Effective Strategies for Graduate School Application in Chemistry

And Introduction to USC Chemistry

Webinar Presented by the Graduate Recruitment Committee to Prospective Students
Timetable for Applications:

- August: Research The Schools
- September: Prepare and Send Application Materials
- October:
- November:
- December:
- January: USC Deadline (Jan 1st)
Major Components of Your Application:

- Transcript
- Research Statement
- Personal Statement
- Letters of Recommendation
- CV
- Test of English as a Foreign Language (TOEFL) or equivalent.
- GRE
Research Statement

For USC chemistry, there are two parts: Research Experience (1-2 pages) and Research Interests (1-page).

Research Experience

Explain your previous research experiences.

Mention the names of your research mentor(s) in bold.

Explain both the bigger scope of your research problem and more specifically explain your own role.

Explain any specific achievements that was directly due to your work.

If you have switched groups or research areas, explain the reason.

Even if your projects have failed, still include them.
Research Interests

Explain why you are interested in this program.

Examples:

I am interested in research at the University of Southern California Chemistry program because of the strong focus of the program on energy storage and conversion. My previous experience in the areas electrochemistry and materials sciences makes a well-suited for your program. [Explain more].

The strong chemical biology focus at the University of Southern California is my main focus. I have noticed many collaborative efforts under the umbrella of the Bridge Institute. Given my multi-disciplinary experience in chemical biology, I anticipate that I will contribute positively to the collaborative environment within your department. [Explain more]
Research Interests

The most important part of your research statement should be a paragraph that explains which groups you are interested in.

I am interested in research in Prof. X’s group. I am interested in problems A and B in his/her lab. My previous experience in field C makes me a good candidate for this group. I am interested in Prof. Y’s work, especially projects A and B. I am also open to exploring new directions in Prof. Z’s group. With my background in physical characterization, I can bring a new set of skills to the lab.

Mention the names of professors in bold.

A recommended number of professors is 3-5.
Do’s and Don’t of Research Interests

Don’t include the name of professors who have retired or are deceased!!

Don’t list faculty who have been research inactive for several years.

Don’t include a series of names that do not logically connect with each other.

Example: I am interested in Prof. Lidar’s group which works in the area of quantum computation and Prof. McKenna’s group in chemical biology.

Don’t list half of the department in your research statement.

Don’t list all the faculty who have secondary appointment in the department.
Do’s and Don’t of Research Interests

**Do** mention if you have had previous contact with a faculty in the department.

**Do** show some flexibility in your research interest. If you very narrowly define yourself, you are going to miss out.

Example: I am interested in studying intramolecular vibration relaxation in biomolecules in extreme environments.

**Do** look at group publications to find the recent interests in the group (sometimes websites have very old data).

**Do** consult with your advisors about your target group choices.
Personal Statement

Personal statement is a place to highlight aspects of your accomplishments that can not find a place in the transcript, CV, or research statement.

Write about personal hurdles that you have overcome.

If a personal issue (for example health problems) has caused your grades to plummet for one semester, this is a place to explain it.

If you are from an under-privileged or minority background please include it in the personal statement.

If you have had major changes in your educational career (school changes, research focus change, etc.) include it here.

Make a case that your personal experiences have made you a resilient person ready to tackle graduate school.
Letter of Recommendation

Give your letter writers ample time to write their letters.

Provide them with a list (for example an Excel sheet) with names of institutions that they should send their letters to.

Ask for letters from your most relevant professors, mentors, or supervisors.

If you want to remind them about certain accomplishments that they should highlight in their letters, please do so.
Which Schools Should I Apply to?

Do your homework and research each institution.

If you can not find at least three potential target groups in a school, think again about applying to that school.

While reputation of a school may be important to you personally, it does not necessarily translate to your success.

Make direct connections with professors and research groups.
How to Effectively Reach Out to Professors:

Read about his/her work and learn about the group.

E-mail the professors directly.

Do not send a mass email to several professors at a time.

Always include your CV in the email.

Include in the subject line that you are interested in their research.

Give them an out, if you are worried they may be too busy to answer your email.

… I understand you may be very busy and may not get a chance to answer this email. I would appreciate if you connect me with some of your group members so that I can learn more about your work.

If the professor(s) respond and you think you can benefit from talking to them, you can request to talk to them on the phone or online.
Graduate Admission

- No Application Fees
- No Subject or General
- Possible Early Decisions
- Competitive Fellowships
Science at USC Chemistry

Core Divisions

- Organic and Materials
- Chemical Biology
- Inorganic
- Physical and Theoretical
Science at USC Chemistry

• 33 faculty with primary appointment in Chemistry
• 11 faculty with courtesy appointments in Chemistry (from MCB, ChemE, EE, and Pharmacy)
• 2 Nobel Prizes (1994, 2013)
• 3 National Academy Members
• 3 Members of the Royal Society
• 5 National ACS awards in 2020

George Olah (1994)
Arieh Warshel (2013)
Graduate Student Support

Standard Ph.D. stipend is $32,000 per year.

This amount can be augmented with a number of internal fellowships for the best applicants.

There are no tuition or fees, and health and dental insurance are covered.
USC Chemistry

https://dornsife.usc.edu/chemistry/graduate-admission/

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**Application Information**

**DO NOT** complete the application with the Office of Graduate and International Admissions (through gradadm.usc.edu) until instead apply to the PhD program directly by completing the Chemistry Department Online Application.

Application opens: September 25, 2020
Application deadline: The deadline for submission of applications is January 1, 2021. All applications must be totally completed by this date, including