Dr. Kathleen Richardson is Pegasus Professor of Optics and Materials Science and Engineering and Florida Photonics Center of Excellence (FPCE) Professor at CREOL/College of Optics and Photonics at the University of Central FL, where she runs the Glass Processing and Characterization Laboratory (GPCL). Prof. Richardson and her research team carry out design, synthesis and characterization of novel glass and glass ceramic materials for optical applications, examining the role of structure/property relationships on resulting optical function and performance in bulk, planar and fiber optical materials. Dr. Richardson's group has extensive industrial and government supported research developing novel materials for broadband infrared (IR) optical systems, gradient refractive index (GRIN) optics, precision molded optics, optical phase change materials, evaluation of complex multi-material interactions in nextgeneration integrated opto-electronic chip design, and in optical nano-composites for advanced chem-bio and detection applications. The Richardson group is a leading source of global expertise in the design, fabrication and characterization of next generation materials for use in infrared components and systems based on diverse optical applications. Kathleen has authored more than 250 peer-reviewed publications, numerous proceedings and book chapters, has a broad portfolio of IP related to these advances. Dr. Richardson was part of the global team who led the successful petition to the United Nations that resulted in the declaration of 2022 as the International Year of Glass. Professor Richardson is a recognized world leader in infrared glass research and education. In 2021, she was recognized with UCF's Excellence in Research Award. She currently holds the rank of Fellow, in the American Ceramic Society (ACerS), the Society of Glass Technology (UK), SPIE and Optica/Optical Society of America (OSA), as well as an honorary fellowship from the European Ceramic Society (ECerS). Her extensive service to the glass and optical materials community in a wide array of leadership and consulting roles is noteworthy. Since 2006, she has served as a member of the Board of Trustees at Alfred University.