ELECTRONIC SUPPORTING INFORMATION

Effect of Interfacial Rheology on Drop Coalescence in Water-Oil Emulsion

Talita Coffler Botti^{a,1}, Anthony Hutin^a, Erick Quintella^b, Marcio S. Carvalho^{a,2}

^a Dept. of Mechanical Engineering, Pontifícia Universidade Católica do Rio de Janeiro, Rio de Janeiro, Brazil

^b Petrobras, Rio de Janeiro, Brazil

emails : ¹talita@lmmp.mec.puc-rio.br; ²msc@lmmp.mec.puc-rio.br

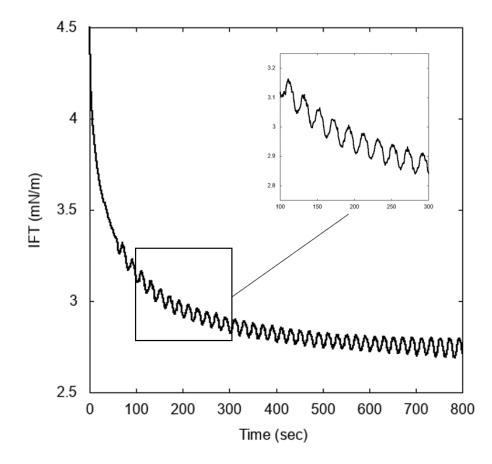


Figure S1: Dynamic interfacial tension for 1.5 *%wt*. of Span 80, during the oscillation of the drop volume at frequency of 0.05 *Hz*. (IFT: interfacial tension)

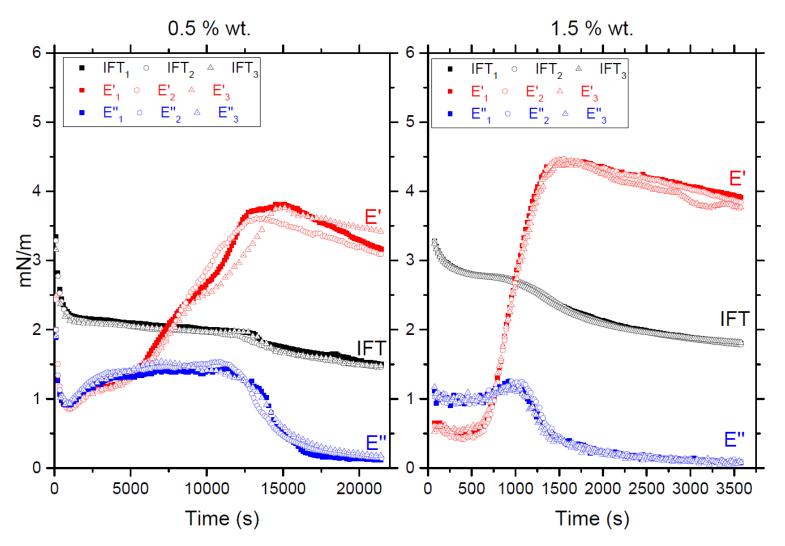


Figure S2: Example of repeatability of interfacial rheological tests conducted at 0.05 *Hz* and 10% amplitude for 0.5 and 1.5 %wt. Span 80. (E': elastic modulus, E'': viscous modulus)

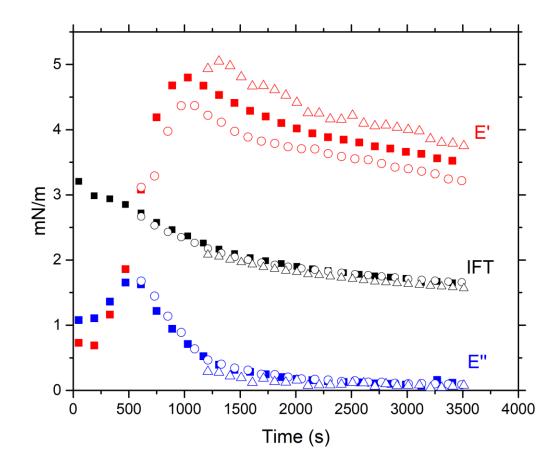


Figure S3: Influence of aging time on the interfacial properties of 2 *%wt.* Span 80. Oscillations of the interface are started after 0 min (squares), 10 min (circles), and 20 min (triangles) of aging.