

**2017 WEEKLY BULLETIN**  
**DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY**  
**EVANSTON, ILLINOIS**  
**August 28, 2017**

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

Monday August 28<sup>th</sup>:            *The James A. Ibers Summer Lectures:*  
   *Francois P. Gabbai, Texas A&M University*  
   Tech L211  
   4:00 – 5:00pm

Tuesday August 29<sup>th</sup>:            *The James A. Ibers Summer Lectures:*  
   *Francois P. Gabbai, Texas A&M University*  
   Tech L211  
   4:00 – 5:00pm

Wednesday August 30<sup>th</sup>:            *The James A. Ibers Summer Lectures:*  
   *Francois P. Gabbai, Texas A&M University*  
   Tech LR5  
   11:00am – 12:00pm

**BIP**

BIP meets every Friday 10-11:00am in Tech K140

**Arrivals**

We did not have any new arrivals

**Opportunities**

**The Chemistry Department at the University of Wisconsin-Eau Claire** seeks a tenure-track faculty member at the rank of Assistant Professor to begin August 27, 2018. Salary will be commensurate with qualifications and experience.

**RESPONSIBILITIES:** A successful applicant will be expected to teach undergraduate courses in quantitative analysis, instrumental analysis, and general chemistry (including labs), as well as upper-division undergraduate courses in the candidate's area of expertise. The successful applicant is expected to develop a program of externally funded research; competitive start-up funds are available. In addition to teaching and collaborating with undergraduate students in research, the successful applicant will provide academic advising to students, engage in service to the university and community, participate in department, college, and university committee work, and carry out other duties as assigned.

**QUALIFICATIONS:** An earned doctorate in chemistry or closely related field by October 8, 2017 is required, with preference given to those with teaching and research interests related to analytical chemistry. A strong commitment to undergraduate teaching and an ability to establish a research program involving undergraduates is required. Postdoctoral or relevant industrial experience is preferred. An interest and ability to contribute to our Chemistry with Business Emphasis program, as demonstrated

through prior industrial and/or entrepreneurial experiences, may be considered an asset. We seek candidates who value our tradition of liberal arts education.

Research interests complementing those of existing chemistry faculty and compatible with the existing infrastructure will be considered an asset. An ability to bring diverse perspectives to the campus and to serve as a role model and mentor for students from underrepresented groups will be considered assets as well.

**DEPARTMENT:** The Department of Chemistry at UW-Eau Claire has 16 full-time faculty members and is ACS-certified. The department has a mission of providing high-quality undergraduate instruction in the chemical sciences through a combination of coursework and collaborative research. The Department of Chemistry emphasizes first-rate classroom teaching at all levels, along with undergraduate research activities that result in peer-reviewed presentations and publications. The department maintains standard spectroscopy and chromatography resources, including FT-IR and UV-Vis spectrometers, GCs, and HPLCs. The department also has a GC/MS, a TOF-LC/MS, an MP-AES, and a 400 MHz NMR with z-gradient broadband and inverse detection probes as well as solid-state capabilities. Individual research programs in chemistry are supported by a single-crystal X-ray diffractometer, differential scanning calorimeters, a jet-cooled laser spectroscopy system, optical cryostats, and a spectrofluorometer. In addition, instrumentation available through UW-Eau Claire's Materials Science Center includes TEM, SEM, STM, AFM, Raman microscope, XPS, XRF, XRD, and ICP/MS (with ppq detection limits). Chemistry faculty also have access to a shared computational cluster comprising 304 cores and 16 GPUs.

*Tradition of Undergraduate Research at UW-Eau Claire* UW-Eau Claire is officially recognized within the University of Wisconsin System as the Center of Excellence in Faculty/Undergraduate Student Research Collaboration. UW-Eau Claire is also an institutional member of the Council on Undergraduate Research. UW-Eau Claire is nationally recognized as one of the premier Midwestern undergraduate colleges in the public and private Comprehensive University sector (*U.S. News and World Report*). The department was identified by Research Corporation as a national model for undergraduate research and received Research Corporation's first Department Development Grant in 1991. Faculty members actively seek external support; for example, currently active grants from federal, state, and private sources are bringing in just under \$1.8M to support collaborative research with students. Within the past decade, UW-Eau Claire chemistry faculty published over 100 peer-reviewed papers and patents, most with student coauthors.

**UNIVERSITY AND EAU CLAIRE COMMUNITY:** The University of Wisconsin-Eau Claire is a comprehensive university with 800 faculty and academic staff, offering a variety of undergraduate and graduate programs to approximately 11,000 students. The fourth-largest university in the state, UW-Eau Claire has strong academic programs and a focus on experiential learning. The campus, often described as Wisconsin's most beautiful, is set on the banks of the Chippewa River in the heart of Eau Claire. A regional center for western Wisconsin, Eau Claire is a vibrant, friendly, safe, and affordable community of 66,000 with outstanding schools, excellent health-care systems, and employment opportunities. The Eau Claire area is also a center for culture, featuring a diversity of restaurants, theater, a thriving arts community, and a wide variety of music. Eau Claire is home to both symphony and chamber orchestras, and hosts several music festivals each year, including the Eaux Claires festival that attracts both local talent and national acts. A wide range of parks, trails, outdoor sports and recreation opportunities exists in the city and surrounding areas. Metropolitan Minneapolis-St. Paul is just a 90 minute drive away, and the local regional airport provides jet service twice daily to Chicago's O'Hare airport.

**APPLICATION PROCEDURE:** Applications are submitted electronically. Interested candidates should apply online at: <http://www.uwec.edu/Employment/uweccareers>.

You must create an account and login before you can apply, unless you are currently employed in the UW-System, in which case, you can use your UW login. To register, click on the "Click here to Register" link to begin the registration process. If you are already a registered user, input your "User Name" and "Password" and select "Login." Click the link to the Department of Chemistry: Assistant

Professor (Job ID# 13396) and then click the "Apply Now" button to submit your application electronically. Your application will not be considered complete until all required documents are attached and all required fields are completed.

*Please be sure you include the following in a single file in PDF format*

- Letter of application
- Curriculum vita
- Statement of research plans (3-5 pages)
- Statement of teaching interests and experience (1-2 pages)
- Graduate and undergraduate transcripts (You should include copies of your unofficial transcripts in PDF format along with the rest of your application. Official copies of your transcripts will be required before a position offer is made.)

Finalists will be asked to provide letters of recommendation at a later date. Only applications submitted electronically and compiled as a *single* PDF document will be accepted. Submissions in other formats, including multiple PDF files instead of a single one, will not receive consideration. Receipt of complete application packages will be acknowledged by e-mail.

*If you have application questions, please email the chair of the search committee at*

[ChemFacSearch@uwec.edu](mailto:ChemFacSearch@uwec.edu).

To ensure consideration, completed applications must be received by the priority date of October 8, 2017. However, screening may continue until the position is filled. Applicants may include links to online materials, which the search committee may consider at its discretion. The university reserves the right to contact additional references with notice given to the candidates at an appropriate time in the process. Inquiries about the search should be directed to the email address above. UW-Eau Claire is an AA/EEO/Veterans/Disability employer dedicated to enhancing diversity, equity, and inclusivity. A criminal background check is required prior to employment. To learn more, visit the Employment at UW-Eau Claire website at <http://www.uwec.edu/>

**The Department of Chemistry and Biochemistry at Southwestern University** seeks applicants for a tenure-track Assistant Professor position in physical chemistry beginning in August 2018. Teaching responsibilities include upper-level physical chemistry, general chemistry, chemistry for non-majors, and courses within the university's general education program such as First-Year Seminar. Other responsibilities include participation in the University's academic advising program. The successful candidate will contribute to the departmental focus on integrating inquiry-based and active learning pedagogies throughout the curriculum. Candidates who have a strong commitment to working with diverse student populations and enhancing diversity in academia are also preferred.

The Department of Chemistry and Biochemistry at Southwestern University is an American Chemical Society (ACS) certified program. The department maintains a vibrant undergraduate research program and is housed within Southwestern's multidisciplinary science center which contains state-of-the-art facilities for teaching and research and is slated to be completed in Fall 2019. Southwestern University is a selective undergraduate institution committed to a broad-based liberal arts, sciences, and fine arts education. Southwestern enrolls approximately 1500 students and maintains a student/faculty ratio of 12 to 1. Located in Georgetown, Texas, 28 miles north of downtown Austin, Southwestern is committed to fostering a diverse educational environment and encourages applications from members of groups traditionally underrepresented in academia. For information concerning the University, visit our web site at [www.southwestern.edu](http://www.southwestern.edu).

ualifications

Applicants must have completed a PhD in physical chemistry or a related field such as materials, energy, polymer, computational or atmospheric chemistry or chemical physics. Applicants with previous college-level teaching experience and/or postdoctoral experience are preferred. The candidate must be committed

to excellence in undergraduate teaching and is expected to develop a productive undergraduate research program.

#### Application Instructions

Applicants should submit the following materials through interfolio: (1) a cover letter addressing the candidate's interest in teaching at a liberal arts institution and summarizing pertinent teaching and research experiences; discussion of leadership efforts and contributions to diversity are encouraged, (2) a curriculum vitae, (3) a brief statement of teaching philosophy that highlights how active learning will be incorporated in the candidate's teaching; (4) a concise summary of the candidate's proposed research program with undergraduates, and (5) three letters of reference. Applications will only be accepted through interfolio at <http://apply.interfolio.com/43596>. Email and paper applications will not be accepted. Review of applications will begin on October 6, 2017 and will continue until the position is filled.

**The Department of Chemistry at Washington University in St. Louis** seeks to make a faculty appointment in physical chemistry to begin in the fall of 2018. The position is at the assistant-professor level. The duties of the position include conducting research, publishing research results in peer-reviewed journals, applying successfully for extramural research grants, teaching assigned courses, including general and physical chemistry, advising students, performing assigned committee work, and participating in appropriate university service. The development and maintenance of an outstanding research program and excellence in the teaching of core chemistry courses at the undergraduate and graduate levels are required. Candidates must have a Ph.D. or equivalent doctoral degree in the field of chemistry or a closely related field at the time of appointment.

Applications should consist of a curriculum vitae, and one or more concise research proposals. These documents are to be submitted in *electronic form* as PDF (portable document format) files to [chemsearch@wustl.edu](mailto:chemsearch@wustl.edu) with the following in the subject line: "Physical Chemistry Position." Applicants should also arrange for three letters of reference to be sent to [chemsearch@wustl.edu](mailto:chemsearch@wustl.edu).

Completed applications for the position must be received by **01 October 2017** to ensure inclusion in the initial review. However, applications received later will also be considered until the search is concluded.

Washington University is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, sexual orientation, gender identity or expression, national origin, genetic information, disability, or protected veteran status. Individuals from under-represented groups and women are especially encouraged to apply.

#### **Scientific Information Analyst – Physical/Applied Chemistry – Chemical Abstracts Service**

##### Job Description

At CAS, a division of the American Chemical Society, we are scientists, technologists and business leaders who continuously and passionately pursue new knowledge in our quest to fuel scientific discovery and empower innovation.

Dedicated to the ACS vision of improving people's lives through the transforming power of chemistry, the CAS team of highly trained scientists finds, collects and organizes all publicly disclosed substance information, creating the world's most reliable collection of content that is vital to innovation worldwide. CAS provides a suite of solutions relied on by researchers, patent professionals and decision-makers around the world that advance the scientific enterprise by enabling discovery and facilitating workflows.

CAS is currently seeking a Scientific Information Analyst. This position will be located in our headquarters in Columbus, Ohio.

Qualifications:

Bachelor's degree in Chemistry or related science, including successful completion of Organic chemistry coursework and a minimum of 1 year of work experience.  
Excellent team player who is organized and willing to adapt to the needs and requirements of an agile organization.  
Must demonstrate a proactive and flexible attitude, with a keen willingness to show initiative.  
Asian language skills, especially Korean and/or Japanese are a plus.

The position also requires:

Effective organizational skills, including attention to detail, time management and multi-tasking  
Ability to work independently as well as part of a team  
Demonstrated ability to ensure successful project completion.

Duties:

Demonstrated ability to solve complex problems within and outside of the primary group.  
Demonstrated skill in handling multiple assignments with varying urgencies and priorities.  
Solid analytical and problem solving skills  
Excellent written and verbal communication skills

Duties:

This position will analyze the world's scientific literature, including patents and journals, for curation into CAS products. Primary responsibilities include review and curation of literature in a number of fields such as chemistry, material science, and engineering in a production environment.

Job posting- info and application at [www.cas.org](http://www.cas.org)-

CAS offers a competitive salary and comprehensive benefits package, including a generous vacation plan, medical, dental, vision insurance plans, and employee savings and retirement plans. Candidates for this position must be authorized to work in the United States and not require work authorization sponsorship by our company for this position now or in the future. EEO/Minority/Female/Disabled/Veteran

Job Location: Columbus, Ohio, United States

**ACS PRF research grant programs** support fundamental research in the petroleum field, and development of the next generation of engineers and scientists through advanced scientific education. Research areas supported include chemistry, the earth sciences, chemical and petroleum engineering, and related fields such as polymers and materials science. (applications open Sep 18, 2017 and close on Oct 20, 2017)

**Research Grants for Doctoral Departments**

**New Directions** Amount: \$110,000 over 2 years. Estimated number of grants awarded: ~ 75 each year. Aims to stimulate a new direction of research for established faculty, and to support the careers of their student scientists and engineers.

**Doctoral New Investigator** Amount: \$110,000 over 2 years. Estimated number of grants awarded: ~ 75 each year. Aims to promote the careers of young faculty by supporting research of high scientific caliber, and to enhance the career opportunities of their undergraduate/ graduate students, and postdoctoral associates through the research experience.

**Research Grants for Non-Doctoral Departments**

**Undergraduate Research** Amount: \$70,000 over 3 years. Estimated number of awards: ~ 25 each year. Supports the research programs of established scientists and engineers at non-doctoral departments

and provides financial support for students at those institutions to become involved in advanced research activities, in preparation for continued study in graduate school or employment.

**Undergraduate New Investigator** Amount: \$55,000 over 2 years. Estimated number of awards: ~ 25 each year. Intended to initiate the research program of new scientists and engineers who are faculty members at undergraduate research institutions and to provide financial incentives for students at those institutions to become involved in research activities leading to employment or continued study in graduate school.

**The Department of Chemistry at Trinity University** invites applications for a tenure-track assistant professor position (research area is open). Candidates must have a Ph.D. in chemistry or biochemistry (or related chemical science degree) and postdoctoral experience is preferred. Teaching responsibility will be in analytical chemistry courses (quantitative and instrumental analysis) along with lecture and laboratory courses in other chemistry-related sub-disciplines (including general chemistry). The successful applicant will have demonstrated teaching ability, along with a passion for teaching and research in the undergraduate environment. This position carries the expectation of developing a sustainable research program with undergraduate students in any field of the chemical sciences. Applicants doing interdisciplinary research are especially encouraged to apply.

Applications include: a cover letter, a curriculum vitae, (unofficial) undergraduate and graduate transcripts, a description of research plans, a description of teaching experience and philosophy, and three letters of reference. Review of applications will begin September 15 and will continue until the position is filled. Trinity University is an equal opportunity employer. Women and minorities are encouraged to apply.

Send materials to Dr. Chris Pursell, Chair, Department of Chemistry, Trinity University, One Trinity Place, San Antonio, Texas 78212-7200. Application materials may be sent via e-mail to:

[cpursell@trinity.edu](mailto:cpursell@trinity.edu) . Further information is available at <http://new.trinity.edu/academics/departments/chemistry> .

### **Renalysis Medical Products in Buffalo Grove, Illinois is accepting application for a Chemistry Research Associate**

#### Job description

The chemistry research associate will conduct research in the laboratory focusing on the development and testing of parenteral formulations. Responsible for an intermediate level of expertise in analytical chemistry, chromatographic and spectrometric methods of analysis, and instrumentation troubleshooting, to execute projects and chemical analyses consistent with the goals of the company.

#### Responsibilities

Conducts chemical and physical testing of pharmaceutical raw materials, packaging components, finished products, and stability samples by internally developed and compendial test methods.

Executes test methods for pharmaceutical raw materials and finished products for strength, impurities, identity, and other characteristics using HPLC, spectroscopy, traditional quantitative wet chemistry, and particle analysis.

#### Qualifications

Bachelor of Science degree in chemistry, plus 3 or more years of experience in a R&D or QC laboratory, or Master of Science degree in chemistry with 1 or more years of industrial experience.

Working familiarity with analytical chemistry equipment including gravimetry, volumetric ware (pipettes, burettes, flasks), thermometers, baths, ovens, and fume hoods. Knowledge of instrumental techniques including HPLC, spectrometry, and particle analysis. Ability to evaluate and document testing results, summarize information in written reports, and assist in SOP and protocol development. Necessary to follow safety rules and regulations.

Interested candidates should send their CV to [skaroor@renalysis.com](mailto:skaroor@renalysis.com)

**Postdoctoral Position in Synthetic Inorganic Chemistry Los Alamos National Laboratory (LANL):**

Seeking an outstanding candidate with extensive inorganic, organic or organometallic chemistry experience to support emerging/growing programs focused on the fields of actinide chemistry and nuclear security. Candidate will be performing synthetic chemistry to prepare, isolate and characterize novel compounds including those of the actinides, or of transition metals. Study and optimization of metal catalyzed decomposition of organic compounds to generate gas pressure at low temperatures may also be pursued. Candidate must be willing and able to work with an interdisciplinary team of scientists from multiple organizations including Chemistry, Materials Science, Engineering, Theoretical and Weapons Divisions.

**Minimum Job Requirements:**

A strong background and extensive hands-on experience in synthetic chemistry. The ability to work in an independent and creative fashion. Demonstrated excellence in written and oral communication skills as evidenced by a strong publication and presentation record.

**Desired Skills:**

Experience with standard wet- and air-sensitive chemistry techniques for molecular synthesis and characterization (chromatography, Schlenk, drybox, chromatography, NMR and optical spectroscopy, etc.) Knowledge of ligand design. Additional experience in structural analysis (XRD) is a plus.

- Demonstrated ability to work independently and with minimum supervision
- Demonstrated ability to plan and organize assignments so that schedules are met on time
- Ability to obtain a DOE "Q" clearance for one of the programs.

**Education:**

Ph.D. in chemistry within the last five years or soon to be completed is required

***Where You Will Work***

Located in northern New Mexico, Los Alamos National Laboratory (LANL) is a multidisciplinary research institution engaged in strategic science on behalf of national security. LANL enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health, and global security concerns. Both positions are in the Chemistry Division

**Notes to Applicants:**

If interested, please send a CV with the names of three references to Jim Boncella at [Boncella@lanl.gov](mailto:Boncella@lanl.gov) For additional technical details, contact Dr. Jim Boncella at [Boncella@lanl.gov](mailto:Boncella@lanl.gov) For general information on the LANL Postdoc Program go to <http://www.lanl.gov/careers/careeroptions/postdoctoralresearch/index.php>.

**The University of Chicago, Center for Integrative Science** Professor Heinrich Jaeger has an opening for a postdoc in his lab, to lead the work on the mechanical properties of self-assembled nanoparticle sheets. He is looking for a person who has extensive experience in nanoparticle synthesis, characterization and assembly. He is looking for a talented and motivated grad student who recently finished his or her PhD, or who will finish in the very near future. Please apply to Dr. Jaeager. The position is available immediately. <http://jfi.uchicago.edu/~jaeger/group/>

**Montclair State University, Medicinal Chemistry Postdoctoral Positions with David P. Rotella, PhD**

One (possibly two) postdoctoral positions will be available later this year for synthetic medicinal or organic chemists for an NIH-funded collaborative research project to optimize protein kinase inhibitors for treatment of malaria. Candidates will have earned a Ph.D. in synthetic medicinal or organic chemistry and have demonstrated experience in modern organic synthesis. Salary is competitive and fringe benefits are also available. Interested candidates should provide a full CV with a research summary and names of at least two references by email to [rotellad@montclair.edu](mailto:rotellad@montclair.edu).

**The Blitstein Institute of Hebrew Theological College** is looking for an enthusiastic and personable adjunct instructor for one section of General Chemistry with lab during Fall 2017. Prefer PhD or ABD, with teaching experience and ability to communicate the relationships between chemistry and medicine. The Blitstein Institute is a highly conservative college for Orthodox Jewish women, so the perfect instructor will be respectful of the culture of the students. Excellent opportunity to mentor female students in a small class (10-15) and to interact with other faculty. The class meets Mondays and Wednesday from 1-4 pm at 2606 W. Touhy, Chicago. The textbook is Introductory Chemistry: Concepts and Critical Thinking, by Charles H. Corwin. The semester runs from Sept 5- Jan 19, with a long fall break in October. Adjunct salary for PhD is \$4000 per semester. Send cover letter and resume/CV to Dr. Laurie Erickson, Chair of the Department of Health Sciences at [Erickson@htc.edu](mailto:Erickson@htc.edu)

**Motus Integrated in Holland, Michigan** has an opening for a Materials Scientist/Engineer

Basic Responsibilities: Provide chemistry and manufacturing process expertise to tier one automotive interior supplier. Areas of expertise include engineering polymer formulation and processing to support company profitability. Candidates should be familiar with thermoplastics and thermoset polymers/composite materials and associated processes (polyurethanes, polypropylene, polyvinylchloride, etc..)

Specific Functions

1. Utilize experience with the manufacturing, formulating, processing and testing of polymers and systems.
2. Assess processing issues, root cause analysis and implementing countermeasures to reduce scrap and repair rates on production lines.
3. Develop and transfer new polymer technology into commercial value within company processes.
4. Optimize processing on current products
5. Monitor foam processing equipment condition and maintenance and recommend equipment improvements/upgrades.
6. Monitor injection molding equipment condition and maintenance and recommend equipment improvements/upgrades.
7. Apply existing knowledge and best practices of foam technology to current and future products.
8. Support quoting, innovation and advanced engineering activities with materials expertise and recommendations.
9. Support both launch and production in addressing quality and processing issues promptly.
10. Develop & maintain an experimental processing documentation system.
11. Requires travel to all Leon/Motus plant locations.
12. Advise on foam and plastics tooling feasibility and design optimization.
13. Solid understanding of interior trim products.
14. Solid knowledge of polyol and isocyanate manufacturing processes.



Reports To  
Director of Innovation

#### Education Required

Bachelor's degree in chemical engineering, materials science and engineering, chemistry or related field. Advanced degree preferred.

#### Experience Required

For a bachelor's degree candidates, 3-5 years minimum of professional experience in chemical engineering/manufacturing & processing in automotive interior applications. For advanced degree candidates, 0-2 years experience in chemical engineering/manufacturing & processing in automotive interior applications.

Contact [jfennell@motusintegrated.com](mailto:jfennell@motusintegrated.com) (719) 648-9716

**Cabot Microelectronics Corporation in Aurora, Illinois** has an opening for a Research Scientist. The Research Scientist - Analytical Development will play an integral role in providing solutions to product development challenges in the support of research and commercialization of high-performance CMP Polishing Slurries and Pads used in the production of advanced semiconductor devices. Leveraging your expertise in organic, organometallic, and/or analytical chemistry, you will identify sources of variation resulting from component interactions and provide mechanistic understanding for CMP slurry formulations.

Responsibilities include the following:

- Support of R&D efforts towards the mechanistic understanding of slurry components (particles/small molecules/polymers/surfactants) for the development of next generation CMP products.
- Analytical method development to support R&D and commercialization efforts, with an emphasis on NMR methodology  
Design of experiments for the characterization of CMP slurry components and variations within them.
- Grow in-house characterization capabilities and collaborate with external laboratories and universities to identify new characterization techniques.
- Document research results for intellectual property.

To be successful in this role, your background should include:

- Proven experience and demonstrable knowledge in a breadth of analytical methods and characterization techniques for chemical structure elucidation, (NMR, MS, FTIR, Chromatography).
- Demonstrated strong problem solving skills and the ability to develop novel analytical methodology and techniques for complex, multi-dimensional problems
- Results-oriented self-starter, capable of setting goals and then planning and executing complex research projects.
- Ability to balance multiple priorities and communicate timelines and results to key stakeholders in a clear and concise manner.
- Flexible, highly creative, innovative, and committed to continuous learning
- Graduate and/or post-doctoral experience, in university or industry, with examples of independent research Education: Ph.D. in Chemistry, Chemical Engineering, or Materials Science, or related degree/discipline is required.

Cabot Microelectronics Corporation, headquartered in Aurora, Illinois, is the world's leading supplier of CMP polishing slurries and a growing CMP pad supplier to the semiconductor industry. The company's products play a critical role in the production of advanced semiconductor devices, enabling the manufacture of smaller, faster and more complex devices by its customers. The company's mission is to create value by developing reliable and innovative solutions, through close customer collaboration, that solve today's challenges and help enable tomorrow's technology. <http://www.cabotcmp.com/>

**Cabot Microelectronics Corporation in Aurora, Illinois** has an opening for a Research Scientist - Formulation Development

The Research Scientist – Formulation Development will play an integral role in developing nanoparticle-based, high-performance CMP Polishing Slurries used in the production of advanced semiconductor devices. Leveraging your expertise in colloidal and materials science, you will innovate CMP slurry formulation designs by identifying new, effective slurry components, establishing key product characteristics, discovering mechanisms of action, and delivering differentiated performance to our customers.

Responsibilities include the following:

- Design, analyses, and interpretation of experiments that advance slurry formulation performance and mechanistic understanding through robust property-activity relationships.
- Generate innovative solutions to complex problems through the use of multiple disciplines and technical principles. Willing to explore more creative approaches to problem-solving.
- Document and communicate research results effectively including presentations/publications to external stakeholders and filing for patents as needed to protect intellectual property.
- As a good team player, collaborate across R&D and CMC functions by sharing research outcomes, adopting best practices, and driving for continuous improvement

#### Position Requirements

To be successful in this role, your background should include:

- Proven experience and demonstrated knowledge in at least one of these disciplines: colloidal science, nanoparticle technology, surface science, or material science.
- Post-doctoral experience, in university or industry, with examples of independent research in diverse areas is preferred.
- Demonstrated ability to innovate and drive original ideas within project research scope.
- Results-oriented self-starter, capable of effective project management including setting goals, planning and executing research, and balancing multiple
- Flexible, highly creative, innovative, and committed to continuous learning

Education: Ph.D. in Chemistry, Chemical Engineering, or Materials Science, or related degree/discipline is required.

Cabot Microelectronics Corporation, headquartered in Aurora, Illinois, is the world's leading supplier of CMP polishing slurries and a growing CMP pad supplier to the semiconductor industry. The company's products play a critical role in the production of advanced semiconductor devices, enabling the manufacture of smaller, faster and more complex devices by its customers. The company's mission is to create value by developing reliable and innovative solutions, through close customer collaboration, that solve today's challenges and help enable tomorrow's technology. <http://www.cabotcmp.com/>

**The Department of Chemistry at Mount Holyoke College** invites applications for a tenure-track position in Analytical Chemistry at the Assistant Professor level to begin Fall, 2018. Applicants are expected to hold a PhD and post-doctoral experience is welcomed. The successful candidate will develop and teach courses in analytical chemistry, anchor this discipline within the department's curriculum, while also contributing to teaching at the introductory level and at the upper level in their area of expertise. Research interests in all areas and applications of analytical chemistry are welcomed, alongside a drive to develop an externally funded research program that will encourage and accommodate close collaboration with undergraduates. Superb facilities for teaching and research are available, housed in a modern, integrated science center.

Mount Holyoke is an undergraduate liberal arts college for women with 2,200 students and 220 faculty. Over half of the faculty are women; one-fourth are persons of color. The teaching load is 2/2. The College is located about 80 miles west of Boston in the Connecticut River Valley and is a member of the Five College Consortium, comprising Amherst, Hampshire, Mount Holyoke and Smith Colleges together with the University of Massachusetts, Amherst.

Mount Holyoke is committed to enriching the educational experience it offers through the diversity of its faculty, administration, and staff. The College seeks to recruit and support a broadly diverse faculty who will contribute to the College's academic excellence, diversity of viewpoints and experiences, and relevance in a global society. In pursuit of these aims the College strongly encourages applications from underrepresented groups in the academy, including African Americans, Hispanics, Native Americans, Alaskan Natives, Native Hawaiians, other Pacific Islanders, LGBTQ applicants, first generation college graduates, those who have followed non-traditional paths to college by demonstrating exceptional talent and drive in the face of adverse societal, economic or academic conditions, and those with a demonstrated commitment to applying and including diverse backgrounds and perspectives to learning, scholarship, service, and leadership. All strong applicants will embrace the opportunity to work with an exceptionally talented student body that is diverse with regard to race, ethnicity, socioeconomic background and status, gender, nationality, sexual orientation, and religion.

Applications will be made on-line at <https://jobs.mtholyoke.edu> by submitting a CV and three documents concerning 1. a statement of teaching philosophy and pedagogical interests, 2. A detailed description of research plans, and 3. a statement of approach to mentoring a diverse student body. Applicants must also arrange for three letters of reference to be submitted on their behalf. Prompts for submission of these letters will be automatically generated once an online application is submitted. Review of completed applications, and their supporting letters, will continue until the position is filled. For additional information please go to: <https://www.mtholyoke.edu/acad/chemistry>