Film Formation of Ag Nanoparticles at the Organic-Aqueous Liquid Interface

JOHN VIGORITA\textsuperscript{1}, JILL SAKATA, ANDREW DWOSKIN, EILEEN M. SPAIN\textsuperscript{2}, Departments of Chemistry and Physics, Occidental College — A wet-chemical method to make films by spontaneous assembly of passivated Ag nanoparticles at the organic-aqueous liquid interface is presented. The interfacial films exhibit a blue opalescence, or in other cases a silvery color, and are characterized with transmission electron microscopy and UV-visible spectrophotometry. Measurements indicate that nanoparticles in the interfacial film can form superlattices and in some cases nanostructures.

\textsuperscript{1}presenting author
\textsuperscript{2}corresponding author

Eileen M. Spain
Department of Chemistry, Occidental College

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