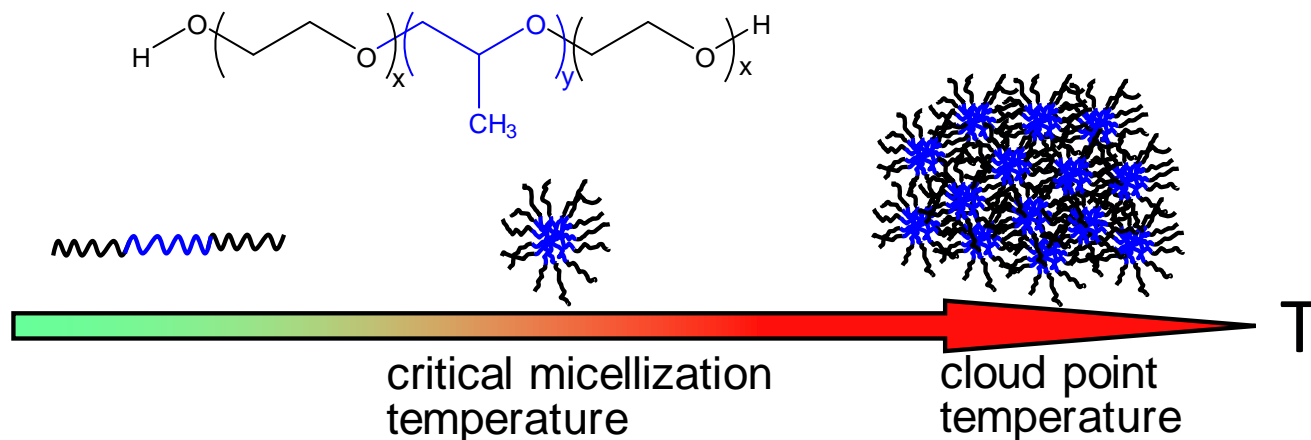


Specific Ion Effects on the Interfacial Properties at the Hydrophobic/Aqueous Interfaces

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The Hofmeister series ranks the relative influence of ions on the physical behavior of a wide variety of aqueous processes. This behavior is more pronounced for anions than cations and is quite general. The typical order for the anion series is as follows:



Although the Hofmeister series is a general recurring trend in aqueous solutions, the molecular-level mechanisms of the Hofmeister effects have remained elusive for over 120 years. Our research uses a simple model, the temperature-induced phase behaviors of poly(ethylene oxide)-b-poly(propylene oxide)-b-poly(ethylene oxide) (PEO-PPO-PEO), to further explore the nature of polymer-anion interactions.