



Student Attendees,

Enclosed you will find information on several graduate programs and REU programs provided by our Academic Partners. We encourage you to visit their booths at the Academic Virtual Career Fair on Thursday, September 16. The Academic Virtual Career Fair will be held from 3:00 to 5:00 PM Eastern Time. In addition, several of these partners will be participating in two panels – the REU Power Hour from 1:00 to 2:00 PM ET, and the Graduate School Panel from 2:00 to 3:00 PM ET.

We look forward to seeing you at some of these events!

REU Opportunities



The National Science Foundation Centers for Chemical Innovation (CCI) program supports research centers focused on major, long-term fundamental chemical research challenges. CCIs work to address these challenges to produce transformative research that leads to innovation and attracts broad scientific and public interest. CCIs are agile structures that can respond rapidly to emerging opportunities through enhanced collaborations.

CCIs actively integrate research, innovation, education, broadening participation, and informal science communication. In that regard, CCIs provide unique research experiences for undergraduates in which students are immersed in collaborative research environments throughout the USA. Applicants can choose from a range of research topics and institutions where to conduct their summer research.

Participants in the CCI Summer Research Programs receive a wide range of exciting opportunities, including:

- A competitive stipend, travel award, and housing for 10 weeks.
- Research in innovative, cutting-edge multi-institutional and interdisciplinary settings.
- Participation in seminars, workshops, career-planning sessions, and other professional development opportunities.
- Interaction with prominent leaders in the chemical sciences.

Current summer opportunities are available at Center for Selective C-H Functionalization (CCHF), Center for Aerosol Impacts on Chemistry of the Environment (CAICE), Center for Sustainable Polymers (CSP), Center for Sustainable Nanotechnology (CSN), and Center for Genetically Encoded Materials (CGEM) with more to come every year as more CCIs are funded through the NSF.

For more information and links to each individual program please go to:

<https://www.nsfcci.org/undergrad/>



PennState
Eberly College
of Science

For ten weeks come participate in the Chemistry Research Experience for Undergraduates (REU): [Catalysis and Motion](#), which is designed for undergraduate students who are majoring in chemistry, biochemistry, or chemical engineering to be introduced to the excitement of chemical research with one of our 36 research faculty members in the [chemistry department](#).

In addition to hands on research, our REU pays particular attention to professional development activities and encourages interactions with our industrial partners.

Join the NSF-REU in Nanoscale Physics and Materials, hosted by Penn State's [Department of Physics](#) and the [Center for Nanoscale Science](#). Interdisciplinary mentored research projects span experimental, computational and theoretical aspects of 2D material design and synthesis, novel electrical and quantum properties, nanofabrication, energy storage, photovoltaics, soft matter, and more and are open to undergraduate students from all across the country who are majoring in physics, chemistry, materials science, all branches of engineering or applied math. Participants stay on campus and participate in outreach and professional development activities geared towards preparing you for life after graduation.

The Penn State [Chemical Engineering Department](#) hosts a [REU focused on the Integration of Biology and Materials](#). This program provides a collaborative research experience aimed at advancing the field and applications of biomolecular materials. In addition to the research experience, students participate in professional development and social activities including seminars and facilities tours. Undergraduate students in Chemical Engineering, Chemistry, Biology, or related disciplines are encouraged to apply.



PRINCETON
UNIVERSITY

The Princeton University Summer Undergraduate Research Fellows in Chemistry (SURF-C) program provides unique laboratory experiences for qualified undergraduates by placing each student into chemistry research groups directed by our well-respected faculty. For nine weeks, the student contributes as a full member of the research team through cutting-edge research done side-by-side with post-docs, graduate students, and other undergraduates. Students will indicate areas of interest in their application and will be matched with research labs in organic, inorganic, physical, biological, or materials chemistry. In addition to the valuable laboratory experience, each summer student participates in research discussion groups and safety training, and has the opportunity to participate in social activities with SURF students from other departments; summer field trips, including an industrial chemistry laboratory tour; and an end-of-summer research poster session. We are partnered with The Leadership Alliance to promote diversity and inclusion, and all students will attend the Leadership Alliance National Symposium in Connecticut in July. Each student is paid a stipend of \$5400 and receives on-campus housing and a modest travel reimbursement for travel to Princeton, NJ. More information can be found at our website: <https://chemistry.princeton.edu/undergrads/surf-c>. Other summer programs at Princeton University include NSF-REUs in Materials Science and Engineering, Biophysics, Neuroscience, and Computational Biology. Links to all summer programs can be found here: <https://undergraduateresearch.princeton.edu/programs/summer-programs>. Tentative dates for 2022 are May 31 – July 31.



Stony Brook University

The Stony Brook University Chemistry Research Experiences for Undergraduates (REU) Site provides student-centered research experiences for undergraduates in a 10-week program over the summer. The Site covers three fundamental research areas Spectroscopy, Biological Chemistry and Synthesis with wide-reaching applications in climate change, energy sources, biomolecular recognition, and human health that will benefit society. Students in this REU will work in research clusters with other undergraduate researchers, graduate students, postdoctoral fellows, and faculty to build and use their fundamental understanding of molecular structure to develop innovative solutions that improve the human condition globally.



The **Department of Chemical Engineering**, with support from the NSF, provides a 10-week, summer research experiences for undergraduates (REU) for 10-12 students each summer. Participants will benefit from conducting research in a broad range of topics relevant to chemical engineering in a diverse and inclusive environment. Research areas include: Biomedical applications of chemical engineering, Catalysis and Surface Science, Complex flows and interfacial phenomena, and Nanomanufacturing and nanoscale engineering. Please visit: <https://www.che.ufl.edu/academics/reu/> to learn more and to apply.

The International REU program in **Chemistry** is a 11–12-week program based in France. Undergraduate students spend their full summer in a research lab in France (Paris, Strasbourg, Toulouse, or Reims) working on a well-developed chemistry research project under the mentorship of an experienced faculty member. Participants present their results at the Spring National ACS meeting. The program is sponsored by the University of Florida and funded by the National Science Foundation (support includes, housing, travel allowance, health insurance, and stipend). Research projects are included from **all** areas of Chemistry. For details on how to apply, please visit <https://reu.chem.ufl.edu/>.

Summer Undergraduate Research Fellowship (SURF)

Yale University

Are you a current undergraduate student considering pursuing a Ph.D.? Each summer the Yale SURF Program brings about 15 qualified undergraduates to Yale for eight weeks to explore what a Ph.D. could offer them. As a SURF program participant, you will learn about the kind of work you can expect to do in graduate school, gain insight into building a career based on Ph.D.-level training, and become more confident in your academic abilities and potential. You will be immersed in an academic, professional setting with a faculty mentor, a post-doctoral associate, and/or an advanced graduate student. You will pursue individual research and participate in workshops and panel discussions.

The program focuses on research. If you are interested in chemistry or chemical engineering, you will learn advanced laboratory methods and conduct research in state-of-the-art facilities. You will

learn to present your research effectively to colleagues. You will develop a proposal, give a final presentation to your peers, submit a written final paper, and present your research at the Leadership Alliance National Symposium.

Graduate Program Opportunities



COLLEGE OF SCIENCES AND MATHEMATICS

governing documents and public statements and is continually renewed by working groups that include faculty, staff and graduate students. Several years of hiring have produced a dynamic faculty that has many members who have won many prestigious awards. Student organizations, including a NOBCChE chapter that has been active since 2008, stimulate interactions between students with complimentary backgrounds and interests.

[Auburn University's Department of Chemistry and Biochemistry](#) has Ph.D. and M.S. programs that emphasize the professional, scientific and intellectual development of graduate students interested in biochemistry and in analytical, inorganic, organic, physical and computational chemistry. Students from a variety of educational and cultural backgrounds design their curricula in consultation with faculty advisors, select supervisory committee members who meet regularly to review progress, and collaborate with their principal advisors with a view toward achieving steady progress toward graduation. The Department's commitment to diversity, inclusion and equity has been codified in its



interests from quantum science and engineering to bioinformatics and the nature of life itself, from human behavior and economics to energy and sustainability.

Caltech is a world-renowned science and engineering Institute that marshals some of the world's brightest minds and most innovative tools to address fundamental scientific questions and pressing societal challenges. Caltech's extraordinary faculty and students are expanding our understanding of the universe and inventing the technologies of the future, with research

The mission of the California Institute of Technology is to expand human knowledge and benefit society through research integrated with education. We investigate the most challenging, fundamental problems in science and technology in a singularly collegial, interdisciplinary atmosphere, while educating outstanding students to become creative members of society.

Caltech is small but prizes excellence and ambition. The Institute has one of the nation's lowest student-to-faculty ratios, with 300 professorial faculty members offering a rigorous curriculum and access to varied learning opportunities and hands-on research to approximately 1,000 undergraduates and 1,250 graduate students.



[Duke University's Pratt School of Engineering](#) is a vibrant teaching and research institution dedicated to educating the next generation of engineering leaders and pursuing research in high-impact fields to address the world's grand challenges.

Duke Engineering has a graduate degree program to help you achieve your career goals. Our graduates receive individualized career and professional development support from a dedicated team; no matter whether the goal is a career in academia, industry, or the public sector.

Duke University's Pratt School of Engineering is a leader in defining and advancing high-impact fields that tie to grand challenges for engineering and society. Pratt Engineering is a vibrant teaching and research institution dedicated to educating the next generation of engineering leaders and pursuing research in high-impact fields to address the world's grand challenges.



[The LSU Department of Chemistry](#) is a leading research and teaching-intensive program within the largest public institution in the state of Louisiana. Our graduate students are working in some of the hottest and most exciting areas of modern chemistry. As a result of our excellence in teaching and research, as well as our commitment to diversity, we are one of the best-equipped Chemistry departments in the US.



The [MIT Department of Chemistry](#) is an inclusive, supportive, and innovative community whose common goal is to create new chemical knowledge and to mentor the next generation of the best and brightest students who

will define the next frontiers of chemical science. In our graduate program, students conduct groundbreaking research and gain a fundamental understanding of the physical world at the molecular level. The Chemistry Department offers a flexible graduate program that allows students to select courses tailored to their individual background and research interests. Students also serve as a teaching assistant for two semesters. A volunteer-based, student-run program, Chemistry Application Mentor Program (CAMP), provides application assistance to applicants from underrepresented groups in STEM. The graduate program will not be accepting GRE scores this application cycle.



NYU

[The Department of Chemistry at New York University](#)

offers a stimulating academic environment in a vibrant city. Research at NYU spans the disciplines of chemistry, including biochemistry, inorganic, organic, physical, and theoretical/computational chemistry. In addition, labs grounded in these traditional areas pursue problems at the interface of biology (i.e., chemical biology) and materials science (i.e., nanoscience and materials chemistry). Students benefit greatly from a highly interdisciplinary and collaborative environment, including strong interactions with other departments at NYU and the scientific community within New York City. The doctoral program enables students to hit the ground running with research rotations beginning early in the fall semester of year 1. Teaching is not a requirement of the program, but students who opt in further strengthen their communication skills and are compensated beyond the stipend used for financial support. Furthermore, each PhD student receives free tuition and health benefits throughout their graduate career.



The Ohio State University is one of the world's best and most comprehensive public research universities, and it attracts high-achieving faculty and graduate students with its state-of-the-art facilities and abundant research opportunities. Ohio State's 10,000 graduate students have access to a large and dynamic university environment, outstanding academic and professional development

resources, and the cultural and recreational opportunities of Columbus, Ohio, one of the country's fastest-growing cities. OSU offers Ph.D. programs in [Chemistry, Biochemistry](#), Chemical Physics, and [Chemical Engineering](#). OSU's Department of Chemistry and Biochemistry is also an ACS Bridge site, offering a 1 year post-baccalaureate Chemistry Bridge Program to help students prepare for graduate school in chemistry. Our vast resources, cutting-edge facilities, and outstanding faculty make us THE launching point for your scientific career. Come visit our booth at the Academic Expo and meet with faculty, students, and admissions coordinators.

UNIVERSITY of
HOUSTON

THE WILLIAM A. BROOKSHIRE DEPARTMENT OF
CHEMICAL AND BIOMOLECULAR ENGINEERING

The [William A. Brookshire Department of Chemical and Biomolecular Engineering at the University of Houston](#) is a

vibrant community of scholars pursuing excellence in teaching and research in a collegial and inclusive environment that respects the diversity of all people and ideas. Our Department enjoys an excellent reputation and has been consistently ranked in the top quartile of Chemical Engineering Departments in the US by US News and World Report and at No. 15 out of 100+ Departments ranked in the most recent National Research Council Rankings.

Our faculty members are world-class researchers and educators engaged in fundamental and applied research at the forefront of modern chemical engineering science. The educational experience of our students is greatly enhanced by access to modern research and instructional facilities, opportunities for specialization, research internships, and collaborations with other departments, universities, national laboratories, and industrial partners. The University of Houston campus offers a culturally-rich environment with numerous educational, artistic and athletic events, while having the global metropolis of Houston with its endless opportunities for arts and entertainment as its backdrop.



among other festivities. Our active NOBCChE and ADSE student groups are a catalyst for involvement and making friends.

The Department of Chemistry and Biochemistry at the University of Maryland College Park provides research and educational opportunities to a diverse cohort of students through two highly interactive graduate programs, in Chemistry and in Biochemistry, that both offer PhD and MS degrees. Students receive financial support to cover their living expenses through graduate assistantships in the form of TA or RA positions. Students in our programs take courses, do research, give seminars, attend scientific conferences, write journal articles, develop professional skills, and are part of a highly interactive scientific community. Outside of research and courses, our students enjoy peer-led activities such as trivia night, bowling, the annual chili cook-off, the monthly science café, intramural sports teams (no skill required!),

Thanks to all of our REU and Academic Partners:

REU Partners

Iowa State University

Northeastern University

NSF Centers for Chemical Innovation

The Pennsylvania State University

Princeton University

Stony Brook University

University of Florida

University of Rochester

Yale University

Academic Partners

Auburn University

Caltech

Duke University

Louisiana State University

MIT

New York University

The Ohio State University

University of California, Irvine

University of Connecticut

University of Houston

University of Maryland, College Park

University of Pennsylvania

University of Wisconsin, Madison