

"Enlightenment And The Responsibilities Of The Enlightened In Communicating Chemistry"

Professor Bassam Z. Shakhashiri

The William T. Evjue Distinguished Chair for the Wisconsin Idea

Department of Chemistry

Director, Wisconsin Initiative for Science Literacy

University of Wisconsin-Madison

Chemistry is both the central science and the science of the *familiar*. The familiarity of chemistry has yet to be fully exploited in reaching all segments of society, especially the nonspecialists. Chemistry brings a wide range of goods and functions to everyone and thus is vital to our democracy. Science literacy is necessary for the democratic process to work. I make a distinction between *scientific literacy*, expertise in a particular field, and *science literacy*, a broad appreciation and understanding of science and its practitioners, and of what science is capable of achieving and what it cannot accomplish. Science literacy enlightens and enables people to make informed choices; to be skeptical; to reject shams, quackery, and unproven conjecture; and to avoid being bamboozled into making foolish decisions where matters of science and technology are concerned. Science literacy is for everyone—chemists, artists, humanists, all professionals, the general public, youth and adults alike. All practitioners of chemistry must work effectively to achieve science literacy by increasing awareness of chemicals, their transformations, hazards, and how they benefit everyone's health, safety, and environment. We must improve and expand our role in communicating the value of science and technology to students, parents, community leaders, the public at large, and to decision makers in government and the private sector. We must showcase the best of chemistry as it addresses significant human and societal issues. My presentation will include demonstrations to show how science can be communicated to all segments of our society. Come learn about combustion, exploding balloons, liquids that glow in the dark, polymers, and other spectacular scientific phenomena. You will sit at the edge of your seat and will see science in action.