## 2018 WEEKLY BULLETIN DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY EVANSTON, ILLINOIS July 23, 2018

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

# **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**

<u>The Department of Chemistry with the University of Texas, Austin</u> is developing a pool of candidates for full or part-time appointment to non-tenure track faculty positions for the 2018-19 academic year.

Duties include primarily teaching general chemistry at the undergraduate level. Other teaching assignments are possible dependent on department need and candidate qualifications. Service/committee assignments may also be expected.

#### Qualifications

A doctoral degree in chemistry or a related field and previous teaching experiences is required. Previous university teaching experience is preferred.

**Application Instructions** 

Upload current CV and teaching statement to Interfolio. Enter names and contact information for at least 3 references who can write letters attesting to your ability as an instructor. https://facultyjobs.utexas.edu/position/35359

<u>Pacific Northwest National Laboratory Center for Molecular Electrocatalysis</u> A postdoctoral researcher is needed in the Catalysis Science Group (Center for Molecular Electrocatalysis) for experimental research. The position will be focused on the design of molecular electrocatalysts, such as oxidation of ammonia, oxidation of alcohols, or other energy conversions. <u>https://pnnl.jobs/richland-wa/post-doctorate-ra-center-for-molecular-electrocatalysis/BF765E1475DC4400B4EC3D06C690E861/job/</u>

#### **Minimum Qualifications**

Candidates must have received a PhD within the past five years (60 months) or within the next 8 months from an accredited college or university.

#### **Preferred Qualifications**

Relevant experience includes: Synthetic and mechanistic inorganic/organic chemistry Handling and manipulation of highly air-sensitive materials Proficiency with a range of spectroscopic techniques, particularly NMR Kinetics and thermodynamics Preferred skills: Ability to work in a highly collaborative environment Proficient in written and verbal communication Independent and highly motivated Ph.D. in Chemistry

**Abbott is accepting applications for a Research Information** Scientist A Biomedical and Business Searcher to define and conduct scientific, business, and IP-related searches. Review, analyze and synthesize search results. Present deliverables to clients to enable assessments, and to support decision-making within R&D and overall business processes.

The resume and cover letter can be sent to me directly at: <u>Anitha.Steventon@abbott.com</u> Main outputs are:

- Conducts literature searches
- Provides research results with value-added analysis
- Creates and monitors current awareness on industry related topics

Key Responsibilities

- Defines search strategy and relevant criteria (databases, indexing, keywords)
- Conducts accurate, comprehensive, literature searches in scientific, business, legal and news databases
- Supports project based searching, including searches related to competitive intelligence
- Consults with business, scientific or legal clients to determine research needs and applies appropriate information strategies to solving problems
- Creates and delivers well researched reports that are clearly structured, and that address the issue
- Monitors, updates, and improves knowledge and expertise with respect to information research tools and resources

Key Skills

- B.S. in Science required, with at least 5-7 years relevant experience in healthcare, corporate or library setting
- MS degree in Library Science and/or a combination of relevant searching experience preferred
- Strong proficiency of secondary research tools and information retrieval techniques using databases and platforms such as Medline, Embase, Inspec, STN, Factiva, Proquest Dialog, Thomson ONE
- Ability to review, analyze and synthesize technical information
- Ability to work with clients to develop solutions that meet expectations and deliver value
- High customer focus, flexibility, initiative, ability to prioritize workload, high accuracy, diligence and a fast responder
- Excellent people skills, ability to work well in a team and in an individual capacity, and willingness to take the lead on initiatives or as assigned
- Demonstrated ability to quickly learn, and continuously develops talents, skills and abilities
- Takes ownership of results, approaching work with a winning attitude
- Excellent problem solving skills, verbal and written communication skills
- Professional attitude to allow agile and proactive responses to changing business demands and opportunities
- Fluency in English (any other language is an advantage)

For additional details and to apply: <u>https://abbott.wd5.myworkdayjobs.com/abbottcareers/job/United-States---Illinois---Abbott-Park/Research-Information-Scientist\_30883003-2</u>

The University of Arizona Cancer Center (UACC) and the College of Pharmacy Department of Pharmacology and Toxicology are seeking an outstanding scientist to serve as Assistant/Associate/Full Professor with a research focus on cancer drug discovery. https://uacareers.com/postings/28407

The successful candidate should have a track record of scholarly productivity and demonstrated ability to secure independent, peer-reviewed funding (e.g. NIH R01) with a background in basic or translational research in cancer drug discovery. The applicant should have expertise in medicinal chemistry and a strong focus on chemical-biology as it relates to cancer therapy. Translational research is strongly supported by the Cancer Center with outstanding shared resources in clinical trials, immunotherapy, biostatistics, bioinformatics, mouse models, and tissue acquisition and analysis.

The College of Pharmacy is an essential component of the UACC. The College has strengths in drug discovery, cancer biology, pharmacology and toxicology and interacts with the four outstanding UACC Research Programs: Therapeutic Development, Cancer Biology, Cancer Imaging, and Cancer Prevention and Control. The University of Arizona has multiple faculty and facilities that will enhance drug discovery efforts including NMR, crystallography, and high throughput screening.

The University of Arizona Cancer Center (UACC), is a National Cancer Institute (NCI)-designated Comprehensive Cancer Center dedicated to the prevention and cure of cancer through patient care, research and education.

Outstanding UA benefits include health, dental, and vision insurance plans; life insurance and disability programs; paid vacation, sick leave, and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; state and optional retirement plans; access to UA recreation and cultural activities: and more!

The University of Arizona has been listed by Forbes as one of America's Best Employers in the United States and WorldatWork and the Arizona Department of Health Services have recognized us for our innovative work-life programs.

Duties & Responsibilities

- Participate in established Division, Department, and Cancer Center programs.
- Participate in translational drug development.
- Actively participate in divisional/departmental program metrics for academic achievement.

Knowledge, Skills, & Abilities

• Ability and dedication to develop an innovative research portfolio that fosters positive intraprofessional and inter-professional relationships.

Minimum Qualifications

- PhD, PharmD or MD degree at a current rank of Assistant/Associate/Full Professor.
- Demonstrated ability to secure independent, peer-reviewed research funding such as an NIH ROI.
- Expertise in Medicinal chemistry AND a strong focus on chemical-biology as it relates to cancer therapy.

Preferred Qualifications

Record of productivity in academic accomplishments as evidenced by publications and successful • peer-reviewed funding.

- Ability to lead or contribute to "team science" based interdisciplinary research grants/projects.
- Established expertise in medicinal chemistry and chemical biology.

<u>General Chemistry Instructor. The Blitstein Institute of Hebrew Theological College</u> is looking for an enthusiastic and personable adjunct instructor for one section of General Chemistry (4 credits with lab) during Fall 2018. Prefer PhD or ABD, with teaching experience and ability to modify lab experiments.

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 nursing majors in a small class (6-12), and to design your own labs in a well-equipped facility.

The class meets Tuesdays and Thursdays from 1-4 pm at <u>2606 W. Touhy, Chicago</u>, during the Fall Semester from Oct 8, 2018- Jan 18, 2019. There is no winter break, but a personal day is allowed and some flexibility in hours can be negotiated. Free parking, good access to public transportation. Adjunct salary for PhD is \$4000 per semester.

Send cover letter and resume/CV to erickson@htc.edu

Dr. Laurie Erickson, Chair of Health Science Dept

Blitstein Institute of Hebrew Theological College

## **Research Scientist - Formulation Development with Cabot Microelectronics Corporation**

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 activities.

• 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.

Please visit our website at <u>https://www.cabotcmp.com/</u> for more information on our company and apply online at <u>https://cmc.wd1.myworkdayjobs.com/CMCCareers</u>

## 3M is seeking a Research Specialist for the Inorganic and Ceramics Cluster of the Corporate

**Research Materials Laboratory located in Maplewood, MN**. At 3M, you can apply your talent in bold ways that matter.

Job Summary:

The person hired for the position of Research Specialist will develop advanced technologies and products in Inorganic and Ceramics Cluster of 3M's Corporate Research Materials Laboratory. The primary focus of this position will be to develop new thermal management materials for the automotive electrification market space. At 3M, our researchers leverage our 46 technology platforms and capabilities to develop new technologies and products that solve customer problems across many businesses and markets. 3M offers over 55,000 products that are helping customers are used in consumer electronics, hospitals and clinics, industrial manufacturing, and safety products. 3M core material technologies and expertise include advanced polymers, nanotechnology, biotechnology, and ceramics that are used in adhesive tapes, protective coatings, film technologies, non-wovens, abrasives, and respirators. 3M is applying Science to Life.

Primary Responsibilities include but are not limited to the following:

- Leverage expertise to develop and advance technologies that can be used for new product commercialization opportunities in the area of thermal management materials.
- Protect 3M intellectual property through the filing of new patent applications, publish in top-tier journals, and present at appropriate conferences.
- Collaborate with research teams from corporate research and business labs on building capabilities and applications that use his/her scientific, mathematical, and computational skills.
- Active participation in 3M's Tech Forum
- Collaboration with international laboratories for technology and product transfers.

# **Basic Qualifications:**

- Possess or in the last year of pursuing a Doctoral degree or Post-Doctoral fellow in a Science or Engineering discipline from an accredited university
- Research & development experience in thermal management materials Preferred Qualifications:
  - Ph.D. degree in chemistry, chemical engineering, material science or related discipline with an emphasis on Thermal Management Materials
  - Previous experience (3-5 years) in thermal management materials and solutions for the automotive and/or electronics products market space.
  - Good skills in data analysis and the use of designed experiments
  - Strong scientific and technical acumen, with demonstrated interest and ability to make connections between science/technology and real-world concerns
  - Strong problem-solving skills
  - Ability to deal with the ambiguity of early-stage scouting and evaluation of new opportunities and the flexibility to change direction as additional information becomes available
  - Leadership and networking skills
  - Self-motivated and self-directed

• Excellent communication skills (oral, written and presentation)

# Location: Maplewood, MN

https://3m.recsolu.com/jobs/qE7mmzOBAqGWwNXOee7aMQ

<u>North Park University, The Chemistry Department</u> seeks a responsible and skillful Director of Chemistry Laboratories. A full-time, 12-month position, the Director of Chemistry Laboratories will oversee chemistry laboratory teaching support needs, including chemical preparations, laboratory equipment set-up, and lab clean-up. The Director provides maintenance support services for all Chemistry Department instrumentation, computers, and technologies. The Director is expected to consistently teach some laboratory sections for 1000-level chemistry classes and to teach General Chemistry I & II during each summer term.

Essential Responsibilities:

• Oversees chemistry laboratory chemical preparations, equipment set-up, and lab clean-up for all chemistry laboratory classes on a year-around basis

• Required to teach CHEM 1150: General Chemistry I with lab and CHEM 1160: General Chemistry II with lab during June and July summer terms, respectively

• Required to teach at least one section each of our 1000-level introductory laboratory sections (CHEM 1011/1021/1031/1150/1160) during the school year.

• Directly assists the Department Chair in supervising and training adjunct faculty who will teach other 1000-level introductory laboratory sections.

• Contribute to the on-going development and pedagogical improvement of introductory laboratory experiments

• Oversees chemistry instrumentation, including regular and preventative maintenance and software/firmware updates

• Performs weekly liquid nitrogen fills of the department NMR and quarterly liquid helium fills

• Ensures all chemistry department computers and iPads are regularly updated

• Ensures department LabQuest handheld computers are updated and all associated probes and sensors are in working condition and repaired in a timely manner

• Supervises and helps direct departmental student laboratory assistants

• Works closely with Chemical Hygiene officer/Laboratory Safety Officer (CHO/LSO) to ensure that laboratory conditions are in compliance with all hygiene and safety laws, regulations, and best practices

• Assists Departmental Chair, CHO/LSO, and Science Division Office Manager with Chemistry Department orders and deliveries

• Works with Physical Plant to ensure that chemistry laboratories are in proper working condition

• Manages chemical stockroom inventory

• Complete other duties as assigned by the Department Chair

Essential Qualifications:

• Master's Degree or higher in Chemistry or Biochemistry, Ph.D. preferred.

• Experience teaching introductory college-level chemistry laboratories

• Experience teaching college-level General Chemistry course sequence and must be willing to commit to teaching General Chemistry during summer term

- Experience working with others (including students) in a laboratory setting
- Experience maintaining instrumentation and computers
- Excellent time management and organizational skills
- An eagerness to learn and master the wide variety of essential responsibilities listed above.
- Understanding of and personal commitment to North Park's mission of Christian higher education.

# *NOTE:* Nothing in this job description restricts the supervisor's right to assign or reassign duties and responsibilities to this job at any time.

https://www.northpark.edu/employmentapplication

## University of Calgary Postdoctoral Fellowship, Cost-Effective C02 Reduction Catalyst

**Development, Canada First Research Excellence Fund** As part of the implementation of its CFREF scientific strategy and to address the Grand Challenge aiming to develop next generation of  $CO_2$  conversion catalysis, a project in the production climate neutral synthetic fuels through electrocatalytic carbon dioxide reduction is seeking a team member at the Postdoctoral level.

The successful candidate will work within a multidisciplinary team of synthetic chemists, electrochemists, surface scientists and engineers consisting of 5-7 PI's, 5 PDFs and a similar number of graduate students. The primary aim will be to develop new, selective  $CO_2$  conversion catalysts supported on novel conducting materials. While initially CO will be targeted as a product, other potential fuels will also be within scope.

Accordingly, we seek applications from qualified candidates within two to four years of their Ph.D. degree to fill a Postdoctoral Fellow position with the following specific qualifications: Synthetic inorganic chemistry: Ph.D. in inorganic chemistry with an emphasis on the synthesis and characterization of organometallic and coordination compounds, particularly of the first row transition series. The ability to prepare and manipulate air and moisture sensitive compounds, and characterize them using a suite of modern spectroscopic and analytical techniques. Working knowledge of electrochemistry and electrocatalysis is also strongly desired.

The appointment will be for two years with a \$55,000/year salary (CND dollars); the position also comes with sufficient research support to be managed by the candidate in consultation with the PI members of the team. In addition, the candidate will be required to work within a team environment and so excellent communication skills and the ability to work effectively with a diverse group of interdisciplinary researchers is a must. As a PDF team member, strong leadership in project management is also expected. Applications should consist of a current CV, a list of two to three referees with contact information and a cover letter indicating your are applying for a position with the *Synthetic Fuels* team as a synthetic inorganic chemist. Please also indicate your availability. The search will continue until the position is filled, preferably by September 1, 2018.

To be eligible as a Postdoctoral scholar at the University of Calgary, the candidate must have been awarded a PhD or equivalent within the five (5) years immediately preceding the appointment. Please review the Eligibility page for more information prior to applying for this position