

ASPE TechSymposium2021



Mark Girgenti

Mark Girgenti is the Director of Design Engineering for Burt Process Equipment, an environmental process equipment firm. Mark has spearheaded the design, integration, project management, and construction of water treatment equipment for wastewater, rain harvesting, graywater, and high-purity water systems in the government, institutional, and pharmaceutical industries in the United States and abroad. As an upcoming engineer with more than 10 years of experience, and from his years of study and publication record in chemical system design, Mark brings a unique understanding to these projects from a process engineering and chemistry perspective as opposed to the traditional mechanical approach. Mark has been a speaker at numerous green building and plumbing technical symposiums across the country and internationally, including the Boston Green Table Discussion, ASPE Chicago and Houston Chapter Symposiums, and ASPE Tech Symposiums. He was also a speaker at the CIPH 2014 exposition as well as numerous ISPE (International Society of Pharmaceutical Engineers) events. He has written several journal articles on water treatment technologies. He has been a member of the ASPE Young Professionals board since its inception and has also served as a member of ASPE's Education Committee as well as a Vice President of the ASPE Research Foundation.

Mark holds a bachelor's degree in chemical engineering from Rensselaer Polytechnic Institute and a M.S. in Chemistry. He is actively involved in academic circles as a professional member of the graduate advisory committee for Southern Connecticut State University and also serves as a volunteer faculty member.

Containerized Water Treatment & Plumbing Design

As the rapid pace of construction and retrofitting of buildings has grown, the need for equipment additions that can be seamlessly integrated into the construction planning without impacting the building's structure and operation has grown. This is especially true of the need for clean rooms, high-end process equipment, or critical infrastructure that cannot afford to be down for long-term construction. This session will examine the benefits of and how modular plumbing systems can be integrated into a building without impacting the building's structure or operation. This will include how these system are designed, the necessary condition for the system to be fully containerized, building and utility hookups, as well as the cost and schedule impact analysis. This will be explored in a couple of case studies to highlight how these types of system are implemented from the ground up, including a special look at pharmaceutical and healthcare requirements during the COVID-19 pandemic.