

Errata Jones

p 8. Hydrogen bond. $2\text{--}6 \times 10^{-20}$ J, corresponding to 25-100 kT. At room temperature $1 \text{ kT} \sim 4 \times 10^{-21}$ J so H-bond corresponds to $\sim 5\text{--}15$ kT. *Thank you Johan S*

p 23 exercise 2.4 c) MULTIPLIED by the density of bonds not *divided*.

p 48 exercise 3.6. Is the answer correct? I cannot reproduce the result.

p72 exercise 4.5 Is the answer correct? Using $Pe=1$, $\eta_0=1.04 \times 10^{-3}$ Pas, $a=10^{-7}$ m, and film thickness 2×10^{-4} m in equation 4.51 I get 4.2×10^{-2} m/s, that is not very substantial shear thinning.

p 80 equation 5.12. should probably read $F_{rep}=kTvN^2/r^3$. We should not divide by 2.

p 80 equation 5.13. should probably read $F_{el}=(3/2)*kTr^2/(Na^2)$. Jones is missing $(3/2)^*$.

p 81 equation 5.16. The second term on rhs should be $zNv(e_{ps} - e_{ss})$. Jones forgets the v and the minus sign. This is not important for the result since that term ends up in the constant (independent on r) but nevertheless it makes following the calculations more difficult.

p 87 When Jones defines the complex modulus he forgets the imaginary unit before $G''(w)$. $G''(w)$ is a real quantity and the imaginary unit is NOT comprised within it (otherwise eq 5.33 would be strange).

It should say: $G^*(w)=G'(w)+iG''(w)$.

p 133 equation 8.5. There should be a minus sign on the rhs.

p 133 equation 8.6. Also a minus sign missing.

minor details

p 23. exercise 2.7 the constant B should have a unit (deg C)

exercise 2.7 b) ON what timescale, not *or* what timescale.