

WEEKLY BULLETIN
DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS
November 30, 2020

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New Arrivals

Please extend a warm welcome to our new Program Assistant, **Elyse Bento**, who joined the department on 11 November. Elyse supports Professor Tobin Marks, replacing Morgan Eklund who accepted a position as a Program Coordinator in ISEN.

Elyse is a Skokie resident, having recently relocated here from New York City, where she spent 13 years providing faculty and administrative support at NYU's School of Medicine in the Departments of Medicine/Microbiology and Psychiatry, and four years at the Mount Sinai School of Medicine.

Prior to joining our department, Elyse worked as a temporary employee in WCAS Undergraduate Studies and Advising, as well as the Department of Spanish and Portuguese.

Welcome, Elyse!

BIP

BIP will be held virtually on Fridays, **10 am to 11 am**. The Zoom link will always be sent out **the Wednesday before the respective seminar to the BIP listserv**! Interested in giving a BIP talk or signing up to be on the BIP listserv? Email the new BIP Meisters, [Zoha Syed](#) or [Megan Kaster](#).

Upcoming Events and News

Call for Abstracts: Webinar Series for Early Career Chemists

JAWSCHEM is a virtual seminar series for chemists in the early stages of their career (i.e. undergraduates, graduate students, and postdocs, as well as people in industry and government/national labs). The goal

of this seminar series is to fill the void of missed conferences and provide a platform for junior researchers to share their work with the worldwide chemistry community.

There is currently a call for abstracts from the chemistry community, and they welcome submissions from all over the world. Additional information about times and talk length can be found on our [abstract form](#) and [website](#). You can follow them on Twitter too ([@JAWSCHEM](#)).

TECH Sanitary Lift Station Project - Bike Corral

Facilities is getting ready to start the retrofit of the Sanitary Lift Station out in front of TECH at the Southwest corner of the building in front of the moat. Facilities will be installing a fence around the area next week. In preparation of this work they need to clear the bike corral in that area. They have tagged the few bikes that are there now and we are giving people till **the weekend** to remove them. There are other bike corrals in front of TECH so there should be no problem for people to find a spot for their bike while this project is going on. Please contact Rob Wikstrom (r-wikstrom@northwestern.edu) with any questions.

NCA/CAPS: Managing Stress, Emotions, and the Job Search Through COVID (For PhDs)

Tuesday, December 1, from 12-1PM CST

Co-facilitated by Adam Hibma, CAPS staff psychologist, and Elysse Longiotti, PhD Career Adviser, we'll spend time discussing stress management as a doctoral student through the pandemic. Identifying strategies for recognizing and managing emotions, we'll present approaches to re-gain agency and control in order to put structure around the doctoral job search. Registration is limited and required through [Handshake](#).

Careers in Patent Law: Session with Wilson Sonsini

Wednesday, December 9, from 12-1PM CST

Interested in a career in intellectual property and patent law? Please join Laurie McNamara, Jim Malecha, and Jose Martinez (Northwestern alums) from Wilson Sonsini Goodrich & Rosati to hear more about opportunities for graduate students and postdocs. The event will consist of a short presentation and interactive case lead by Laurie McNamara (NU PhD alumna). The case activity will be followed by an open Q&A with current patent agents, who can discuss how they transitioned from academia to working at a law firm. Participants are welcome to submit questions in advance via email to momar@wsgr.com.

Wilson Sonsini Goodrich & Rosati is the premier legal advisor to technology, life sciences, and growth enterprises worldwide, as well as the venture firms, private equity firms, and investment banks that finance them. Wilson Sonsini's patents and innovations practice helps clients leverage their intellectual property, defend against claims of others, and establish a competitive position for the future in fields such as therapeutics, biologics, personalized medicine, research tools, and clean technologies.

Registration via [Handshake](#) is required for this event.



R&D Process Chemist

Overview:

FMC Agricultural Solutions is an R&D-based business, dependent upon the introduction of new products to deliver a competitive advantage in the agrochemical industry. Our business has a robust pipeline of new products that anticipate our customers' needs and contribute to their long-term prosperity while advancing agriculture. The Process Development organization employs process chemists and process engineers to achieve its mission to develop the technology necessary to commercialize new agricultural active ingredients.

FMC Agricultural Solutions has an opening for a synthetic organic chemist at their global research center in Newark, Delaware. The successful candidate will conduct a hands-on laboratory-based program to design and develop synthetic routes for commercial manufacturing processes as part of an interdisciplinary team of process chemists, analytical chemists and chemical engineers. The role includes support of all phases of process development, with responsibility from early stage to commercial launch.

Responsibilities:

Establish research goals and objectives and manage an independent technical segment of an overall development project. Develop an understanding of corporate, business and functional needs so as to align their work with overall strategies and objectives. Adhere to required and approved safety procedures. The successful candidate will develop process concepts and cost analyses for chemical synthetic routes/manufacturing processes, design and conduct a hands-on laboratory-based program to demonstrate commercial process feasibility and to establish essential chemistry/engineering parameters, develop basic data, define operating conditions and critical limits, and establish safety and quality parameters for the commercial process from Discovery through scale up. Document and transfer technology, direct research activities at CRO's, support campaigns at internal and external partners, and participate in the pre-campaign planning and start-up of commercial operations.

Required Education:

- Ph.D. in Organic Chemistry with strong background in synthetic organic chemistry.

Qualifications & Requirements:

- Solid knowledge of classical and modern synthetic methods as well as modern tools in chemical research
- Experience with multi-step synthesis or methodology
- Experience in effectively mentoring other team members
- Strong ability to work in a cross disciplinary international team environment with strong communication and interpersonal skills
- Experience in working in a dynamic, timeline driven environment, strong track record of delivering high quality results that meet or exceed expectations
- Ability to travel to national and international sites may be required (less than 10%).
- Flexible work schedules to accommodate work performed in different geographies required



To apply, please use the link below:

<https://jobs-fmc.icims.com/jobs/9334/r%26d-process-chemist/job?branding=live>

Assistant Professor: Polymer Science and Engineering (direct link to application)

Job Summary: The University of Southern Mississippi invites applications for a nine-month tenure-track Assistant Professor position in the School of Polymer Science and Engineering (SPSE) within the College of Arts and Sciences (Hattiesburg Campus) to begin in fall 2021. Applications will be accepted from candidates whose research interests are in any area of contemporary polymer science and engineering, but candidates with expertise in physical polymer chemistry, polymer engineering, or computational modeling/theory are particularly encouraged to apply. In addition to building an independent research platform, this position offers potential to develop collaborations within an NSF-funded state-wide infrastructure program focused on optoelectronic materials, with research focus areas in infrared organic optoelectronics, macromolecular materials with tunable electronic structures, hybrid organic/inorganic interfaces, and materials for bioimaging and sensing.

Primary Duties and Responsibilities

1. Teach undergraduate and graduate courses in polymer science and engineering
2. Build an internationally recognized research program, including mentorship and supervision of graduate and undergraduate student research
3. Secure external funding from private, state, and federal entities to sustain a high level of research and scholarship
4. Contribute to the mission of the school, college, university, and scientific community through professional service
5. Perform other duties as assigned

Minimum Qualifications

1. Earned Ph.D. in polymer science and engineering, chemistry, or a closely related discipline
2. Demonstrated record of intellectual and academic accomplishments evidenced by peer-reviewed publications, professional presentations, and/or grant submissions

Knowledge, Skills, and Abilities

- Demonstrated ability to work effectively, collaboratively, and collegially with students, staff, and faculty from diverse backgrounds, programs, and colleges
- Excellent written and oral communication skills
- Skill sets associated with use and application of common equipment and instrumentation in PSE

Preferred Qualifications: Candidates with postdoctoral research experience who demonstrate strong potential to develop collaborations within SPSE and across other academic disciplines.

Special Instructions to Applicants: Applications must be submitted online at <https://jobs.usm.edu>. Applicants should submit a single PDF document containing a cover letter, curriculum vitae, statement of research plans and a brief statement of teaching philosophy that includes interest in specific core courses in the polymer science and engineering (PSE) graduate and undergraduate curricula. Applicants should provide contact information for at least three references. Review of applications will begin immediately and continue until the position is filled. For inquiries about the position or to nominate a candidate, contact the search committee chair Dr. Sarah Morgan (sarah.morgan@usm.edu).

About the School: SPSE comprises faculty members with research programs in optoelectronic materials, composites, biomaterials and bioinspired polymers, materials for energy and sustainability, and coatings and thin films with average annual external funding of ~\$15M over the past three years. SPSE offers state-of-the-art facilities for soft-matter optoelectronics research including newly acquired thin-film device fabrication and characterization equipment, SAX/WAXS laboratory beamline, XPS/UPS spectrometer, magnetic characterization, AC/DC SQUID magnetometer, ESR, cryogenic probe station, and supercomputing capabilities. SPSE is home to ~80 Ph.D. students and ~110 undergraduate students; it offers polymer science and engineering degrees at the B.S., M.S., and Ph.D. levels.

About the University of Southern Mississippi: USM is a comprehensive public research institution delivering transformative programs on campuses in Hattiesburg and Long Beach, at teaching and research sites in central and southern Mississippi, as well as online. Founded in 1910, USM is one of only 130 universities in the nation to earn the Carnegie Classification of Institutions of Higher Education's "R1: Doctoral Universities - Very high research activity" designation, and its robust research enterprise includes experts in ocean science and engineering, polymer science and engineering, and sport venue safety and security, among others. USM is also one of only 40 institutions in the nation accredited in theatre, art and design, dance and music. As an economic driver, USM generates an annual economic impact of more than \$600 million across the state. USM welcomes a diverse student body of approximately 15,000, representing 71 countries, all 50 states, and every county in Mississippi. USM students have collected four Truman Scholarships and 36 NSF Graduate Research Fellowships, while also leading Mississippi with 24 Goldwater Scholarships, an honor that recognizes the next generation of great research scientists. For more information, visit www.usm.edu.



Northeastern

The Department of Chemistry and Chemical Biology at Northeastern University seeks a new colleague in analytical chemistry or environmental chemistry with a focus on plastics, beginning in academic year 2021-2022. We seek someone at the rank of Assistant Professor (tenure-track), although exceptional senior candidates will be considered for appointment at higher ranks. Joint or affiliated appointments with other departments may be possible.

The link to apply:

<https://careersmanager.pageuppeople.com/879/cw/en-us/job/504207/open-rank-assistantassociatefull-professor>

The study of environmental plastics is advancing by applying analytical chemistry and imaging to resolve the size classes, chemistries and impact of plastics and their byproducts. Candidates are sought who study plastics or their byproducts in natural, engineered, or biological samples. Appointments will have the opportunity to collaborate in cross-disciplinary teams across the University and will complement existing strengths in analytical chemistry. Northeastern is also home to the Coastal Sustainability Institute <https://www.northeastern.edu/csi/> and the Global Resilience Institute <https://globalresilience.northeastern.edu/>.

The Department of Chemistry and Chemical Biology ("CCB") (<https://cos.northeastern.edu/chemistry-chemical-biology/>) includes 27 tenured / tenure-track faculty, 30% of whom are women; nine full-time teaching faculty; four research faculty; and eight faculty with affiliated appointments. CCB was recognized as the most gender diverse faculty among the top 50 US Chemistry Departments in 2019. CCB enrolls approximately 150 undergraduate majors; 27 M.S. and PlusOne (BS/MS) students; and 80 Ph.D. students.

In the Northeastern University College of Science, we embrace a culture of respect, where each person is valued for their contribution and is treated fairly. We oppose all forms of racism. We support a culture that does not tolerate any form of discrimination and where each person may belong. As a College, we strive to have a diverse membership, one where each person is trained and mentored to promote their success.

Job Openings & Recruiting



Tenure-Track Faculty Position in Computational/Theoretical Chemistry

The Department of Chemistry at UNT invites applications for a tenure-track faculty position in the broad area of Computational and Theoretical Chemistry. The position will be at the rank of Assistant Professor and has an expected start date of August 2021.

We are seeking individuals who have a record of research accomplishment and compelling ideas for building an independent research program in any area of computational/theoretical chemistry. Candidates whose research complements or builds upon existing strengths in the department are especially encouraged to apply. The selected individual will interact with diverse faculty, staff and students within the Chemistry department and in other disciplines, contributing to a strong tradition of interdisciplinary and collaborative computational research at UNT. Development of a nationally and internationally visible, funded research program is expected. The new faculty member will have access to computing resources and collaborative opportunities through the Center for Advanced Scientific Modeling (CASCAM, <http://cascam.unt.edu/>), a multi-departmental group centered in the Chemistry Department which supports research, education, training, and outreach in computational science.

The University of North Texas (UNT) is a Carnegie R1 research university and a federally designated Hispanic-Serving Institution and Minority-Serving Institution, with a diverse population of over 40,000 students. UNT is located in Denton, [a cultural hot spot](#) on the northern edge of the Dallas-Fort Worth Metroplex, [one of the fastest growing metropolitan areas in the country](#). The [UNT Chemistry Department](#) is in a growth phase, having hired an endowed Welch Chair in Chemistry and three junior faculty in the past year, with plans to hire up to six additional tenure-track faculty over the next few years. Our department has a strong culture of interdisciplinary collaboration, with specific strengths in computational chemistry, photochemistry, and materials chemistry. New faculty have the opportunity to contribute to these areas, as well as interfacing with a growing interdisciplinary emphasis in Chemical Biology within the Chemistry Department and in collaboration with the [BioDiscovery Institute \(BDI\)](#) and other units on campus. The UNT Chemistry Department is dedicated to creating a climate that values and promotes diversity, equity, and inclusion, and we welcome applications from people of color, women, and LGBTQ+ individuals.

Applicants should submit materials by visiting <http://jobs.untsystem.edu> and searching for posting number F310P, or by [following this link](#). A cover letter, curriculum vitae, a research proposal, a statement of teaching philosophy, and a diversity statement are requested. In addition, please supply names and contact information for three professional references, and arrange for reference letters to be emailed to chemjobs@unt.edu with "Assistant Professor" in the email subject line. Evaluation of applications will begin on December 1, 2020 and will continue until the position has been filled.

For more information, please visit websites for the UNT College of Science <https://cos.unt.edu/> and the Department of Chemistry <https://chemistry.unt.edu/>.

The University of North Texas System and its component institutions are committed to equal opportunity and comply with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University of North Texas System and its component institutions do not discriminate on the basis of race, color, sex, sexual orientation, gender identity, gender expression, religion, national origin, age, disability, genetic information, or veteran status in its application and admission processes, educational programs and activities, and employment practices.

Job Opening, University of Southern California

The Department of Chemistry in the Dana and David Dornsife College of Letters, Arts and Sciences at the University of Southern California (Los Angeles, California) invites applicants for a tenure track Assistant Professorship in the areas of physical chemistry, chemical biology and organic chemistry, to start August 16, 2021. Candidates should have a Ph.D. and postdoctoral experience.



The Chemistry Department is highly collaborative and holds diversity, equity and inclusiveness as core values. Candidates that will contribute to the excellence as well as diversity of our academic community are strongly encouraged. We are committed to supporting the family needs of faculty and encourage candidates from non-traditional career paths and those that have demonstrated commitments to advancing diversity and inclusion through their career. Candidates have access to USC Provost's Assistant Professor Fellowship, which can provide additional time, research support and resources to transform their scholarship into extraordinary platforms for their own independent research prior to start of the tenure clock. The Department also offers flexibility in appointment start date. Candidates at any early career stage are encouraged to apply. Candidates should submit their application online at <http://chem.usc.edu/facsearch> with a cover letter, curriculum vitae and a detailed description of their research and teaching plans. In order to be considered for this position, applicants are also required to submit an electronic USC application; follow this job link or paste in a browser: <https://usccareers.usc.edu/job/los-angeles/assistant-professor-of-chemistry/1209/17813341>

A separate statement on contributions and future plans in advancing diversity, equity and inclusion should be provided. The names and addresses of at least three individuals who will provide letters of recommendation will be requested on-line. The committee will begin evaluation of files that include three letters of recommendation on December 1, 2020 and applications will be considered until the position is filled.

Job Opening, Trinity College

Trinity College is seeking candidates for a tenure-track position in physical chemistry and a second potential tenure-track opening in the areas of organic chemistry or chemical biology at Trinity College. This second position could be made possible by the College's renewed Special Opportunity Hire program, which endeavors to recruit "scholars and teachers of exceptional achievement or promise who will diversify the faculty." Both positions would begin in the fall 2022 semester. The Department of Chemistry at Trinity is committed to recruiting, interviewing and hiring diverse candidates for both positions.



Trinity College is a coeducational, independent, nonsectarian liberal arts college located in Connecticut's capital city of Hartford. Our student body is diverse, coming from all socio-economic, racial, religious, and ethnic backgrounds across the U.S. and internationally. Faculty combine teaching excellence with productive research programs that engage undergraduate students. Trinity College is located in an urban environment and nearby institutions include Hartford Hospital, the Institute of Living, Connecticut Children's Medical Center, and University of Connecticut Medical School. Researchers at these institutions often have active collaborations with Trinity faculty. The Chemistry Department is exceptionally well-equipped for both teaching and research.

The ideal applicants would excel at teaching in their area of expertise and in our introductory courses, and who would establish or continue a productive research program that meaningfully involved undergraduate co-workers. Applications are welcome from graduate students, postdoctoral scholars or established faculty members who, through their research, teaching, and service, would contribute to the diversity and excellence of our academic community.

Applications may be submitted to:

Timothy Curran

Vernon K. Kriebel Professor of Chemistry and Chair Email: timothy.curran@trinco ll.edu

Telephone: 860-297-5276

Tenure-track position in biochemistry at Beloit College

Beloit College invites applications for a tenure track faculty position in biochemistry to begin August 2021. The

successful candidate will hold a Ph.D. in biochemistry or related field and teach courses in biochemistry and general chemistry. Willingness to teach courses in another area of chemistry (analytical, inorganic, or physical) preferred. We especially seek candidates who have demonstrated success in working with diverse populations of students. This position is an excellent opportunity to teach in a department known for innovative pedagogy. The successful candidate will also develop a research program related to some aspect of health, broadly defined, that engages undergraduates. This position places strong emphasis on advising undergraduate students in Biochemistry, Chemistry, and our multidisciplinary Health and Society program. The candidate will also contribute to all-college programs and serve in leadership roles in campus governance. More details can be found here: <https://www.beloit.edu/live/profiles/3870-assistant-professor-of-chemistry>

The logo for Beloit College, featuring the words "Beloit" and "College" in a white serif font, stacked vertically, against a dark blue rectangular background.



Haogang Cai, PhD
Assistant Professor
Health Technology and Engineering Institute
(Tech4Health)
NYU Grossman School of Medicine
New York, NY, 10016

Postdoc, PhD positions in Optical Metasurface and Nanophotonics

A postdoctoral position is available in the Cai Lab, part of the Health Technology and Engineering Institute (Tech4Health) at New York University Grossman School of Medicine (recently ranked # 4 in medical schools by [‘U.S. News & World Report’](#)). We build new paradigms of nanotechnology for biomedical applications, including optical metasurfaces for imaging and sensing, active tunable metasurfaces, and nano-engineered biomimetic materials. Our work has been published in high-impact journals including Nature Nanotechnology, Nature Materials, NPJ Comput. Mater., ACS Nano, Nano Letters, etc. This position is immediately available, and will remain open until filled. The postdoc will receive competitive stipend, and benefits provided by the NYU School of Medicine.

Who we’re looking for

Candidates must have a PhD in engineering (electrical, mechanical, etc), optics, physics, materials science or an appropriate field. Those with expertise in optical metasurfaces (near infrared, visible), nanophotonic/plasmonic sensors, nanofabrication, are encouraged to apply. Those with hands-on cleanroom experience (e.g., e-beam lithography, RIE, SEM), a strong background in optics, optical experiments, and finite-difference time domain (FDTD) simulation are preferred. We seek candidates who are strongly motivated, open-minded, and capable of both independent and collaborative research work. Demonstrated ingenuity, productivity, communication and writing skills, and an excellent record of publications is preferred. We also have PhD student, research associate openings in related fields.

How to apply

To apply, send your CV to Dr. Haogang Cai, at haogang.cai@nyu.edu. Please include a detailed description of your research interests, a full list of publications, and names of at least two references.

Who we are

The Tech4Health Institute, NYU Langone Health’s Institute for Health Technology and Engineering, is NYU Langone’s research and development hub for new biomedical instruments and technologies. With state-of-the-art facilities in Midtown Manhattan and an advanced rapid-response engineering team, the institute connects engineers and physical scientists with clinicians and life scientists to address key unsolved problems and unmet needs in biomedicine. Immersed in the unique vibrant and innovative environment of the New York City, and one of the foremost medical schools in the world, this is an ideal place for engineering researchers to design technologies improving human health. For more information, visit the lab website at <https://www.cai-labs.com/> and the institute website at <https://med.nyu.edu/departments-institutes/health-technology-engineering/>.

illumina- Open Position

Illumina is looking for a chemist with experience in surface chemistry, nanoparticle synthesis/characterization, and bioconjugations. Based at our Headquarters in San Diego we require a Scientist to join our Research & Technology Development department as a Materials / Surface Chemist in a permanent role. As part of the Materials and Applied Surface Science group, you will play an integral role in developing new sequencing and array technologies and related applications. As the company moves fast so does the technology we use, the candidate will have to be adaptable to a wide range of techniques and methods used in life-sciences.



Visit [this page](#) for more details and to apply.

Job announcement: Research Associate/ Group Leader

The Lab Dresden Center for Intelligent Materials (DCIM) is focused on novel materials which, as a central component of intelligent systems, feel, think and act autonomously through integrated sensory and actuator functionalities.



For more details, please refer to the following [announcement](#).

Northwestern | Chemistry

Research Assistant Professor for a New Lab Downtown

Dr. Karl Scheidt, a Professor in the Department of Chemistry and Department of Pharmacology at Northwestern University, is seeking a Research Assistant Professor with expertise in chemical and molecular biology for a new translational chemistry laboratory. The Research Assistant Professor will engage in research activities focused on advancing new molecules to understand biological function and expected to pursue independent grants, research and collaborations.

This is non-tenure, research faculty appointment for an initial period of up to three years and eligibility for renewal based on scholarly achievements and available funding. This position will be physically located on primarily on Northwestern's Medical School campus in Chicago, IL.

Only electronic application materials will be accepted. Northwestern University is an equal opportunity, affirmative action employer and does not discriminate against qualified individuals on the basis of race, color, religion, national origin, sex, pregnancy, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship status, veteran status, genetic information, or any other protected class. Individuals from all diverse backgrounds are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

Applications should be submitted via email and sent to scheidt-ofc@northwestern.edu. Please include a cover letter detailing your research experience, CV, three representative publications, and contact information for three references. Review of applications will begin immediately.

Minimum Qualifications: (Education and experience)

- Doctoral degree in the area of chemical biology/molecular biology/biological sciences or a related field of study with at least 2 years of relevant postdoctoral experience.
- Strong publication record and proven potential for independent extramural funding.

Minimum Competencies: (Skills, knowledge, and abilities)

- Strong interpersonal and communication skills and a desire to engage in team-based research and collaboration are necessary.
- Working knowledge of chemistry is essential to integrate effectively with translational chemistry projects at the University and within Dr. Scheidt's laboratory.
- Strong writing skills demonstrated through authorship of publications or independent grant research awards.
- Highly motivated and able to manage multiple projects and keep pace in a dynamic research environment.

Do you have news or opportunities to share in the Weekly Bulletin?
Please email them to Colleen Kjellberg at colleen.kjellberg@northwestern.edu

For an archive of the Department of Chemistry's Weekly Bulletins, please visit: [Bulletin Archive](#)