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Abstract

This study focused on characterizing the structure of biofilms developed on carriers used in lab-scale moving bed biofilm reactors. Both light microscopy (2D) and optical coherence tomography (OCT) were employed to track the biofilm development on carriers of different geometry and under different aeration rates. Biofilm structure was further characterized with respect to average biofilm thickness, biofilm growth velocity, biomass volume, compartment filling degree, surface area, etc. The results showed that carriers with a smaller compartment size stimulated a quick establishment of biofilms. Low aeration rates

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