



FOR DIRECTOR-AT-LARGE, 2017-2019



JOSEPH A. HEPPERT

University of Kansas, Lawrence, Kansas

HEPPERT, JOSEPH A. *Wakarusa Valley Section.* University of Kansas, Lawrence, Kansas.

Academic Record: San José State University, B.S., 1978; University of Wisconsin, Ph.D., 1982; Indiana University, Post-Doctoral Fellow, 1985.

Honors: ACS Fellow 2012; University of Kansas Leading Light Award, 2012; Vice-Chancellor's Fellow, 2002; University of Kansas Center for Teaching Excellence Graduate Teaching Award, 1998; Keeler Intra-University, Professor, 1998.

Professional Positions (for past 10 years): University of Kansas, Associate Vice Chancellor for Research, 2009 to date; Chemistry Chair, 2005 to date; Professor 2001 to date; Director, Center for Science Education, 2001-09.

Service in ACS National Offices: Committee on Budget and Finance, 2013-15, Vice Chair, 2015-16, Committee Associate, 2011-12; Committee on Education, 2002-10, Chair, 2004-06, Committee Associate, 2000-01; Council Policy Committee (Nonvoting), 2004-06; ACS Chemistry Teacher Education Coalition National Advisory Board, 2011-14; Governance Review

Team A, 2007; ACS Program Review Advisory Group 2005–06; Task Forces on Program Valuation and Metrics, 2013-14; ACS Joint Board President's Task Force on Education, Spring 2009-10; ACS President's Task Force on Competitiveness, 2007-08.

Service in ACS Offices: Member ACS since 1979. *Wakarusa Valley Section (formerly University of Kansas Section):* Councilor, 1997-2017; Alternate Councilor, 1994-96; Chair, 2004, 1993; Chair-Elect, 2003, 1992; Treasurer, 1991. *Midwest Regional Meeting:* General Meeting Co-chair, 2017; Program Chair, 2002.

Member: American Association for the Advancement of Science; Sigma Xi; National Science Teachers Association; American Association of Chemistry Teachers; Public Responsibility in Medicine and Research. *ACS Divisions:* Chemical Education; Inorganic Chemistry and Organic Chemistry.

Related Activities: Participant, ACS Legislative Summit, April 2008; Past Member, Senator Pat Roberts Advisory Committee on Science, Technology and the Future; Past Director, University of Kansas' Center for Science Education; Past Chair, University of Kansas Faculty and University Senate Executive Committees; Education Director of the Center for Environmentally Beneficial Catalysis (NSF-ERC); Past Member Board of Directors, the Advanced Academy of Georgia; University of Kansas Medical Center, Institute for Advancing Medical Innovation, Advisory Board Member, 2015.

STATEMENT

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

All chemists can be proud of the work we accomplish through ACS. ACS is acknowledged as one of the world's top professional scientific societies. The value proposition that motivates chemists to associate with ACS is multi-faceted: scholarly information, education, professional activities and employment, advocacy for STEM issues, and fellowship with likeminded chemical scientists. ACS does a remarkable job accommodating these broad needs under a single umbrella. As we look to the coming decade, I believe the Society needs to expend particular effort in these and related areas that represent challenges and opportunities for the future of the Society.

Chemical Jobs. Over the past 75 years, the international chemical industry, led by U.S. chemical innovation, has ushered the world into a healthier, more prosperous, and increasingly more environmentally conscious era. The chemical industry, along with all of its client and supplier businesses, has long been a key strength of the U.S. economy. The potential for erosion of this mainstay of economic prosperity and employment explains membership concerns about ongoing structural changes in U.S. chemical businesses.

Regardless of the changing structure of U.S. high technology industry, ACS members know that chemical innovation must continue to play a central role in driving U.S. competitiveness. Without sustained chemical entrepreneurship, we will stifle one important pathway for developing chemical innovations critical to the vitality of high tech industry. ACS needs to advocate for chemical entrepreneurs on a national level and help connect the originators of promising

technologies in industry and academics with resources needed to successfully launch new product lines and chemistry startups. The Society must encourage talented chemists and chemical engineers to obtain the business and political skills, and experiences required to become discerning leaders of and advocates for U.S. chemical businesses.

Chemical Education. Degrees in chemistry provide an excellent foundation for career paths in chemical, biotechnology and materials related industries; and in business, teaching, and government service. Leadership from members of the Division of Chemical Education and the Committee on Professional Training has created greater traction for innovation in undergraduate curricula over the past decade. However, the Society needs to go further to ensure that graduate and undergraduate students are prepared for the rapidly changing environment in high technology employment. Undergraduate students need expanded access to research at chemistry's disciplinary interfaces, and all students should have opportunities to explore strategies for applying their knowledge of chemistry in parallel career paths such as information science, biotechnology, law, international relations, and government service. More students need to learn how to take processes from conception to the market through experiences in maker spaces, internships in high technology businesses, and participation in entrepreneurship training. ACS has already conducted experiments in many of these areas, and must advocate for providing these opportunities earlier in the formal educational process.

Building on Existing ACS Strengths. ACS programs, including Project Seed, ACS Scholars, and local section outreach are already working to increase the diversity of student populations studying in STEM fields. The ACS needs to re-double its efforts in these areas. The Society can play an increased role in advocating for federal, state and local programs to enhance STEM education, and in ACS sponsorship of programs bringing the wonder of the chemical sciences to students from underrepresented populations.

ACS remains the world's premier source of chemical science knowledge, which is an important value proposition for scientists who associate with the Society. Recent changes in ACS publications and information services have been very popular among academic and industry client bases. As the Society considers strategies for retaining younger scientists, we need to examine how these individuals access and consume scientific information, and how we can adapt Society programs beyond CAS and PUBS to support this critical segment of our membership.

The vast majority of scientific professionals are appalled by a governmental climate that seems to marginalize the role of scientific knowledge in policy making, sidetrack programs to build high quality STEM education, and disregard the urgent need to support research that leads to technological innovation. ACS must sustain support for its Office of Public Affairs, while seeking additional partnerships to publicly support science with likeminded stakeholders among other scientific societies and technology related businesses.

It is truly an honor to have been asked to stand for election to an at-large seat on the ACS Board of Directors. If elected, I will work with ACS members and with other representatives on the Board to support Society policies, practices and programs that will address these and other questions of importance to ACS members.