A world-class expert in low pressure and vacuum metrology, Dr. Hendricks is the Deputy Program Manager for NIST on a Chip (NOAC), an innovative approach that seeks to utilize fundamental physics to develop quantum-based sensors and standards. Dr. Hendricks received his M.A. and Ph.D. in Physical Chemistry from Johns Hopkins University (1996), and his B.S. in Chemistry from Penn State University.

Dr. Hendricks has authored 109 publications on vacuum science, metrology and technology, surface chemistry, and on-beam laser spectroscopy (source <u>google scholar</u>). He holds 6 patents US Patents vacuum science technology. He is a two-time winner of US Department of Commerce Gold Medal (the highest honor the Commerce Department Awards), for an innovative quantum-based pressure standard and the encasement of documents of historical significance including the US Bill of Rights, and the US Declaration of Independence. He is the President-Elect for IUVSTA (International Union of Vacuum Science, Technique and Application).



QUANTUM based System of Units for Pressure- A Fixed Length Optical Cavity (FLOC) prototype is held by Jay Hendricks and NIST. The FLOC is a new way to realize and measure pressure with light-matter interactions

(refractive index) of a gas that will enable the world-wide elimination of mercury manometers. Photo Credit: NIST