigate, identify, develop and optimize new methods/ techniques to address critical project needs. Continuously seek to improve existing laboratory methods and processes. Read and adapt literature to accomplish assignments. Demonstrate mastery of broad range of experimental techniques and methods of data analysis.

To be successful, we need outstanding individuals willing to challenge themselves to find the best solutions for our patients. The AbbVie Postdoc program is one way we are doing just that.

Through our Postdoc program, we are hiring postdocs from key academic institutions for preferred areas of science in the U.S., while providing a unique opportunity for participants to build a solid career foundation in the pharmaceutical industry while building the AbbVie brand as an employer of choice for scientific talent. The program offers a balance of structured learning and work experience, with accessibility to high-level knowledge building across the drug development continuum.

# Background:

The preparation of novel fragments for the purpose of Fragment-Based Drug Discovery (FBDD) has become increasingly important at AbbVie and in the pharmaceutical industry at large. Fragment based drug discovery is a front line screening and optimization paradigm that is employed at AbbVie to generate high quality lead chemical matter. Among the many challenges associated with fragment design is the ability to adequately follow up with chemistry that enables rapid optimization of a given fragment hit. New synthetic methodologies discovered at AbbVie in the context of projects and through academic collaborations provide particularly compelling opportunities to enhance our fragment collection via close mentorship from the FBDD group.

This postdoctoral appointment will combine elements of both modern organic synthesis methodology coupled with modern state of the art property based fragment (and drug) design. Overall, the program will offer a broad range of research experiences for the postdoctoral scientist and opportunities to publish in high impact journals. The expansion of this chemistry will be under the supervision and mentorship of FCG and FBDD scientists. The compounds prepared will serve as novel fragments, enhancing AbbVie's compound collection. Finally, the postdoctoral researcher will benefit from carrying out cutting-edge organic synthesis research in a collaborative, innovation-rich environment.

# For more information and to apply please visit this LINK

**Illumina-** We are looking for a highly talented Senior / Staff engineer to be a part of the NanoFab team within the product development engineering group. A candidate with proven track record in the areas of nanofabrication, wafer processing, device physics, and a variety of nanoscale characterization methods would be considered. As a successful candidate you will work in a fast pace and dynamic environment to create consumable devices to enable next generation sequencing products.

https://illumina.wd1.myworkdayjobs.com/illumina-careers/job/US---California---San-Diego/Staff-Engineer---Development 13173-JOB

#### Responsibilities:

Job duties will include, but are not be limited to

• Develop novel nanofabrication techniques for next-generation sequencing platforms.

- Strong wafer fabrication process and sensor / photonic device fabrication skills.
- Experience in interdisciplinary fields combining nanofabrication, device physics, material science and surface chemistry is highly desirable.
- Experience in nanoscale characterization methods (SEM, AFM, EDX etc.), with the ability to build new characterization methods.
- Experience with working with external partners on technology development. Experience with technology scale up and transfer to manufacturing is highly desirable.
- Experience with design of experiments (DOE) and statistical data analysis techniques and tools (JMP, Minitab etc.) is highly desirable.
- Strong communication skills with the ability to work with multi-disciplinary teams in a fast-paced environment are required.

Preferred Educational and Experiential Background:

- The ideal candidate will have a MS / PhD in Science or Engineering, Physics, Electrical Engineering, Nanoengineering or related discipline.
- 3-10 years' industry experience with demonstrated ability to identify, develop, and implement nanoscale device fabrication techniques.
- Diverse background including an understanding of current Photonics / MEMS industry, micro/Nano fabrication technology, materials, techniques, and associated characterization methods.
- Solid statistical data analysis background with knowledge and hands on experience using six sigma methods.
- Fluency in at least one programming environment (Python, R etc.) is a must. Knowledge of image processing, and Dx and FDA regulations is a plus.
- Self-driven team player with attention to detail and analytical problem-solving skills, that can work well in a fast-paced multi-disciplinary industrial environment.

# <u>Illumina</u> is accepting applications for a Senior Engineer – Development

https://illumina.wd1.myworkdayjobs.com/illumina-careers/job/US---California---San-Diego/Sr-Engineer---Development\_13174-JOB

# **Responsibilities:**

- Develop, execute, and document results for System Verification and Validation protocols
- Use mechanical, optical, fluidics, electronics, and organic chemistry knowledge to troubleshoot system level sequencing instrument issues
- Lead or contribute to root-cause analysis experiments and present findings to project teams
- Use analytical techniques to interpret large data sets from experimentation and make technical recommendations
- May supervise one or more Research Associates on project or platform investigation activities
- Collaborate with all functions within platform teams (Engineering, Software, Manufacturing, Field Service, etc.)
- Provide product support for pre- and post-launch activities
- Willingness to be hands on

# **Requirements:**

- 5+ years relevant experience in biotech or medical device field desired
- Hands-on experience with commercial electro-mechanical equipment

- Experience working with formal investigation methodologies (8D Methodology, Fault Tree Analysis, FMEA, etc.)
- Basic knowledge of project management
- High degree of detail orientation and documentation skills
- Experience writing and executing test plans to validate product performance and robustness
- Demonstrated ability to understand and successfully work across multiple disciplines such as engineering, software, and manufacturing
- Strong interpersonal, verbal communication, and presentation skills
- Occasional travel required, no more than 10%
- Experience with statistical analysis and data analysis programs (JMP, MATLAB, Microsoft Excel)
- Experience working in regulatory environments e.g. CLIA, ISO 13485, GMP/GLP, IVD a plus

Listed responsibilities are an essential, but not exhaustive list, of the usual duties associated with the position. Changes to individual responsibilities may occur due to business needs.

**Illumina** - We are looking for a highly talented senior engineer to be a part of the Metrology and Physical Systems team within the product development engineering group. A candidate with facility in statistical methods, data analysis and programming/scripting languages would be considered. As a successful candidate you will work in a fast pace multidisciplinary environment to create consumable devices to enable next generation sequencing products.

https://illumina.wd1.myworkdayjobs.com/illumina-careers/job/US---California---San-Diego/Sr-Engineer---Development\_13997-JOB

# **Responsibilities:**

# Job duties will include, but are not be limited to

- Apply statistical methods to design experiments, analyze and interpret data
- Develop first principles models for Illumina products and processes
- Developing novel metrology tools and/or model systems for critical parameter analysis
- Manage databases of process and metrology data.
- Mine process and metrology data as part of post-hoc root cause analysis
- Strong communication skills with the ability to work on multi-disciplinary teams in a fast-paced environment are required.

# **Preferred Educational and Experiential Background:**

- The ideal candidate will have a degree in Science or Engineering, Physics, Electrical Engineering, Biomedical Engineering or related discipline.
- Ph.D. with 0 to 3 years of experience or BS/MS with 2+ years of experience
- Fluency with one or more of the following programming environments: R, Python, C, C++, C#, Matlab, LabView
- Experience with image processing is a plus
- Knowledge of Arduino, RaspberryPi or similar microcontrollers is a plus
- Self-driven team player with attention to detail and analytical problem-solving skills, that can work well in a fast-paced multi-disciplinary industrial environment.

# <u>Postdoctoral position available in the Department of Chemical and Biomolecular Engineering at the University of Delaware</u>

A postdoctoral research position is immediately available in Professor Yushan Yan's group in the Department of Chemical and Biomolecular Engineering of the University of Delaware. The project is focused on the design and synthesis of polymer hydroxide exchange membranes for affordable fuel cells and electrolyzers that can work with nonprecious metal catalysts. The ideal candidates should have

excellent training in organic and/or polymer synthesis and the related synthesis and characterization techniques. The project involves both monomer design, polymerization, and membrane casting. The Yan group currently has 9 postdoctoral researchers and 8 PhD students working on the fabrication and testing of fuel cells, electrolyzers, and flow batteries; hydroxide exchange membranes and ionomers; electrocatalysis; and electrochemical interfaces. The successful candidate will be exposed to electrocatalysis and have the opportunity to learn the fabrication of membrane electrode assemblies if so interested. She/he will also help manage the project and serves as the main contact to its industrial sponsor.

The University of Delaware offers a starting salary for its postdoctoral researchers of \$47,500/year with generous health, dental and vision benefits, the same as those of its faculty. The postdoctoral researchers have also a generous vacation benefits. Interested candidates should contact Professor Yushan Yan at <u>yanys@udel.edu</u>. For more information about his group please visit yan.cbe.udel.edu.

# The Department of Chemistry & Biochemistry at Washington and Lee University invites

applications for a tenure-track Assistant or Associate Professor of organic chemistry. Candidates with expertise in polymer/materials chemistry, bioorganic chemistry, medicinal chemistry, organometallic chemistry or other relevant fields who can teach organic chemistry will also be considered. A Ph.D. is required; postdoctoral experience is strongly recommended.

Diversity is a core value of the Department of Chemistry & Biochemistry. We believe that the educational environment is enhanced when people with diverse backgrounds and ideas come together to learn. Women and underrepresented groups are encouraged to apply.

The successful candidate will be responsible for teaching a 5.5 course load, which includes: teaching a two-semester organic chemistry sequence and the accompanying labs, and creating one advanced or non-majors course. An active research program involving undergraduates is expected; startup funds competitive with top liberal arts colleges will be provided.

The applicant should submit the following: a curriculum vitae, graduate and undergraduate transcripts, a three-page statement of research plans at an undergraduate liberal arts institution, a two-page statement of teaching philosophy, and the contact information for the writers of three letters of recommendation. To submit applications online, visit: https://apply.interfolio.com/52937. Review of applications begins immediately and will close on September 28, 2018.

If you have questions about the position, please contact Erich Uffelman, Chair of the Search Committee, Department of Chemistry and Biochemistry, uffelmane@wlu.edu.

Washington and Lee University 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 consistently ranked among the top 12 national liberal arts colleges. The Department has ACS-certified programs in both chemistry and biochemistry.

**The Department of Chemistry at Virginia Commonwealth University** invites applications for a tenure-eligible, Assistant Professor Position in Analytical Chemistry to begin in fall 2019. Candidates are required to have an established research agenda and clear potential for extramural funding as well as potential for nationally-recognized scholarship in Analytical Chemistry that complements or expands existing expertise in the Department of Chemistry. Teaching will primarily be in undergraduate and graduate courses in Analytical Chemistry. Those candidates with analytical chemistry interest's especially biological mass spectrometry and nanoscience as applied to biology and medicine are encouraged to apply.

A Ph.D. in chemistry is required and post-doctoral experience is strongly encouraged. Candidates need to submit (1) a cover letter, (2) a curriculum vitae, (3) a document containing detailed research proposals, teaching plans and an estimate of start-up costs to https://www.vcujobs.com/. In addition, names of three references must be entered into VCUjobs.com; these individuals will be asked to provide recommendation letters. Review of applications will begin immediately and continue until the positions are filled. Please contact Maryanne Collinson, Search Committee Chair, at <u>mmcollinson@vcu.edu</u> for any questions about the position.

**The Department of Chemistry at Virginia Commonwealth University** invites applications for a tenure-eligible, Assistant Professor Position in Physical Chemistry to begin in fall 2019. Candidates are required to have an established research agenda and clear potential for extramural funding as well as potential for nationally-recognized scholarship in Physical Chemistry that complements or expands existing expertise in the Department of Chemistry. Teaching will primarily be in undergraduate and graduate courses in Physical Chemistry. Candidates with physical chemistry interests such as biophysical chemistry or nanoscience as applied to the biological and medical sciences are encouraged to apply. A Ph.D. in chemistry is required, and post-doctoral experience is strongly encouraged. A well-qualified candidate at higher ranks may be considered, contingent on funding availability. Such a candidate must have a well-developed research portfolio with evidence of multi-disciplinary applications and external funding.

Candidates need to submit (1) a cover letter, (2) a curriculum vitae, (3) a document containing detailed research proposals, teaching plans and an estimate of start-up costs to https://www.vcujobs.com/. In addition, names of three references must be entered into VCUjobs.com; these individuals will be asked to provide recommendation letters. Review of applications will begin immediately and continue until the positions are filled. Please contact Sally Hunnicutt, Search Committee Chair, at <u>sshunnic@vcu.edu</u> for questions about the position.

# The Chemistry and Biochemistry Department in the College of Science at California State

**Polytechnic University, Pomona (Cal Poly Pomona)** invites applications for two (2) tenure-track positions in Organic Chemistry at the rank of Assistant or Associate Professor, commensurate with experience, to begin Fall 2019. Candidates with strong teaching and research interests from any subdivision in Organic Chemistry are encouraged to apply.

Cal Poly Pomona cultivates success through a diverse culture of experiential learning, discovery, and innovation. We demonstrate academic quality, relevance, and excellence through teaching, learning, scholarship, and creative activities with student-centered faculty in an evidence-based culture. Cal Poly Pomona is committed to being the model for an inclusive polytechnic university that inspires creativity and innovation, embraces local and global challenges, and transforms lives. The Position:

The faculty member will teach undergraduate and graduate lectures and laboratory classes in Organic Chemistry. The positions require excellence in teaching and advising, research and scholarly achievements, and a commitment to service to the University. Applicants whose work incorporates a global perspective and a commitment to diversity in higher education are particularly encouraged to apply.

More information on the Chemistry and Biochemistry Department can be found https://www.cpp.edu/~sci/chemistry-biochemistry/.

Qualifications

- Ph.D. in Chemistry, including completion of graduate-level organic coursework, from an accredited university by September 14, 2018.
- Demonstrated potential for excellence in teaching Organic Chemistry lecture and laboratory.
- Demonstrated commitment to contribute, teach, and engage a diverse student body and multicultural constituencies in an inclusive environment.
- Demonstrated potential to establish an active research program founded in organic chemistry that broadens our current disciplinary expertise.
- Demonstrated ability to contribute to the diversity and excellence of the academic community through research, teaching and/or service.

Preferred/Desired Qualifications:

- Postdoctoral experience.
- University/college teaching experience in Organic Chemistry lecture and laboratories courses.
- Capability and interests in teaching upper division and Master's courses in Organic Chemistry.
- Experience or familiarity with techniques that promote student engagement and success.

Application Instructions

Application Procedure:

A completed application will consist of:

- A cover letter that summarizes how the candidate's teaching and research experiences, and career interests, relate to the duties and qualifications of the described position;
- A curriculum vitae composed of at least those elements specified on the application form;
- A completed application form;
- A statement of the candidate's proposed research plans that details how undergraduates and Master's students will be involved (4 page limit);
- A statement of the candidate's anticipated teaching plans inclusive of (a) a teaching philosophy, (b) prior teaching experiences, and (c) short and long-term teaching interests (2 page limit);
- A separate Student Success statement regarding the candidate's aims and experiences (e.g., successes and challenges) related to working or otherwise engaging with a diverse student population (1 page limit);
- Transcripts showing each degree earned (an official transcript will be required for finalists);
- Three recent letters of recommendation; and
- The names and contact information (with written permission to contact) of two additional individuals who can address the candidate's potential for success in the described position.

The position is open until filled. First consideration will be given to completed applications received no later than September 14, 2018. Early response is encouraged.

General inquiries regarding the application process and Chemistry and Biochemistry Department should be directed to: Ms. Sandra Gutierrez-Magallanez organicsearch@cpp.edu or (909) 869-3653