Fouling during Synthesis of a Latex Dispersion

Start: Immediately / By Arrangement

Emulsion polymers, also more commonly known as latex, have a wide-array of applications. Profits from these polymers amounted to 40 billion USD alone in 2018. During the synthesis of latex, unwanted deposits or fouling can build up on the inner surfaces of a reactor.

In this project, the effect of reaction parameters on rates of fouling will be studied. Two novel pieces of instrumentation will be designed, including a moving heated-finger in the reaction vessel and a flow channel with a quartz microbalance integrated within a bypass loop. This project will help you learn about the chemical industry and polymer synthesis, while providing hands-on experience with processing equipment. There are several possibilities for your work, including design, experimental, and modelling work. The content can be tailored to your specific interests. This work must be done in English (this is a great chance to improve your English speaking and writing skills with a native English-speaking supervisor!).

Interested? Contact:
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