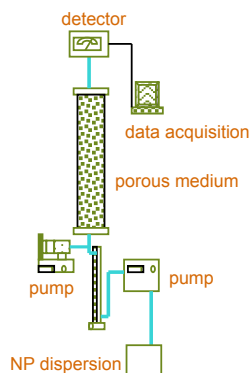


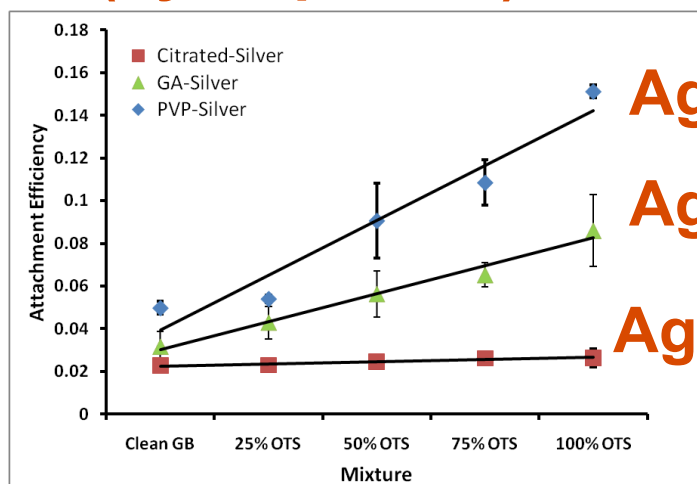
# Predicting deposition of NPs Coated with organic macromolecules

Shihong Lin, Jee Eun Song, Malai Ramamoorthy, Stella Marinakos, Mark Wiesner, Gregory Lowry, Kim Jones, Jie Liu



NP Hydrophobicity  
Ag-PVP > Ag-GA >> Ag-citrate

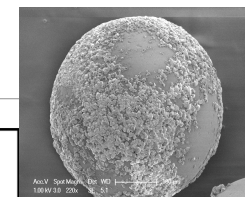
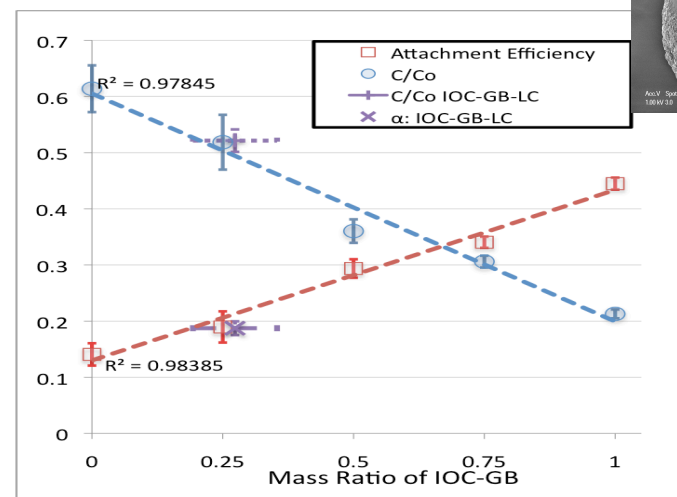
**OTS (hydrophobic) sand**



**Ag-PVP**

**Ag-GA**

**Ag-citrate**



- Deposition of PVP-coated Ag NPs to Fe-oxide surfaces and hydrophobic surfaces increases linearly with increasing amount of that surface
- More hydrophobic coatings deposit greater onto hydrophobic surfaces
- Models using linear combinations of environmental surfaces may be possible to describe distribution of ENPs in the environment.