Yale Chemistry Department
New Haven, Connecticut

- Bustling city of 130,000
- Pedestrian & bike friendly
- Award-winning local theatres
- World’s best pizza!
- Free cultural events
- Easy to access by auto and train
Facilities for Chemistry

• Instrument center with 9 NMR spectrometers from 2014
• Biochemical, biophysical, proteomics facilities
• Microscopy and materials characterization facilities
• Crystallography facility with four X-ray diffractometers
Amazing Students

- Annual symposium and seminar series that are organized and led by graduate students
- Joint Safety Team of graduate students for culture of safety
- Departmental intramural sports teams
- Graduate Student Assembly
- Center for Teaching and Learning offers teaching certificates
- Student-organized social events such as Halloween Party
Research Opportunities for Career Success

• 175 graduate students work closely with the 30 faculty.
• Our Chemistry-affiliated faculty includes 12 Fellows of the AAAS, 11 members of the National Academy of Sciences, many editors of major journals, and two Nobel Laureates.
• Graduates go on to high-level faculty, industry, and government positions. By interacting with other budding research leaders, Yale students gain valuable experience and connections.
• Yale sponsors the Center for Teaching and Learning, Writing Center, Career Center, and other career-building opportunities.
Ph.D. Program in Chemistry

- Rotations with 3-4 research groups in first year
- Six graduate-level courses in first two years
- 2-5 semesters of teaching
- Public presentation of research
- Proposal of an original research project
- Project on new research, leading to Ph.D. dissertation
- Typical time to degree is 5-6 years

2018-2019 stipend in Chemistry: $34,550
All Yale graduate students are guaranteed five years of support including stipend, tuition, health insurance, gym membership, campus transportation
Many students successfully compete for outside fellowships
Applying to the Ph.D. Program in Chemistry

- deadline is December 1
- GRE (including Chem), academic transcript, CV (curriculum vitae)
  - no specific cutoffs on GRE, GPA
- 3 recommendation letters (from faculty or employers)
- personal statement of purpose
  - different than undergraduate application
  - aimed at assessing research aptitude, perseverance

What do successful students look like?
- self-motivated and hardworking
- creative but also goal-driven
- good communication skills
- good at teamwork
Focus Area: Water Oxidation

Batista
Brudvig
Crabtree
Mayer
Schmuttenmaer
Established in 2012 on Yale’s West Campus. Tackling one of the Grand Challenges of the 21st Century: Can clean energy sources be improved and implemented on a scale that will replace fossil fuels?

Interdisciplinary faculty: Chemistry, Engineering, Physics

Newly renovated space

Instrumentation for materials research

PHI VersaProbe II Scanning XPS Microprobe
Focus Area: Biological Chemistry

Example: Schepartz group

repurposing the ribosome

super-resolution microscopy


10 μm
Focus Area: Organic Chemistry
Focus Area: Physical Chemistry

Ganim
Johnson
Loria
Schmuttenmaer
Vaccaro
Yan
Focus Area: Nitrogen Activation