Combating environmental and societal problems that we face today, such as climate change and the COVID-19 pandemic, will require a new generation of scientists who can think critically about the chemical and biochemical aspects of these problems. The graduate program in Chemistry & Biochemistry at SF State will provide you with the focused knowledge, training, and skills to face these and other problems with confidence and direction.

Department Mission
The mission of the Department of Chemistry & Biochemistry is to educate and inspire students to reach their personal and professional goals. We are committed to providing access to scientific careers to students from all backgrounds. We strive in all interactions between students, instructors, and staff to promote our core values: scholarship, independence, scientific curiosity, ethics, collaboration, diversity, and inclusiveness.

Research Opportunities
Research topics available to students include biochemistry and chemical biology, analytical and environmental, organic and inorganic synthesis, computational and materials chemistry. Research is increasingly interdisciplinary and our faculty frequently establish collaborations to address research questions. For example, faculty from the Departments of Chemistry & Biochemistry, Biology, and Computer Science at SF State and the University of California, San Francisco developed the NSF funded Graduate Opportunities to Learn Data science (GOLD) and the Center for Cellular Construction programs. You may find information about these and other ongoing research projects by clicking here.

M.S. Curriculum
The Master of Science curriculum in Chemistry & Biochemistry focuses on original student research and elective coursework to advance knowledge, understanding, and technical skills. Students engage in stimulating and original research that culminates in a written thesis or manuscript. Scientific independence and effective communication skills are key outcomes for graduates of our MS chemistry program.

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<th>Core requirements include</th>
<th>Units</th>
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<tr>
<td>CHEM 879 and 880 Research Methods I and II</td>
<td>3 + 3</td>
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<tr>
<td>CHEM 897 Research</td>
<td>9-12</td>
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<tr>
<td>CHEM 898 or 895 Thesis or manuscript</td>
<td>3</td>
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<tr>
<td>CHEM 800-level Elective coursework</td>
<td>9-12</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
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Research topic and elective courses define your area of study. Our MS curriculum is flexible to accommodate student interests and research training.

New Certificate Program in Data Science!
A NSF funded Data Science Certificate Program (GOLD program) begins Fall 2020. Enhance your research through coding and data science and gain valuable skills that will help your career path. https://goldsfsu.weebly.com/

“Besides research experience, I gained invaluable skills in presenting, writing, and communicating my science.”

Essential Links
https://chemistry.sfsu.edu/
https://www2.calstate.edu/apply

Department of Chemistry & Biochemistry
1600 Holloway Avenue, Thornton Hall 806
San Francisco, CA 94132

Fanning pyrite crystal for photovoltaic research. Image credit, Diana Mars.
Resources and Facilities
As a graduate student, you will use state of the art equipment in your research. Department resources include two 500 MHz NMRs, an X-ray diffractometer, a computational chemistry visualization facility, and a suite of spectroscopic and chromatography instrumentation. You will also have access to the Atomic Force Microscopy, Electron Microscopy, Protein Crystallography, Cell & Molecular Imaging Center, and Mass Spectrometry core facilities. For more information about the resources located in the Department and College of Science and Engineering click here.

Funding Opportunities
SF State has a number of resources to help you fund your graduate education. For Chemistry and Biochemistry students, the two main resources are the Student Enrichment Opportunities (SEO) office and College of Science & Engineering (CoSE). The SEO office manages scholarship and fellowship programs in biochemical and chemical sciences for graduate students from historically underrepresented groups including those with disabilities. The graduate fellowships provide academic support and student research and professional development experiences. One application covers all SEO graduate programs including RISE, Bridge to the Doctorate, Genentech Fellows, and the Center for Cellular Construction.

CoSE hosts a number of graduate scholarship opportunities. Please visit the website for applications and deadlines. Finally, some faculty have research grants that fund students during the summer and academic year.

Graduate Teaching Assistant (GTA) Positions and Graduate Scholarships are also available through the department of Chemistry & Biochemistry. Incoming and continuing graduate students are eligible for a GTA position based on availability of teaching assignments, experience, and academic record. Eligibility requirements for the various scholarships can be found on our website.

"My chemistry Master’s definitely prepared me for my next career step, pursuing a PhD in chemistry.”

Graduate Student Life and Organizations
There are several organizations within CoSE that promote involvement, inclusivity and outreach in STEM. The Chemistry & Biochemistry Student Association (CBSA), Black Excellence in STEM (BE-STEM) and the SF State chapter of the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) are all student-run and serve to provide supportive communities for SF State students in STEM.

After Graduation
Chemistry & Biochemistry M.S. graduates go on to Ph.D. programs, professional schools such as medicine, pharmacy, and dentistry, move up the career ladder in industry, and become educators.

Apply now!
Requirements include a B.S. or B.A. in chemistry, biochemistry, or related field with a GPA of 3.0 or higher. Visit the Cal State Apply Web Portal to begin your application for Fall 2022.

Questions?
Contact the Department’s Graduate Coordinator, Professor Andrew Ichimura, to set up an appointment for questions about the application process, graduate program, or advising based on your unique academic or work situation.

“If you are concerned about funding your graduate education, apply for fellowships and scholarships, but also FAFSA!”