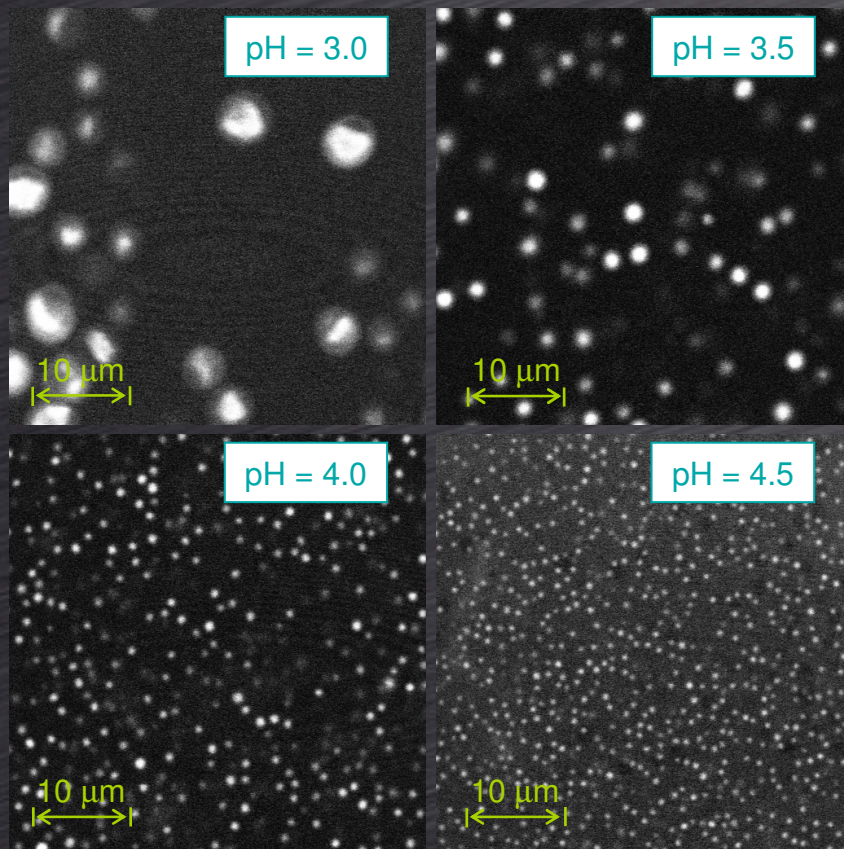


# Investigating the Micro-Mechanical Properties of Hydrogel Glasses Using Confocal-Rheology

49778-DNI7

Daniel L. Blair PhD  
Georgetown University  
Department of Physics and Institute for Soft Matter



We create N-Isopropylacrylamide microgel particles that are large, stable and fluorescent. This new synthesis technique provides us with unprecedented access to the microscopic behavior of these systems through the use of laser scanning confocal microscopy and rheology

Using laser light scattering methods, we are able to characterize the sizes and osmotic compressibility through the inclusion of non-adsorbing polymers. The dynamic range of volume fractions of these systems is ideal for studying the glass transition like never before

