

Supplementary Material

Emulsions synergistic-stabilized by hydroxyl sulfobetaine surfactant and SiO₂ nanoparticles and their potential application for enhanced oil recovery

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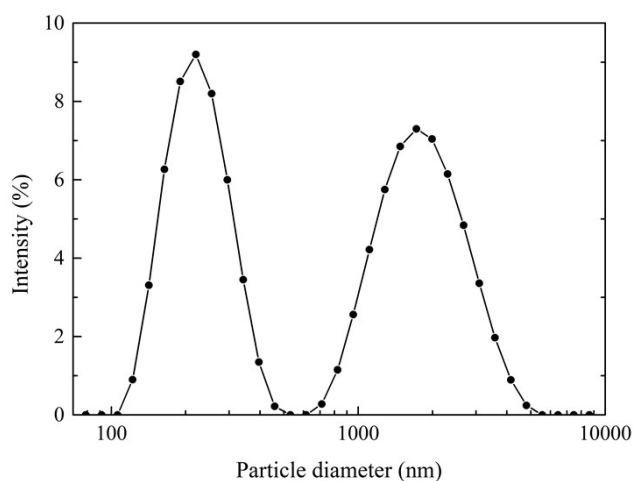


Fig. S1. Particle size distribution at 0.1 wt % determined using Zetasizer Nano ZS ZEN3600.

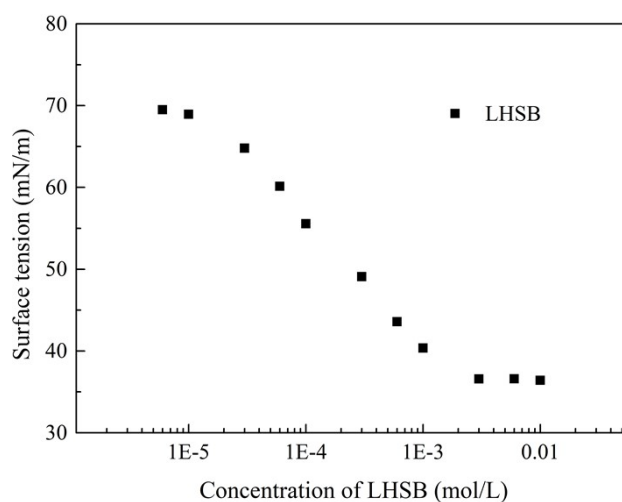


Fig. S2. Surface tension of aqueous solutions of LHSB as a function of concentration (25 °C).

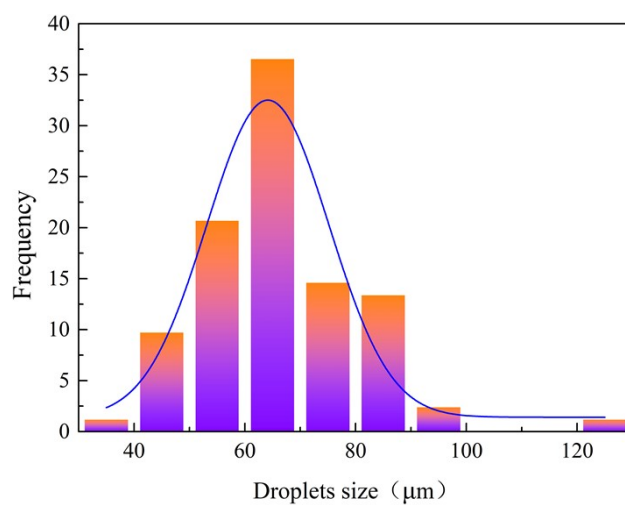


Fig. S3. Droplet size distribution of 0.6 mmol/L LHSB stabilized emulsions.

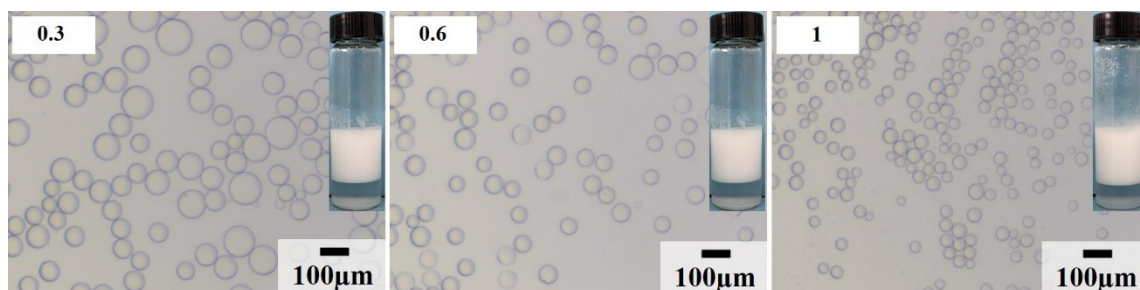


Fig. S4. Digital photos and micrographs of emulsions synergistic-stabilized by LHSB and SiO₂ nanoparticles (0.5 wt%) taken 1 month after preparation.

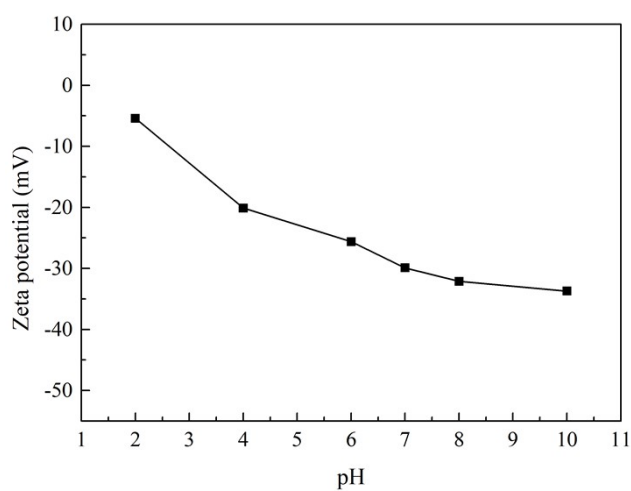


Fig. S5. Zeta potential of SiO₂ nanoparticles at different pH conditions.