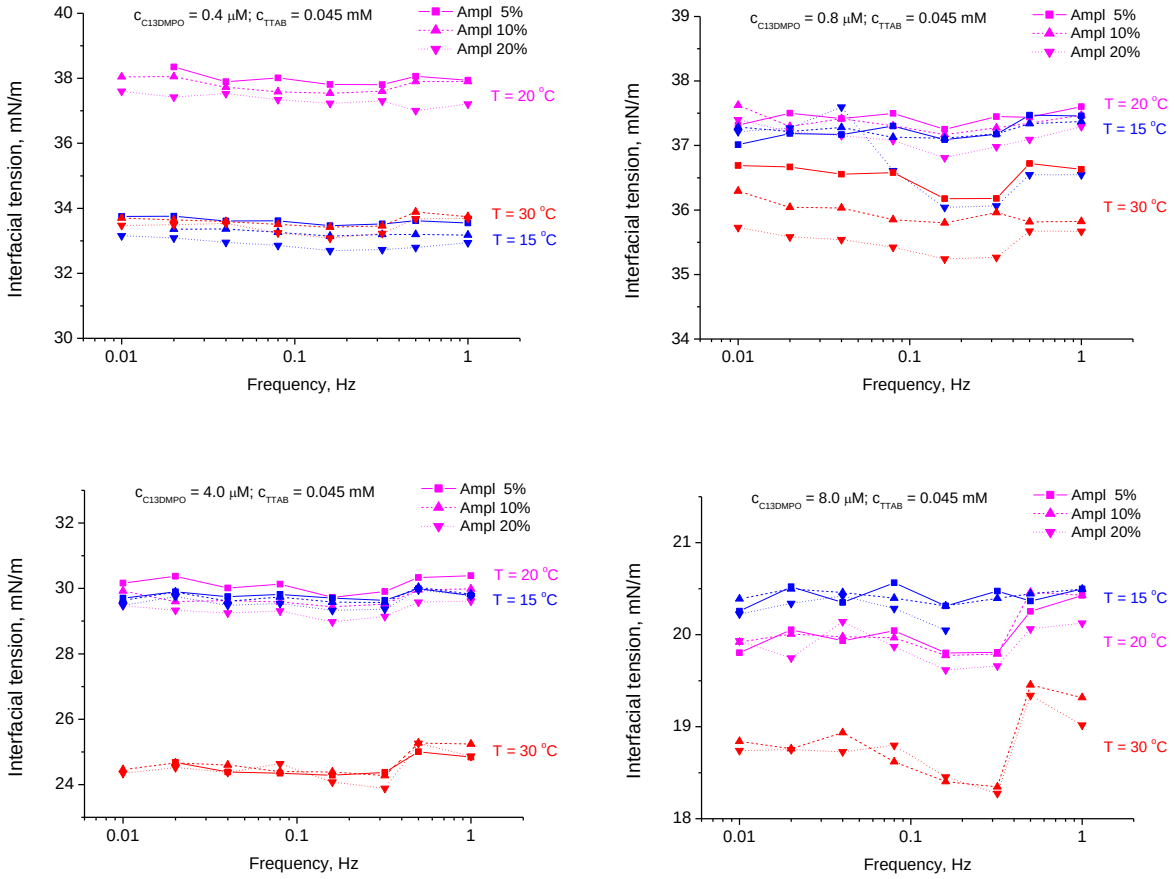
Supplementary Materials

Effect of Temperature on the Dynamic Properties of Mixed Surfactant Adsorbed Layers at the Water/Hexane Interface under Low-Gravity Conditions

Volodymyr I. Kovalchuk [1,*], Giuseppe Loglio [2,*], Alexey G. Bykov [3], Michele Ferrari [2], Jürgen Krägel [4], Libero Liggieri [2], Reinhard Miller [4,5], Olga Yu. Milyaeva [3], Boris A. Noskov [3], Francesca Ravera [2], Eva Santini [2] and Emanuel Schneck [4,5]

[1] Institute of Biocolloid Chemistry, 03142 Kyiv (Kiev), Ukraine
[2] Institute of Condensed Matter Chemistry and Technologies for Energy, Unit of Genoa, 16149 Genoa, Italy; michele.ferrari@ge.icmate.cnr.it (M.F.); libero.liggieri@ge.icmate.cnr.it (L.L.); francesca.ravera@ge.icmate.cnr.it (F.R.); eva.santini@ge.icmate.cnr.it (E.Sa.)
[3] Department of Colloid Chemistry, St. Petersburg State University, 198504 St. Petersburg, Russia; ag-bikov@mail.ru (A.G.B.); o.milyaeva@spbu.ru (O.Y.M.); borisanno@rambler.ru (B.A.N.)
[4] Max Planck Institute of Colloids and Interface, 14424 Potsdam, Germany; kraegel48@gmail.com (J.K.); miller@fkp.tu-darmstadt.de (R.M.); schneck@fkp.tu-darmstadt.de (E.Sc.)
[5] Physics Department, Technical University Darmstadt, 64289 Darmstadt, Germany
* Correspondence: vladim@koval.kiev.ua (V.I.K.); giuseppe.loglio@ge.icmate.cnr.it (G.L.)

S1. Temperature and Amplitude Dependences of Interfacial Tension



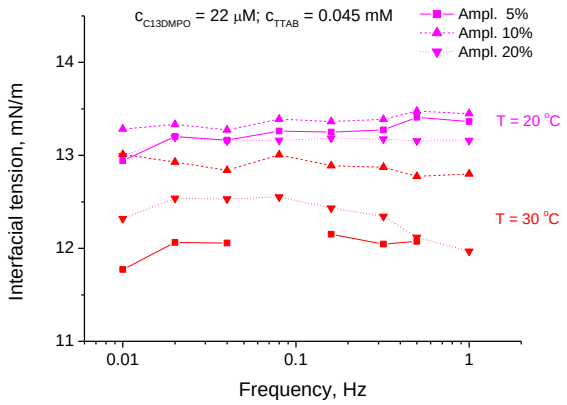
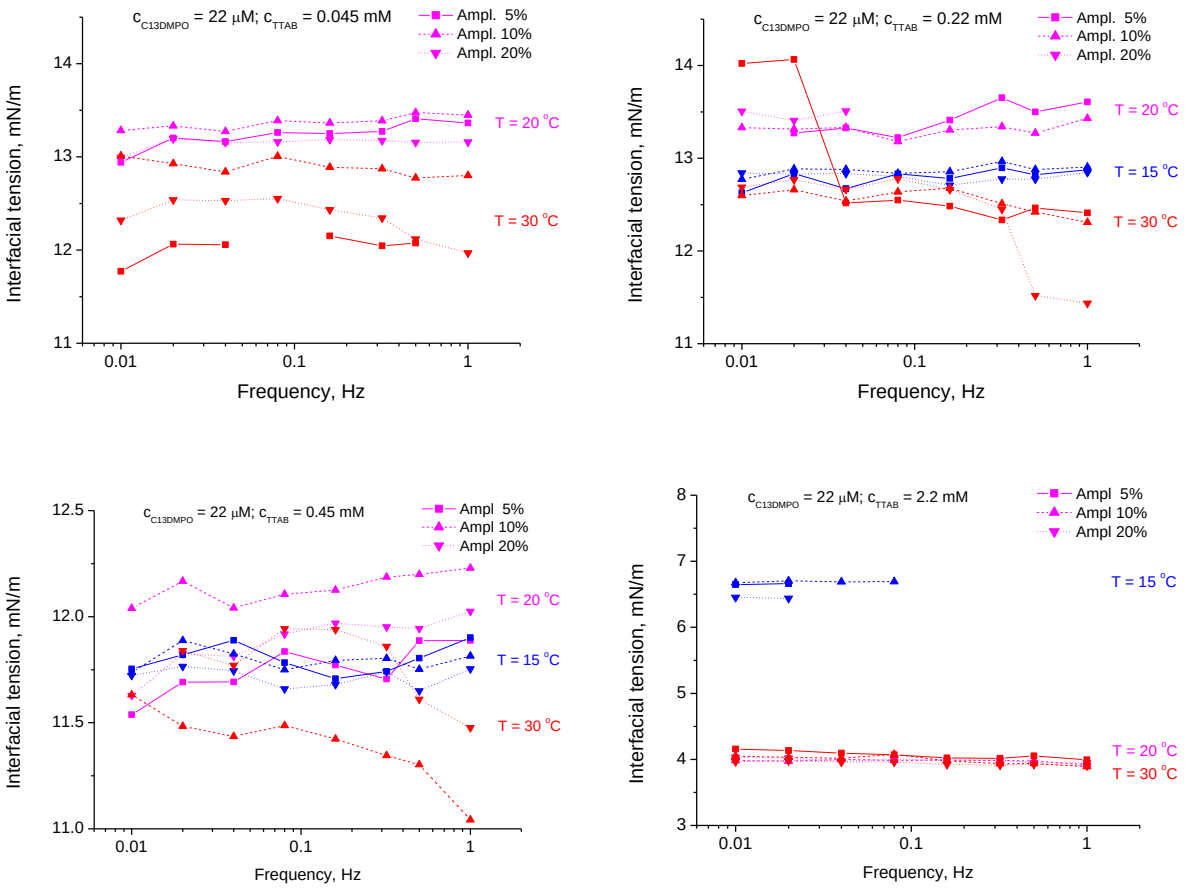


Figure S1. Temperature (blue T = 15°C, magenta T = 20°C, red T = 30°C) and amplitude (squares - Ampl. 5% up triangles - Ampl. 10%, down triangles - Ampl. 20%) dependences for the mean-level values of interfacial tension oscillations as a function of frequency (f = 0.01, 0.02, 0.04, 0.08, 0.16, 0.32, 0.5, 1.0 Hz) at C_{13}DMPO concentrations of c_1 = 4.0×10^{-7}, 8.0×10^{-7}, 4.0×10^{-6}, 8.0×10^{-6}, and 2.2×10^{-5} mol/dm^3, and at a fixed TTAB concentration c_2 = 4.5×10^{-5} mol/dm^3.



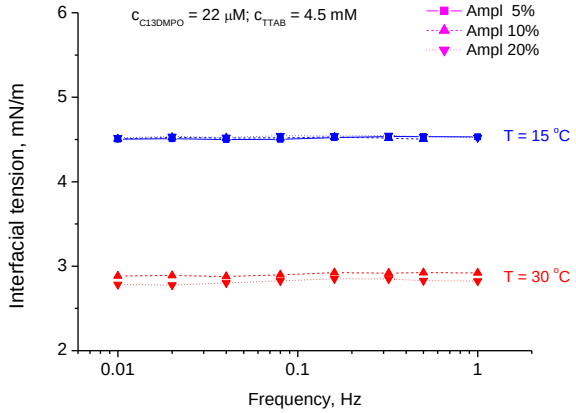
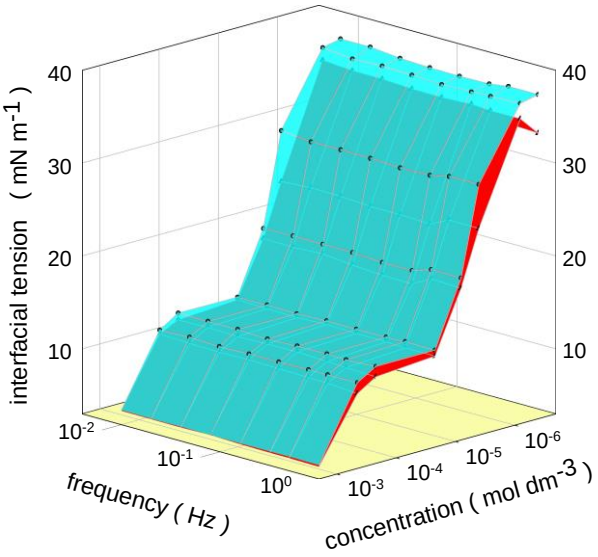


Figure S2. Temperature (blue T = 15°C, magenta T = 20°C, red T = 30°C) and amplitude (squares - Ampl. 5% up triangles - Ampl. 10%, down triangles - Ampl. 20%) dependences for the mean-level values of interfacial tension oscillations as a function of frequency (f = 0.01, 0.02, 0.04, 0.08, 0.16, 0.32, 0.5, 1.0 Hz) at TTAB concentrations of c_2 = 4.5×10^{-5}, 2.2×10^{-4}, 4.5×10^{-4}, 2.2×10^{-3}, 4.5×10^{-3}, mol/dm^3, at a fixed C_{13}DMPO concentration of c_1 = 2.2×10^{-5} mol/dm^3.

S2. Overview: 3D-Graphs (T = 20 °C, T = 30 °C)



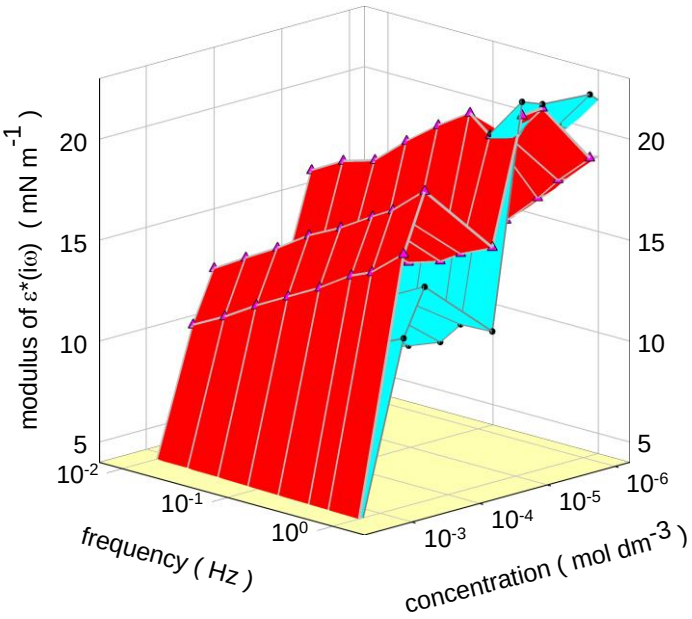
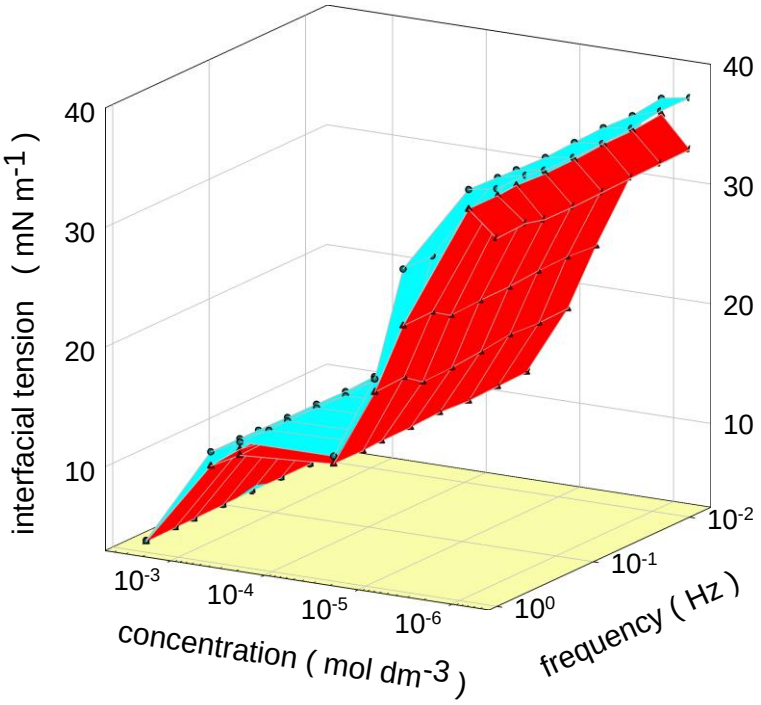


Figure S3. Temperature dependence (cyan surface T = 20 °C, red surface T = 30 °C) for the mean-level values of interfacial tension oscillations upper panel) and for the ε*(iω) modulus (lower panel) as a function of frequency (f = 0.01, 0.02, 0.04, 0.08, 0.16, 0.32, 0.5 and 1.0 Hz) and as a function of concentration, in the concentration sequence for C_{13}DMPO (at concentrations of 4.0×10^{-7}, 8.0×10^{-7}, 4.0×10^{-6}, 8.0×10^{-6} and 2.2×10^{-5} mol/dm^3 at a fixed TTAB concentration of 4.5×10^{-5} mol/dm^3), and of TTAB (at concentrations of 4.5×10^{-5}, 2.2×10^{-4}, 4.5×10^{-4} and 2.2×10^{-3} mol/dm^3 at a fixed C_{13}DMPO concentration of 2.2×10^{-5} mol/dm^3). Graph rotation: Horizontal view = 45°; Vertical view = 15°.



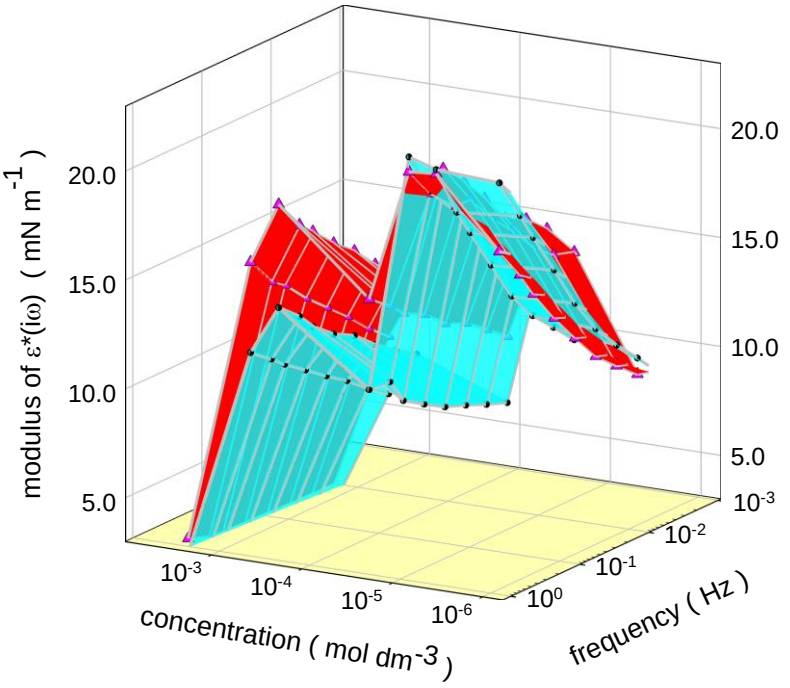
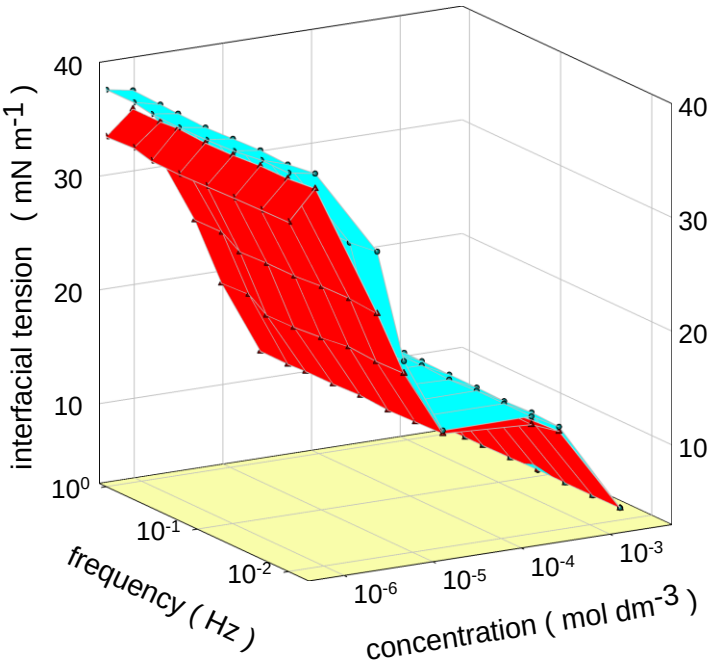


Figure S4. Same as Figure S3. Graph rotation: Horizontal view = 120°; Vertical view = 15°.



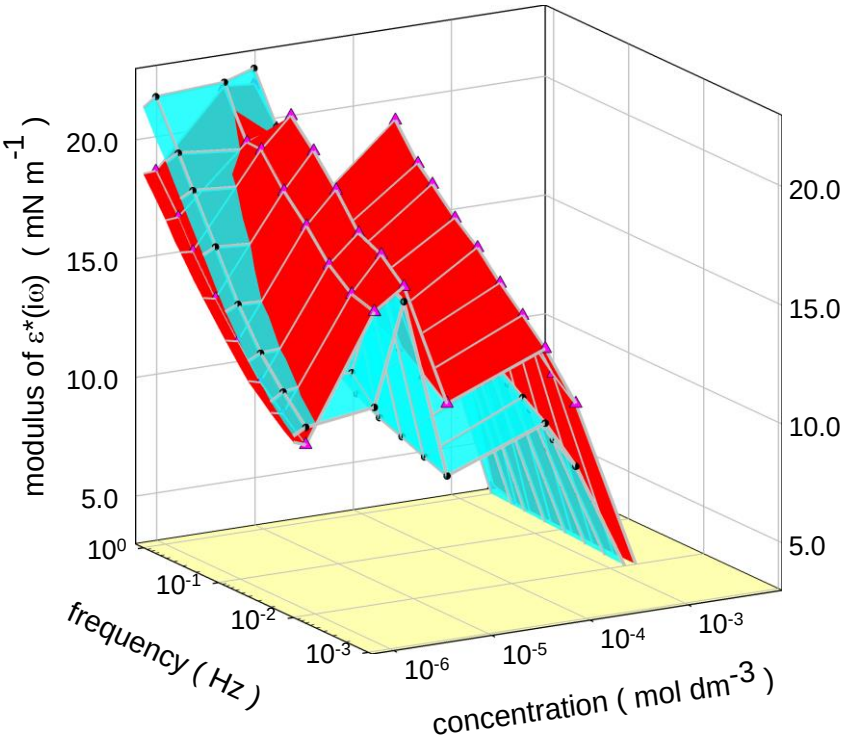


Figure S5. Same as Figure S3. Graph rotation: Horizontal view = 240°; Vertical view = 15°.