

Title: Soft Robotics and Human Digestion

Abstract: This talk will give an overview of soft robotics for digestion, its challenges and opportunities. It will focus on one of the digestion robots we have developed following soft robotic technologies, which is Robotic Soft Esophagus (RoSE) for in vitro simulations of human swallowing. The talk will cover RoSE's concept, technical specifications, design and development involving sensing, actuation and control, characterisation, validations as well as applications such as esophageal stent testing and drug swallowing experiments.