WEEKLY BULLETIN DEPARTMENT OF CHEMISTRY, NORTHWESTERN UNIVERSITY EVANSTON, ILLINOIS March 29, 2021

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For a full schedule, including Center events, please see the Department Calendar.

Return to Research Guidelines

Return to Research Policy

COVID-19: Return to Campus Guidelines

New Arrivals

Matthew Bailey (Post Doc) joins the Meade group on April 01, 2021 Athri Rathnayake (Post Doc) Silverman group on April 01, 2021

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 I 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 <u>abstract</u> form and <u>website</u>. You can follow them on Twitter too (@JAWSChem).

Job Openings & Recruiting



Honda Research Institute US

Honda Research Institute USA has multiple internship openings for Spring/Summer 2021 in the following categories.

Material Sciences

- 1. The Synthesis and Evaluation of Nanocatalysts (Job Number: P20INT-22)
- 2. Circuit Design for Wearables (Job Number: P20INT-23)
- 3. Fabrication of Flexible Electrodes (Job Number: P20INT-24)
- 4. Synthesis of 2D Materials (Job Number: P20INT-25)

Please go to their careers website (<u>https://usa.honda-ri.com</u>) for a complete list of available positions, including internships. All inquiries must include the Job Number(s) in the subject line and sent directly to <u>careers@honda-ri.com</u>.

How to Apply: send an e-mail to <u>careers@honda-ri.com</u> with the following:

- Subject line including the job number(s) you are applying for
- Recent CV
- A cover letter
- Topics you are interested in (Optional)

Candidates must have the legal right to work in the U.S.A.

Two Post-doc Positions in IMSERC

IMSERC has two (2) open post-doctoral candidate positions for immediate placement. The



appointment term is planned for 2-3 years, but it is intended to be converted to a full-time, permanent position during or at end of postdoctoral appointment. The post-doctoral position within IMSERC is intended to be for

applied career development, and it should not be considered a "traditional" post-doctoral role that is intended as preparation for a role as an independent investigator. It could be classified as an industry post-doc. IMSERC and other cores within Northwestern use post-doc positions as employment trials of individuals interested in pursuing a career of working in a core facility or another similar analytical scientist position in industry. The scope of the role(s) will primarily be centered around the subject areas within IMSERC of: mass spectrometry, crystallography (single and powder), and physical characterization (Thermal analysis, XRF, FT-IR etc.). Experience in most of the above techniques is desired, specifically mass spectrometry or LCMS. NMR experience would be an additional advantage. The responsibilities will include but are not limited to: (1) sample submission analysis, (2) new user training, (3) instrument quality control and maintenance, (4) following and maintaining instrument standard operating procedures (SOPs – for internal IMSERC protocols) and IMSERC User Manuals (for training of new users), (5) integration/networking with current NU researchers for new project and method development, (6) performing undergraduate and graduate educational support, as needed, and (7) general adherence to and stewardship of IMSERC policies and mission to be a premier research instrumentation facility for Northwestern. The positions are intentionally broad to allow IMSERC the flexibility to assign roles and responsibilities based on the candidate pool skill set.

Please reach out to <u>imserc-director@northwestern.edu</u>, if interested, attaching your CV and provide an introduction to yourself along with a short message around your reason/motivation for applying (ideally highlighting your career goals and aspirations and how they overlap with a longer-term role in such a position).

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 socioeconomic, 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

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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. Krieble Professor of Chemistry and Chair Email: <u>timothy.curran@trinco II.edu</u> Telephone: 860-297-5276

PhD Research Chemist Position at Eastman Chemical Company in Kingsport, TN



Founded in 1920, Eastman is a global specialty materials company that produces a broad range of products found in items people use every day. With the purpose of enhancing the quality of life in a material way, Eastman works with customers to deliver innovative products and solutions whi le maintaining a commitment to safety and sustainability. The company's innovation-driven growth model takes advantage of world-class technology platforms, deep customer engagement, and differentiated application development to grow its leading positions in attractive end-markets such as transportation, building and construction, and consumables. As a globally inclusive and diverse company, Eastman employs approximately 14,500 people around the world and serves customers in more than 100 countries. The company had 2019 revenues of approximately \$9.3 billion and is headquartered in Kingsport, Tennessee, USA. For more information, visit <u>www.eastman.com</u>.

Eastman Chemical Company is seeking a Research Chemist for the Scale-up Chemistry team located in Kingsport, TN. As a member of a high performing team within Eastman's Scaleup & Process Innovation Division, the selected individual will be responsible for developing, optimizing, and scaling synthetic routes to novel compounds. The individual will have an opportunity to develop innovative technical solutions across multiple business areas. Project work will be conducted in the laboratory, pilot plant, and large-scale manufacturing facilities.

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Job Responsibilities:

- collaborate with applications R&D, marketing and business partners to understand customer needs and provide technical solutions that are economically viable;
- work in a fast-paced, results-oriented team environment to develop new technologies that provide solutions to customers' needs;
- solve complex problems, analyze results, propose next steps and strategies, and document conclusions/issues on a timely basis;
- work in and lead multidisciplinary teams to execute on technical projects, including directing the work of technicians;
- communicate results to technology, manufacturing, and business stakeholders;
- identify inventive aspects of new technology and work with our Legal department to capture and protect intellectual property.

Research Chemists are expected to take the lead in safety and housekeeping. Additionally, Research Chemists need to be self-starters, work independently, and have good personal organization skills to be successful. Flexibility is a must in this distinctly innovative environment. Candidates should have a positive social attitude and like to work in a team.

Education: Ph.D. in Organic Chemistry or Homogenous Catalysis from an accredited college or university

The candidate must possess:

- \cdot a broad exposure to synthetic organic chemistry transformations and laboratory experimentation techniques;
- · demonstrated creativity and a desire to solve challenging and complex problems;
- first principles mechanistic approach and a passion for understanding the fundamental aspects of complex chemistries and processes;
- exhibit a high level of initiative and self-motivation;
- · broad interests and willingness to take on relatively undefined challenges;
- strong project management and team leadership skills;
- excellent oral and written communication skills;
- ability to work in a team setting and with members from different technical backgrounds.

Postdoc Opening in Catalysis Methodology at UNC Chapel Hill



THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL Dr. <u>Michel Gagne</u> has an opening for a postdoctoral fellow to work in the general area of site selective catalysis at UNC Chapel Hill. Interested candidates can contact him at mgagne@unc.edu.

Postdoc opening for an Organometallic Chemist at Columbia University

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Dr. Jonathan Owen has an opening for a postdoctoral position for a synthetic chemist with skills in both molecule and materials chemistry. Ideally this person would be an organometallic chemist (broadly defined) that is interested in synthesis, catalysis, and advanced characterization techniques including advanced NMR spectroscopy and x-ray scattering/crystallography. Interested candidates can contact him at jso2115@columbia.edu.

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Postdoctoral Opening

Two immediate postdoctoral openings in Chen Group on ultrafast laser spectroscopy and X-ray spectroscopy/scattering are available to study structural and electronic dynamics in transition metal complexes and clusters using nonlinear optical spectroscopy combined with time-resolved X-ray spectroscopy and scattering. The position will be at NU and Argonne National Laboratory. Interested persons may contact Prof. Lin Chen for further details (l-chen@northwestern.edu). The formal ads will be posted later.

HP Inc. 1070 Circle Blvd Corvallis, Oregon 97330 hp.com



Reposted 9 March 2021

Post doc announcement: ink formulation chemist

Position #3065784

Post doc description

This Post-Doctoral R&D chemist position is in HP's imaging and printing business in our Corvallis, Oregon facility. The work will be focused on development of new ink formulations for inkjet printers.

Our group is responsible for the design and formulation of inkjet printing inks including the characterization of the print attributes and robustness. This project will focus on developing components that expand various ink attributes such as optical density and durability on different media. The project will also involve optimizing the new inks for drop formation and the printing process. Part of the role is to collaborate with the printer component designers to implement system level changes to balance tradeoffs in the various components.

Aspects of this role include:

- Component development, refinement, and selection
- Formulation design (includes design for performance, manufacturing and chemical regulatory guidelines)
- Print system characterization
- Cross functional/ pan global team participation and leadership
- External supplier material co-development and manufacturing

Our group is part of a chemistry center of excellence that develops inks for the different print businesses. While we work across several sites, this project will partner with colleagues at our Corvallis, Oregon location. The Corvallis site includes a combination of R&D and manufacturing facilities with work ranging from MEMS fabs to development of large industrial printing presses.

Qualifications

- A recent (<1 year) PhD in chemistry, chemical engineering, or related field.
- Understanding of fundamental chemical mechanisms, key areas include
 - Pigment and dye chemistry
 - Polymers in solution
 - o Organic and inorganic nanoparticle suspensions
 - o Interfacial and surface chemistry
 - Proficiency in appropriate analytical instruments and the data interpretation
- Wet chemistry experience
- Strong written and spoken communication skills.
- Ability to creatively solve problems in a fast-paced product development environment
- Ability to work & effectively interact (remotely, as needed) with team members from other disciplines, projects, organizations, cultures, & companies.
- Demonstrated leadership, teamwork/interpersonal, communication and technical skills.
- Resourceful, creative, and flexible
- Fluency in English

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Desired qualifications

- Programming skills
- Familiarity with printing technology and color science
- Formulation experience is a plus

To apply, please visit our website: <u>https://hp.wd5.myworkdayjobs.com/ExternalCareerSite/job/Corvallis-Oregon-United-States-of-America/Post-Doc-Ink-Chemist_3065784-2</u>





Synthetic Biology and Molecular Imaging Departments of Radiology and Biomedical Engineering

Michigan State University

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 Department of Radiology

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The Michigan State University SYNTHETIC BIOLOGY AND MOLECULAR IMAGING PROGRAM is a post-doctoral training program headed jointly by Dr. Assaf Gilad and Dr. Erik Shapiro in the Departments of Radiology and Biomedical Engineering. Housed in the new Institute for Quantitative Health Science and Engineering, this post-doctoral training program is geared towards talented PhD scientists with genetic and protein engineering backgrounds, to adapt and apply their scientific talents in the fields of biomedical imaging, synthetic biology and theranostics. The Program takes full advantage of the breadth of our molecular imaging systems, enabling imaging of molecules to rodents, large animals to humans, across projects in basic, translational and clinical science. For more information about the program and projects please contact:

Dr. Assaf Gilad gilad@msu.edu

Dr. Erik Shapiro shapir86@msu.edu

Phillips 66 Jobs/Careers - Technician - Jobs in Bartlesville, OK



Phillips 66 is hiring to fill several technician positions that may be of interest to the bachelor's level students in the chemistry department. Areas of interest include corrosion, lubricants, batteries and analytical sciences. The job postings are open through April 7 and can be found <u>here</u>.



Current Opening:

Princeton Computer Science is seeking a Data Scientist to work with its world-renowned faculty and students to solve biomedical research questions using novel computational approaches. The data scientist will develop novel, scalable algorithms and machine learning techniques and apply these to large repositories of biomedical data. They will work with faculty, post-doctoral researchers, and graduate students in research projects across multiple biomedical applications, particularly in human genetics and disease.

As a Data Scientist you will work in a collaborative, multidisciplinary environment and actively contribute your skills to advance scientific discovery. You will have access to Princeton's first-class resources, the opportunity to co-author academic publications, to offer short courses and workshops on data science, and to collaborate with the larger data science community. You will join a team of five Data Scientists working across multiple disciplines as part of the Schmidt DataX Project at Princeton, an initiative made possible by a major gift from Schmidt Futures.

Appointments are for 3-years and offer a very competitive salary and excellent opportunities for growth and career development. The Biomedical Data Science initiative is spearheaded by the Department of Computer Science, with strong connections to the Lewis-Sigler Institute for Integrative Genomics, Center for Statistics and Machine Learning, and other engineering departments.

Required Qualifications:

- Ph.D. required in computer science, mathematics, statistics, data/computational science, or related disciplinary field or equivalent combination of educational training and relevant experience.
- Strong coding/algorithm prototyping skills, and ability to explain and document work.
- Proficiency in one or more of the following: Python, R, C/C++, or Julia.
- Experience using data analysis, statistics, machine learning, and/or scientific computing to address basic research questions; or commensurate achievements

Questions? Contact Project Manager, Ellen DiPippo

Ready to Apply: Full job description and access to application on Princeton's job posting system: <u>https://www.princeton.edu/acad-</u>positions/position/19701.

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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 <u>colleen.kjellberg@northwestern.edu</u>

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For an archive of the Department of Chemistry's Weekly Bulletins, please visit: Bulletin Archive

