

Additions and Corrections

Role of the Secondary Minimum on the Flocculation Rate of Nondeformable Droplets

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The interaction potential between emulsion drops is usually calculated prior to the simulations, adding a set of writing instructions to the actual computer program. This procedure also allows the retrieval of certain relevant parameters, avoiding the differences between the estimated (input) values and the ones actually employed in the simulations. In particular, the effective charge of one surfactant molecule at the oil/water interface, $z_s e$ (where $e = 1.6 \times 10^{-19}$ C), is obtained from the surface charge of an emulsion drop at a given surfactant coverage. In the program, the particle charges are evaluated from the scaled value of the electrostatic surface potential ($\psi^* = \psi e / k_B T$). Unfortunately, an incorrect value of the temperature ($T^* = 1$) was used in the auxiliary code in order to obtain the particle charge. As a consequence, the values of z_s reported in the manuscript differ from the ones employed in the simulations.

The value of z_s required to reproduce the electrostatic surface potential ($+115 \text{ mV}^1$) of a $3.9\text{-}\mu\text{m}$ Bitumen drop at a maximum surfactant coverage ($\Gamma^{-1} = 50 \text{ \AA}^2/\text{molecule}$) is 0.2057235 (~ 0.21), not 6.9×10^{-4} as formerly reported.² The correct set of z_s values employed in the simulations of this manuscript is given in Table 1. These are the numbers that should appear in the fourth column of Table 3 in the original report.

Table 1

system	z_s	system	z_s
B1	2.057×10^{-1}	S1	2.057×10^1
B2	2.057×10^{-1}	S2	2.147×10^{-2}
B3	2.057×10^{-1}	S3	2.057×10^{-1}
B4	2.057×10^{-1}	S4	2.057×10^0
B5	2.057×10^{-1}	S5	
B6			

(1) Salou, M.; Siffert, B.; Jada, A. *Colloids Surf., A* **1998**, *142*, 9.

(2) Urbina-Villalba, G.; Toro-Mendoza, J.; García-Sucre, M. *Langmuir* **2005**, *21*, 1719.

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