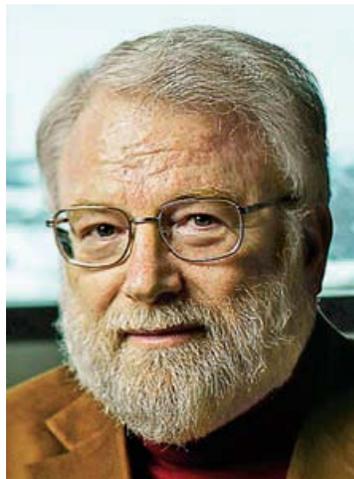


FOR DIRECTOR-AT-LARGE



THOM H. DUNNING JR.

East Central Illinois Section. University of Illinois, Urbana-Champaign

Academic record: Missouri University of Science & Technology (formerly the University of Missouri, Rolla), B.S., 1965; California Institute of Technology, Ph.D., 1970

Honors: ACS Fellow, 2011; ACS National Award for Computers in Chemical & Pharmaceutical Research, 2011; Professional Degree in Chemistry, Missouri University of Science & Technology, 2005; Department of Energy Distinguished Associate Award, 2001; Award for Excellence in Technology Transfer, Federal Laboratory Consortium for Technology Transfer, 2000; E. O. Lawrence Award in Chemistry, 1997; American Physical Society Fellow, 1992; American Association for the Advancement of Science Fellow, 1992; National Science Foundation, predoctoral fellowship, 1966–69; Woodrow Wilson Foundation, predoctoral fellowship, 1965–66

Professional positions (for past 10 years): University of Illinois, Urbana-Champaign, Institute for Advanced Computing Applications & Technology, director, 2007–, National Center for Supercomputing Applications, director, 2004–, Distinguished Chair for Research Excellence, Department of Chemistry, professor, 2004–; University of Tennessee, Department of Chemistry, distinguished professor, 2002–04; Oak Ridge National Laboratory, distinguished scientist, 2002–04; University of Tennessee & Oak Ridge National Laboratory, Joint Institute for Computational Sciences, director, 2002–04

Service in ACS offices: *Physical Chemistry Division:* councilor, 1998–2000.

Member: Member of ACS since 1979. American Physical Society; American Association for the Advancement of Science. *ACS Divisions:* Computers in Chemistry, Physical Chemistry

Related activities: Member of advisory committees for: Argonne National Laboratory, Brookhaven National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and Pacific Northwest National Laboratory, 2007–; “Chemical Computations on General Purpose Graphics Processing Units,” 240th ACS national meeting, 2010; NSF Task Force on Software & on Scientific Grand Challenges & Communities, member, 2009–11; Computational Chemistry in the 21st Century: Methods & Applications, International Conference for Computational Science, cochair, 2003; American Physical Society, *Journal of Chemical Physics*, editorial board, 1998–2001; American Physical Society, Division of Chemical Physics, secretary-treasurer, 1998–2001; Work shop on Impact of Advances in Computing & Communication on Chemical Science & Technology, Chemical Sciences Roundtable, 1998; Workshop on Assessing the Value of Research in Chemical Science & Technology, Chemical Sciences Roundtable, chair, 1997; Council on Chemical Sciences, Office of Science, U.S.

Department of Energy, member, 1996–99; National Research Council, Chemical Sciences Round Table, vice chair, 1996–99; Workshop on High Performance Computing in Chemistry, National Institutes of Health, cochair, 1993; Theory & Simulation in Chemistry: The Impact of Mini Supercomputers & Supercomputers, 193rd ACS national meeting, cochair, 1987

DUNNING'S STATEMENT

Like many previous candidates I am not fond of campaign statements. However, I understand that it is important for ACS members to know what issues I consider important. First, let me state that I believe the American Chemical Society has a major role to play in our nation's future. Our lives are profoundly affected by chemistry, whether it is the creation of materials for solar-energy conversion or the remediation of unwanted compounds in the environment. To ensure the future, we must have a citizenry that has a basic understanding of chemical principles, a cadre of basic and applied chemists who will continue to discover and innovate, and a government that will provide the investments needed to achieve these goals. ACS has a major responsibility in all of these areas.

Education. While there is considerable, and legitimate, concern over the loss of student interest in math, science, engineering, and technology and the impact that this loss has on the technical workforce in the U.S., we must not lose sight of the fact that our nation will only prosper if its citizens as a whole have the knowledge needed to make wise decisions. Thus, our educational efforts must be sufficiently broad to interest as many students as possible in chemistry. Although this is a daunting goal, with chemistry often considered a difficult and demanding subject, ACS should engage the creativity of its members to develop ways of explaining chemical principles that will engage a broad group of students and citizens.

Research. Chemical research is the foundation for progress in a large number of areas, from biological science to chemical and materials science. The aircraft and automobile industries need new lightweight materials to increase fuel efficiency, new batteries are needed to make more efficient use of electrical power, a better understanding of environmental chemistry is needed to deal with current insults and prevent future insults, and the list goes on and on. However, all of this rests on a secure foundation of chemical knowledge. So, we must invest in the elucidation of the basic principles that underlie chemical phenomena. A carefully balanced portfolio of investment in basic and applied research in chemistry is needed, and ACS should articulate the importance of both of these investments.

Communication. As a society we have adopted an unfortunate vocabulary—a chemical is something that is unnatural and unwanted. However, the natural world is composed of chemicals, and the role that they play is essential to all of us. ACS should be a spokesman for the importance and value of chemistry and chemical research—to the general public as well as to our government, local, state, and federal representatives. It should seek to change the tone of the conversation by elucidating the vital role that chemistry and chemicals play in all of our lives.

Service. A major role of ACS is to serve its members. It does this in many ways, from sponsoring scientific meetings to holding career fairs. However, it is possible to do more—we need to help young chemists achieve their career aspirations, we need to draw more women and underrepresented minorities into chemistry, and we also need to help midcareer members who

have been displaced in the marketplace. ACS should examine the effectiveness of its current efforts and develop new efforts that will accomplish these goals.

To achieve the above goals in Education, Research, Communication, and Service is a tall order; we must approach these issues carefully, noting what has worked and what has not. However, ACS members are enormously talented and dedicated, and I am confident that, working together, we can achieve these goals.