

EFFECT OF RHAMNOLIPIDS ON SURFACE TENSION AND INTERFACIAL BEHAVIORS ON TRADITIONAL SURFACTANTS

Yao Zhou, Manhattan College Chemical Engineering Department
yzhou01@manhattan.edu
Liangchen Xu, Manhattan College Chemical Engineering Department
Samiul Amin, Manhattan College Chemical Engineering Department

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The global surfactant market is expected to reach \$44.9 billion by 2022, of which 67% of the demand is from the personal care and detergents market [1]. Due to consumers' increasing awareness on product sustainability, the microbial-produced biosurfactants are increasingly gaining the interest of the personal care industry as potential alternatives for traditional petroleum-derived and chemically synthesized surfactants [2]. The future of personal care and detergent products is the elimination of non-biodegradable, environmentally toxic surfactants. However, prior to that, an understanding of performance criteria such as surface tension is affected by substitution of traditional surfactants with biosurfactants is required. This study mainly focuses on the influences of rhamnolipid biosurfactant on surface tensions and CMC behavior of sodium laureth sulfate and cocamidopropyl betaine. In addition, the effect of rhamnolipids on the interfacial tensions of surfactants mixture and dimethicone have also been evaluated.

Reference

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* Y.Zhou and L.Xu contributed equally to this work.