A Combined Wetting and Scattering Study of the Near Surface Ordering in Sugar Surfactant Based Bicontinuous Microemulsions at Hydrophilic and Hydrophobic Surfaces

-Supporting Information-

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1. **Phase diagram of the quaternary system water/cyclohexane/Glucopon220/ pentanol**
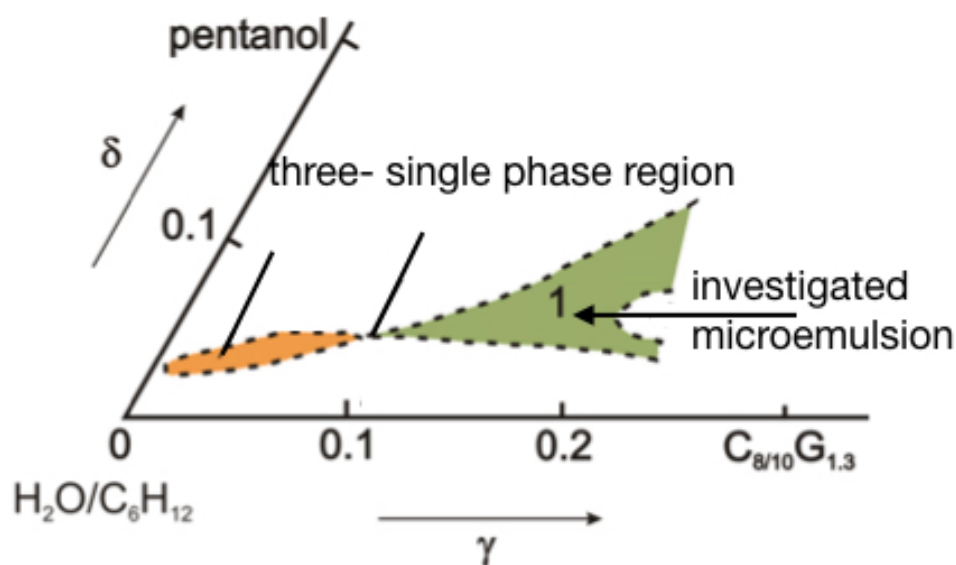

Figure S1: Fish-type cut through the phase tetrahedron of the quaternary phase system water/cyclohexane/Glucopon220/pentanol at constant water to oil ratio (0.5) and constant temperature. The composition of the investigated bicontinuous microemulsion is indicated.

2. Wetting behavior and surface energy determination
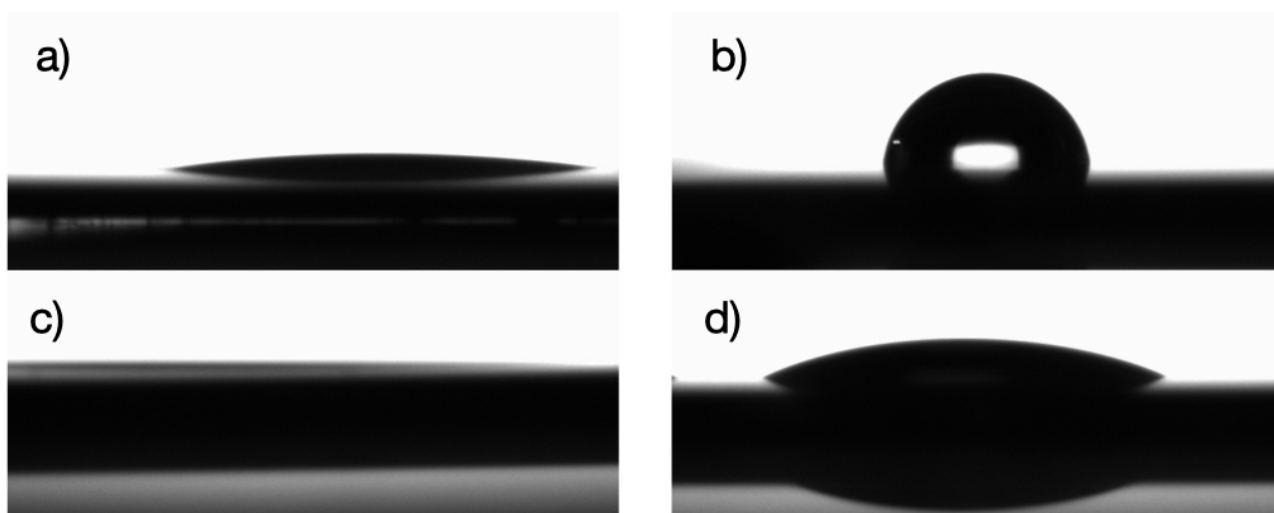
Figure S2: Examples of static contact angles of water at a) h-Si and b) hp-Si. Images c) and d) show the results for the aqueous solution of Glucopon 220 (20 mmol/L) at both substrates, h-Si resp. hp-Si.

The surface energies of h-Si and hp-Si were determined with the OWRK method from the measurement of the contact angles of water, diiodomethanue and glycerol at 25° C. For each liquid, 3-5 sessile drop were measured. Using the OCA20 software, the values of small contact angles were determined with the tangent leaning and larger contact angles with the elliptic method.

surface free energy (mN/m)			
substrate	γ_d^{SE}	γ_p^{SE}	γ^{SE}
h-Si	20 ± 2	48 ± 2	69 ± 3
hp-Si	22 ± 1	8 ± 1	30 ± 1
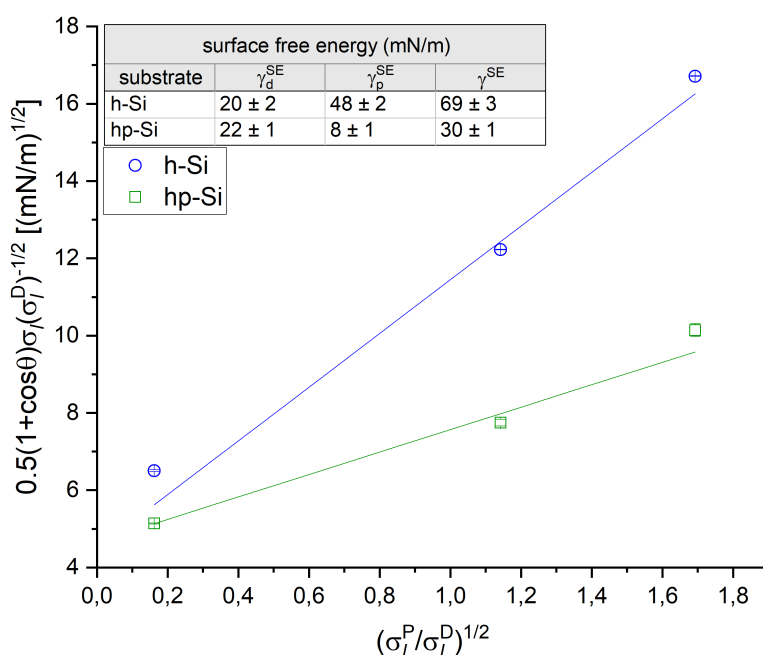
Figure S3: OWRK Plot for the determination of the surface energies of h-Si (hydrophilic) and hp-Si (hydrophobic) substrates.

3. Full integral evaluation of the NSE/GINSES data according to the Zilman-Granek theory
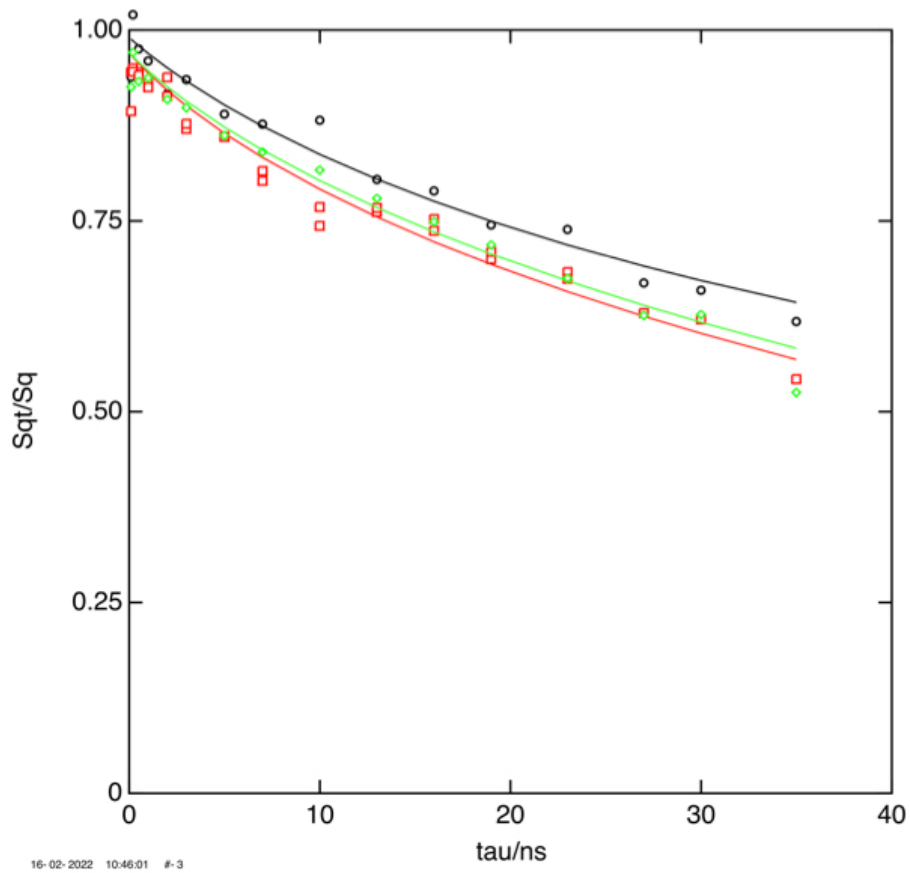
Figure S4: Normalized intermediate scattering functions as shown in Figure 4 of the paper evaluated withe full integral analysis according to the Zilman-Granek theory.

```
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ezg1Qang    = 0.000000E+00
ezg1Monk    = 0.000000E+00
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bgr         = 0.000000E+00
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Figure S5: Fitting parameters and results for the fits shown in Figure S4.