2018 WEEKLY BULLETIN DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY EVANSTON, ILLINOIS August 28, 2018

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

Friday August 31st: Faculty Research Committee Colloquium: Professor William Dichtel Tech LR3 4:00-5:00pm

Arrivals

We did not have any new arrivals

<u>BIP</u>

BIP has finished for the 2017-2018 school year. They'll be back in the fall.

Opportunities

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.

The Department of Chemistry, Yale University, New Haven, CT 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 http://apply.interfolio.com/53419. 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

For further information on the company and its people, portfolio and commitments, please

- visit www.abbvie.com. Follow @abbvie on Twitter or view careers on our Facebook or LinkedIn page.
 - Equal Opportunity Employer Minorities/Women/Veterans/Disabled

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 yanys@udel.edu. 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.

<u>The Department of Chemistry at Virginia Commonwealth University</u> 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.

Pfizer has an opportunity for a Senior Associate Scientist – Applied Synthesis Technologies Group

All over the world, Pfizer colleagues work together to positively impact health for everyone, everywhere. Our colleagues have the opportunity to grow and develop a career that offers both individual and company success; be part of an ownership culture that values diversity and where all colleagues are energized and engaged; and the ability to impact the health and lives of millions of people. Pfizer, a global leader in the biopharmaceutical industry, is continuously seeking top talent who are inspired by our purpose to innovate to bring therapies to patients that significantly improve their lives. Role Description

We are seeking a creative, highly motivated synthetic organic chemist to join our Pfizer Global Research and Development laboratories based in Groton, CT. As part of the Applied Synthesis and Technology (AST) Group, the successful applicant will contribute to the execution of parallel medicinal chemistry (PMC) and aid in the synthesis of compound libraries to drive advancement of programs across the small molecule portfolio. He/she will demonstrate a passion for the theory and laboratory practice of synthetic organic chemistry in addition to having a proven track record of productivity in generating high-quality technical and scientific results.

Please submit your CV and a research summary with your application. A research summary is required to be considered for this position.

Responsibilities

• Design, develop and execute PMC protocols to deliver libraries of analogues of preclinical candidates.

• Utilize the technical capacities of the AST laboratories to enhance capacity in supporting Pfizer's small molecule discovery programs

• As a strong team player, work with partner lines to deliver on project goals via collaboration and clear communication (written and oral)

• Build effective partnerships with other research lines, in particular: analytical, medicinal chemistry, biochemistry

• Work with the AST team to understand broader PMC strategy and goals and ensure laboratory capabilities are in place to deliver

Qualifications

Educational Qualifications:

• Bachelor's degree, Master's degree or equivalent.

Training and Experience:

- For applicants with a BS degree, at least 2 years' experience as an organic chemist post-BS
- Proven track record of productivity and consistent project impact
- Experience in multistep synthesis; experience in methodology development is valued
- Familiarity with analytical instrumentation, liquid handler robotics, and use of a glove box is desirable

Competencies:

• A skilled synthetic organic chemist in practice and theory: firm understanding of reaction mechanisms and reactivity, familiar with a range of reaction types, conditions and scales, knowledge of purification methods and characterization of organic compounds, especially NMR and mass spectroscopy

• Capable of working independently to solve problems through careful experiment design, data analysis, and mechanistic insight

• Effective communication skills (oral and written); must be able to interact effectively within a multidisciplinary team of colleagues. Builds strong working relationships with fellow scientists

- Self-aware: will seek input from others on ideas and problem-solving; uses others as a resource
- Change agile: capable of quickly adapting to changes in project direction
- Responds well to scientific challenges and applies significant rigor to their own work
- Will scientifically challenge fellow colleagues in a constructive manner

NON-STANDARD WORK SCHEDULE, TRAVEL OR ENVIRONMENT REQUIREMENTS: Some (limited) travel may be required for this role.

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

<u>Polytechnic University, Pomona (Cal Poly Pomona)</u> 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

<u>The University of Virginia Department of Chemistry</u> invites applications for a Postdoctoral Research Associate position in the group of Professor Charles W. Machan. The field of study is for the electrocatalytic reduction of carbon dioxide. This research project will include mechanistic studies and synthetic modification of catalysts. The project is highly interdisciplinary and focused on important energy-related problems.

This is a one-year appointment; however, appointments may be renewed an additional one-year increment, contingent upon available funding and satisfactory performance.

The completion of a Ph.D. in Chemistry or a related field is required by the start date of the appointment. Candidates are required to have experience in organometallic chemistry, homogeneous catalysis, and/or synthetic inorganic chemistry. Knowledge and proficiency in DFT methods, mechanistic studies, electrochemical methods, materials characterization, and time-resolved spectroscopic methods are preferred. The project requires strong organizational, communication, and leadership skills as the candidate is expected to play a prominent role in the laboratory as a mentor for both graduate and undergraduate students and assist in the set-up, organization, and maintenance of laboratory equipment. To apply candidates must submit a Candidate Profile through Jobs@UVa (https://jobs.virginia.edu), search on posting number 0622844, and electronically attach the following: a cover letter, a curriculum vitae, and contact information for 3 references.

Questions regarding the position should be directed to Professor Charles W. Machan 434-924-7997 machan@virginia.edu. Further information about Professor Machan and his research may be found at his website: cwmachan.com.

Questions about the application process in JOBS@UVa should be directed to: Lin Burton at lgb4d@virginia.edu.