

The **Jun Lab** (EECE) works on environmental nanochemistry by studying the nucleation and/or aggregation mechanisms of environmental as well as engineered nanoparticles. They are exploring the relationship between nanotechnology and environment to address the question on how nanochemistry potentially lead to better water treatments, more effective contaminated-site remediation, or new energy alternatives. The efforts include (1) examining the thermodynamics and kinetics of nanoscale reactions at solid-water interfaces; (2) investigating how nanoscale interfacial reactions affect the fate and transport of contaminants; (3) exploiting surface characterization tools for obtaining fundamental information about the structure and reactivity of nanoparticles and thin films, and the speciation or chemical form of environmental pollutants at the molecular scale; and (4) seeking connections between environmental nanochemistry and kinetic analysis at larger scales.

Jun Lab: <http://encl.engineering.wustl.edu/>