

Prof. Eng. Ashok VASEASHTA, PhD

Prof. Dr. Ashok Vaseashta is the Chief Researcher for International Clean Water Institute in Virginia, USA. In addition, he serves as a Visiting Professor at Riga Technical University, Chaired Professor of Nanotechnology at the Academy of Sciences of Moldova, Academician at Euro-Mediterranean Academy of Arts and Sciences and Senior Strategic Research Advisor for several organizations. Inspired by nature and guided by societal necessities, he strives for innovations to address global challenges of the 21st century, such as environment, human safety and security, and sustainability using advanced technological solution platforms. He is a scholar, dedicated futurist and visionary leader who provides strategic leadership to promote and advance research initiatives and priorities using data driven decisions. He received PhD from the Virginia Polytechnic Institute and State University, Blacksburg, VA in 1990 followed by Kobe post-doctoral fellowship. Following his PhD, he served as professor and researcher at Virginia Tech and Marshall University. He also served as the Director of Research at the Institute for Advanced Sciences Convergence and International Clean Water Institute for Norwich University Applied Research Institutes. Prior to his current position, he served as Vice Provost for Research at the Molecular Science Research Center in Orangeburg, South Carolina. He served as visiting professor at the 3 Nano-SAE Research Centre, University of Bucharest, Romania and visiting scientist at the Helen and Martin Kimmel Center of Nanoscale Science at the Weizmann Institute of Science, Israel. He served the U.S. Department of State in two rotations, as strategic S&T advisor and U.S. diplomat. His research interests span nanotechnology, environmental/ecological science, and safety and security. His research on nanotechnology has been on improving the understanding, design, and performance of nanofibers and sensors/detectors, mainly for applications such as wearable electronics, target drug delivery, detection of biomarkers and toxicity of nano and xenobiotic materials. In the security arena, he has worked on counterterrorism, countering unconventional warfare and hybrid threats, critical-Infrastructure protection, biosecurity, dual-use research concerns, and mitigating hybrid threats including fake-news. In addition, he has made numerous contributions in environmental/ecological science including directing research for International Clean Water Institute, pollution monitoring, contamination detection and remediation, and sustainability through green nanotechnology. He has authored over 270 research publications, edited/authored nine books on nanotechnology and environment and has presented many keynotes and invited lectures worldwide. He serves on the editorial board of several highly reputed international journals. He is an active member of several national and international professional organizations. He is a fellow of the American Physical Society, Institute of Nanotechnology and the New York Academy of Sciences. He has earned several other fellowships and awards for his meritorious service including 2004/2005 Distinguished Artist and Scholar award.