



Vicki Helene Grassian

1

1. University of California - San Diego, San Diego, California, United States

Water, H₂O, is ubiquitous on Earth with oceans covering ca. 70% of the Earth's surface. Water is essential to life and is *the solvent* in which life's chemistry occurs. This talk will focus on *waters effect on chemistry* a vast topic that covers a myriad of effects including: dissolution, solvation, hydrolysis, hydration, phase and many others. Because of the vast nature of the topic, selected *highlights* will be presented including waters effect on the chemistry that occurs at interfaces, waters effect on the chemistry of aerosols and waters effect on chemistry as it relates to molecular structure, energetics, reaction chemistry, and the environment.

Andrew Kricun¹

1. Camden County Municipal Utilities Authority, Camden, New Jersey, United States

The old paradigm for most water utilities was that permit compliance was the ceiling of aspirations and the utility sought to stay away from the public, the press and, especially, regulators. However, several water utilities are seeking to change the paradigm for the water sector by seeing mere permit compliance as a given floor and, in addition, by striving to be environmental champions and anchor institutions in their community. The case study of the Camden County (NJ) Municipal Utilities Authority depicts how a clean water utility, operating in one of the most challenged cities in the United States, significantly improved its environmental performance and became an anchor institution in the City, all while reducing real, inflation-adjusted user rates, by 40%. Implementing a triple bottom line (environmental, economic and community benefit) approach to operations is the cornerstone of the Clean Water Utility of the Future initiative.

Bego Gerber¹

1. Chemists Without Borders, Sacramento, California, United States

Are you a free radical, chain-reaction initiator? How do we convert our potential energy into kinetic energy and *take action*? Hear some myths, truths and lessons from Chemists Without Borders in the context of global humanitarian opportunities. What are its foundations? Why does it exist? How does it work? Why does it matter? Who is affected? What have we learned? Where do we all fit in? What is possible? Imagine!

