FOR PRESIDENT- ELECT 2019

THOMAS R. GILBERT

Northeastern University, Boston, Massachusetts

GILBERT, THOMAS R. ***Northeastern Section.*** Northeastern University, Boston, Massachusetts.

Academic record: Clarkson College of Technology, B.S., 1968; Massachusetts Institute of Technology, Ph.D., 1971.

Honors: ACS Fellow, 2011; Henry A. Hill Memorial Award, 2010; Outstanding Teacher of First Year Students Award, College of Engineering, Northeastern University, 2010, 2013, 2015; Excellence in Teaching Award, Northeastern University, 1999; Sigma Xi; Gamma Sigma Epsilon.

Professional positions (for past 10 years): Northeastern University, Associate Professor of Chemistry and Chemical Biology 1987 to date; Acting Chair, Department of Chemistry and Chemical Biology, 2015−16; Academic Director, Professional Science Masters Programs in Biotechnology, 2009-11.

Service in ACS national offices: Committee on Membership Affairs, 2017-18; Board of Directors, Director, District I, 2013-15; Councilor ex officio, 2013-15; Committee on Public Affairs and Public Relations, 2014-15; Committee on Professional and Member Relations, 2013-15; Subcommittee on Web Strategy and Innovation, 2013-15; Council Policy Committee (Voting), 2007-12, Vice-Chair, 2008-10; Long-Range Planning Subcommittee, Chair, 2008-12; Committee on Nominations and Elections, 2001-06, Vice-Chair, 2004-06; Committee on Meetings and Expositions, 1995-2000, Chair, 2000; Board of Directors Planning Committee, 2008-10; Task

Force on Web-Based Resources for Volunteers, Chair, 2015-16; ACS Network Task Force, Chair, 2014; Task Force on Election Procedures, Chair, 2003-05.

Service in ACS offices: *Northeastern Section:* Councilor, 2017-19, 1990-2012; Chair, 1988; Chair-Elect, 1987; Alternate Councilor, 1987-89; Centennial Celebration Program Chair, 1998; Analytical Group Chair, 1983-86; Nominations Committee, 2016-17, Chair, 1989; Long-Range Planning Committee Chair, 1989. *Northeast Regional Meeting:* General Chair, 1993. *Division of Analytical Chemistry: 46th Annual Summer Symposium on Analytical Chemistry,* Co-Chair Organizing Committee, 1993.

Member: Member ACS since 1968. *ACS Divisions:* American Association of Chemistry Teachers, Analytical Chemistry and Chemical Education.

Related activities: ACS, Education Division, Examinations Institute, 2000; Analytical Chemistry Examination Committee, 1998-2000; International Symposia on High Performance Capillary Electrophoresis, Vice-Chair Organizing Committees, 1993-96, 1998, and 1999; New England Aquarium, Associate Director, Research, 1977-81; Published 45 journal articles and two general chemistry textbooks (in their 5th and 2nd editions), holds three patents.

STATEMENT

The statements of the candidates represent their opinions and do not necessarily represent the views of the ACS.

An ACS president has only a short time to make a difference; so, if elected, I would focus on two vital matters: 1) making membership in ACS more valuable to a wider range of chemistry professionals and 2) assuring that chemistry students acquire the knowledge and skills they need to have successful and rewarding careers as chemistry professionals. I believe that ACS must address both of these issues if it is to grow as a membership organization while supporting an expanding chemical enterprise.

Make ACS Membership More Valuable to a Wider Range of Chemistry Professionals

At the top of my Presidential to-do list is to better connect ACS with the growing number of chemistry professionals pursuing multi-disciplinary career options that transcend the traditional boundaries of chemistry. This means developing new programs, services, and engagement opportunities that are of more value to an increasingly diverse community of chemistry professionals, and making these benefits more affordable, particularly for student members transitioning into the workplace, for unemployed members, and for the many chemists who are under-employed: working at jobs that pay much less and that have fewer (if any) fringe benefits than the jobs they held a decade ago.

To make ACS membership more valuable to more chemists, we need to better understand the scope of our members' professional needs and career aspirations, and we need to identify those volunteer service opportunities they find most rewarding. I believe the best way to gain these insights is not through online surveys, but through personal interaction.

Therefore, if I'm elected, I will organize a cross-country campaign in which I lead a corps of volunteers -- mostly student members and senior members -- based in every local section, who will reach out to their chemist neighbors to discuss their professional goals and how ACS can better support them in achieving those goals. This campaign will connect with students, early and mid-career chemists, chemists who have transitioned into managerial roles, and the growing number of members who are approaching or past retirement.

The insights gained in this campaign will inform the work of those involved in redesigning ACS governance, in reviewing ACS programs, and in organizing volunteer opportunities that more effectively engage our members. They will also guide the Council's Membership Affairs Committee in developing dues categories and benefits packages that enhance the value of ACS membership. If successful, this campaign will reverse the recent decreases in ACS membership, particularly among industrial chemists, and it will increase membership renewal rates among student members and younger chemists. In other words, it will get ACS growing again!

Education

Employment data over the last decade show disturbingly high unemployment rates among newly graduated B.S. chemists. The employment gap between young and experienced chemists has decreased with recent economic expansion, but it is still greater than historical benchmarks, leading some to question whether our colleges and universities are preparing B.S. chemists for jobs that no longer exist or preparing them poorly for the jobs that do exist. These are reasonable questions given the growing interdisciplinary nature of the career options available to chemical professionals, which is not always reflected in undergraduate (or graduate) programs of study.

So, how can today's chemistry students acquire a broader base of knowledge and skills and cross-disciplinary experiences? A proven effective and efficient way is through academic/industrial partnerships that feature paid internships and cooperative education experiences. A number of universities offer this mix of academic preparation and industrial application, including mine (Northeastern) where our students experience its benefits through a richer program of study that leads to more employment opportunities and higher starting salaries upon graduation, often at companies where they were once co-op employees. We who are their teachers and mentors also benefit as our upperclassmen provide useful feedback on the relevance of our curriculum and how it can be improved.

I am convinced that ACS, with its strong industrial base and associations with large corporations and small chemical businesses, is uniquely positioned to help create a national – indeed, an international – network of industrial partners supporting experiential education for students from many colleges and universities. If I am elected ACS president, I will work to make this experiential education model a reality.

For more information about my goals as ACS President and qualifications that will help me achieve them, or to comment on them, please go to my campaign website at: https://sites.google.com/site/thomasgilbertacs/