Charge to the ACS Presidential Commission

What are the purposes of graduate education in the chemical sciences?

What steps should be taken to ensure that graduate education addresses important societal issues as well as the needs and aspirations of graduate students?
Major Tasks in the Charge

- Consider **fundamental, comprehensive, and systemic changes** suitable for graduate education in the chemical sciences.

- Suggest **actionable approaches for enhancing the quality** of graduate education at all institutions.
Answers to the Big Questions

• Purposes of graduate education in the chemical sciences

“The primary purpose of graduate education is education. The proper first focus is to educate students to solve problems in society, including the effective education of the succeeding generations.”

– 10 purposes transcending the individual

– 6 purposes focused on the individual

• Addressing societal needs as well as the needs and aspirations of graduate students

– 9 particular points

• The capability of our nation to acquire fundamental knowledge about the nature and behavior of living systems will be affected by the quality of graduate education in the chemical sciences.
5 Conclusions, 32 Recommendations

- The Educational Experience of Graduate Students
- Financial Support of Graduate Students
- Safety as a Culture
- Sustainability and Opportunity in Graduate Programs
- Postdoctoral Education
ACTION

• Faculty, deans, provosts, presidents
• Policy makers, federal and state funding agencies, and private foundations
• Industry leaders and other employers
• Graduate students and Postdocs
• ACS and other scientific and professional organizations
“In a free and civil society people must be virtuous as well as technically skilled.”

“We must assure that the next generation of scientists is both highly skilled technically and properly educated to carry on their scientific and educational work for the common good of society.”
Communicating Doctoral Research to the Public

All Ph.D. chemistry candidates are encouraged to include a chapter in their Ph.D. thesis communicating their research to non-specialists.

Cash awards of $250 are given to individuals whose Ph.D. thesis includes such a chapter.

The goal is to explain the candidate's scholarly research and its significance to a wider audience that includes funding agency program officers, state legislators, members of the U.S. Congress, community groups, friends, neighbors, and family members.

WISL disseminates these contributions publicly.

www.scifun.org