

#46: Spectroscopic Characterization of Ions at Biointerfaces

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In order to understand biological processes such as ion regulation, cell signaling, and lipid oxidation, the behavior of ions at biointerfaces must be explored. Investigations at the molecular level showed that these processes are dominated by ion-biomolecule interactions. First discovered in 1888, the Hofmeister series ranks cations and anions in order of their ability to influence protein solubility in aqueous solutions. The ions in both of these series play crucial roles in many biological processes. Cremer research group aims to understand the molecular-level details of ion behavior at biointerfaces by using MCR-Raman, FT-IR, etc.