



## **Association Mechanisms of Sand with Anionic Extracellular Polysaccharides (EPS)**

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The configuration, molecular weight and the type and charge of functional groups often have a strong effect on adhesion of Extracellular Polysaccharides (EPS) to solid surfaces. Our hypothesis is that the EPS with higher molecular weight will be more associated with sand as compared to those with a low molecular weight. In this study, we investigated the association of anionic EPS by sand of six size fractions. The association experiment was carried out at different time, initial concentrations, and sorbent concentrations. EPS concentrations were determined by Sulfuric Acid-UV method. Preliminary results indicate that increasing the concentration will lead to the formation of longer molecules. Therefore, more association with sand will be occurred until critical length is reached where increasing the length of the molecules will adversely affect the association.