

CHEMISTRY AND CHEMICAL BIOLOGY (GRADUATE FIELD)

Program Website (<http://www.chemistry.cornell.edu/>)

Field Description

The program of graduate study is designed to give broad training in the fundamentals of chemistry and in methods of research. Students ordinarily pursue those objectives by taking advanced courses, participating in organized and informal seminars, and carrying out and reporting on research projects in their major subject. Students normally conduct research during the summer and receive financial support for this purpose.

With the consent of the Special Committee, a student may elect one or two minors from the above list or from another field. Entering students are required to register with the Department of Chemistry and Chemical Biology at the beginning of their first term. They consult with the Director of Graduate Studies and with their temporary Special Committee.

Proficiency tests in inorganic, organic, and physical chemistry are required of all entering Ph.D. degree candidates. These tests are given a few days before registration for the fall term. Results are used to help the Special Committee plan the student's program. Remedial coursework may be required of students with poor test scores.

Specific inquiries from prospective graduate students are welcomed and should be addressed to the graduate field office or to any faculty member in the field.

Data and Statistics

- Research Master's Program Statistics (<https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/research-masters-program-statistics/?SelectGradField=26>)
- Doctoral Program Statistics (<https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/doctoral-program-statistics/?SelectGradField=26>)

Field Manual

- Manual (<https://chemistry.cornell.edu/phd-program/>)

Subject and Degrees

Chemistry and Chemical Biology

- Chemistry (MS) (<https://catalog.cornell.edu/programs/chemistry-chemical-biology-ms/>)
- Chemistry and Chemical Biology (PhD) (<https://catalog.cornell.edu/programs/chemistry-chemical-biology-phd/>)

Concentrations by Subject

Chemistry and Chemical Biology

- biophysical chemistry
- chemical biology
- inorganic chemistry
- organic chemistry
- organometallic chemistry

- physical chemistry
- polymer chemistry
- theoretical chemistry

Faculty

Nicholas Lawrence Abbott (<http://www.cheme.cornell.edu/faculty-directory/nicholas-l-abbott/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: biophysical chemistry
- **Research Interests:** interfaces, colloids, structured liquids, self-assembly

Hector D Abruna (<http://chemistry.cornell.edu/h%C3%A9ctor-d-abru%C3%B1a/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; physical chemistry
- **Research Interests:** analytical; inorganic; physical; materials; chemical physics

Nandini Ananth (<http://chemistry.cornell.edu/nandini-ananth/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: theoretical chemistry
- **Research Interests:** theoretical chemistry

Nozomi Ando (<http://ando.chem.cornell.edu/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry
- **Research Interests:** protein structure and dynamics

Youn Jue Bae (<http://chemistry.cornell.edu/youn-jue-eunice-bae/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry
- **Research Interests:** Materials, Physical chemistry

Barbara Ann Baird (<http://chemistry.cornell.edu/barbara-baird/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: biophysical chemistry; chemical biology; physical chemistry
- **Research Interests:** biophysical, physical; chemical physics; chemical biology

Jeremy M. Baskin (<http://baskin.wicmb.cornell.edu/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: chemical biology

Richard A Cerione (<http://www2.vet.cornell.edu/research/faculty/richard-cerione-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: biophysical chemistry; chemical biology
- **Research Interests:** chemical biology; biophysical; analytical

Judy Cha (<http://www.mse.cornell.edu/faculty-directory/judy-cha/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry
- **Research Interests:** <https://www.engineering.cornell.edu/faculty-directory/judy-cha> (<https://catalog.cornell.edu/graduate-school/chemistry-chemical-biology/%20https://www.engineering.cornell.edu/faculty-directory/judy-cha/>)

Pamela V. Chang (<http://www.pamchanglab.com/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: chemical biology
- **Research Interests:** chemical biology, bio-organic, and organic chemistry

Peng Chen (<http://chemistry.cornell.edu/peng-chen/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: biophysical chemistry; chemical biology; organic chemistry; physical chemistry
- **Research Interests:** biophysical chemistry; chemical biology; inorganic chemistry; physical chemistry

Geoffrey Coates (<http://chemistry.cornell.edu/geoffrey-w-coates/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organic chemistry; organometallic chemistry; polymer chemistry
- **Research Interests:** polymer; organic; bio-organic; inorganic; materials; organometallic

David B Collum (<http://chemistry.cornell.edu/david-b-collum/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organic chemistry; organometallic chemistry
- **Research Interests:** organic; inorganic; organometallic

Brian Crane (<http://chemistry.cornell.edu/brian-crane/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: biophysical chemistry; chemical biology; inorganic chemistry
- **Research Interests:** biophysical; inorganic; chemical biology

Harry Floyd Davis (<http://chemistry.cornell.edu/h-floyd-davis/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry
- **Research Interests:** physical; chemical physics

Robert Anthony DiStasio (<http://chemistry.cornell.edu/robert-distasio-jr/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: theoretical chemistry

James R Engstrom (<http://www.cheme.cornell.edu/faculty-directory/james-r-engstrom/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; physical chemistry

- **Research Interests:** physical chemistry, inorganic chemistry, analytical chemistry

Gregory Simon Ezra (<http://chemistry.cornell.edu/gregory-sion-ezra/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry; theoretical chemistry
- **Research Interests:** theoretical; physical; chemical physics

Brett P. Fors (<http://chemistry.cornell.edu/brett-p-fors/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: organic chemistry

Bruce Ganem (<http://chemistry.cornell.edu/bruce-ganem/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: chemical biology; organic chemistry
- **Research Interests:** organic; bio-organic; chemical biology

Melissa A Hines (<http://chemistry.cornell.edu/melissa-hines/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry
- **Research Interests:** physical; analytical; materials; chemical physics

Jonathan A. Kephart (<http://chemistry.cornell.edu/jonathan-kephart/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organometallic chemistry; physical chemistry
- **Research Interests:** Inorganic, Materials, Organometallic

Tristan H. Lambert (<http://chemistry.cornell.edu/tristan-lambert/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: organic chemistry

Kyle Lancaster (<http://chemistry.cornell.edu/kyle-m-lancaster/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry
- **Research Interests:** inorganic chemistry

Marissa Lavagnino (<http://chemistry.cornell.edu/marissa-lavagnino/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organic chemistry; organometallic chemistry
- **Research Interests:** Organic Chemistry, Organometallic Chemistry, Catalysis

Stephen Lee (<http://chemistry.cornell.edu/stephen-lee/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry
- **Research Interests:** inorganic; materials; theoretical

Song Lin (<http://chemistry.cornell.edu/song-lin/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: organic chemistry
- **Research Interests:** catalysis for organic and materials synthesis

Roger F Loring (<http://chemistry.cornell.edu/roger-f-loring/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry; polymer chemistry; theoretical chemistry
- **Research Interests:** theoretical; materials; physical; chemical physics; polymer

Phillip J. Milner (<http://chemistry.cornell.edu/phillip-milner/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organic chemistry; organometallic chemistry
- **Research Interests:** interface of organic and materials chemistry

Andrew J. Musser (<http://chemistry.cornell.edu/andrew-musser/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry

Frank C. Schroeder (<http://chemistry.cornell.edu/frank-c-schroeder/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: chemical biology; organic chemistry
- **Research Interests:** organic chemistry; chemical biology

Erik Henning Thiede (<http://as.cornell.edu/people/erik-thiede/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: theoretical chemistry
- **Research Interests:** Theoretical Chemistry

Ulrich Bernd Wiesner (<http://www.engineering.cornell.edu/faculty-directory/uli-b-wiesner/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: polymer chemistry
- **Research Interests:** materials chemistry; polymer chemistry; physical chemistry

Peter Thomas Wolczanski (<http://chemistry.cornell.edu/peter-t-wolczanski/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organic chemistry; organometallic chemistry
- **Research Interests:** inorganic; organic; materials; organometallic

Yao Yang (<http://www.yang.chem.cornell.edu/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: physical chemistry
- **Research Interests:** Physical Chemistry; Analytical Chemistry; Materials Chemistry

David B Zax (<http://chemistry.cornell.edu/david-b-zax/>)

- **Campus:** Ithaca
- **Concentrations:** *Chemistry and Chemical Biology*: inorganic chemistry; organic chemistry; physical chemistry
- **Research Interests:** analytical; physical; chemical physics; inorganic; materials