ERRATUM

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Erratum to: Effect of fibrils on curvature- and rotation-induced hydrodynamic stability

Published online: 21 January 2015
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Erratum to: Acta Mech 224, 2249–2261 (2013)
DOI 10.1007/s00707-013-0929-8

Unfortunately, the calculation of the theoretical viscosity was incorrect in the original article. This error affects Figs. 6 and 10 and four text passages where these figures are discussed. The main result of the paper, *i.e.* that the experiments show that fibrils affect the instability less than what would be expected from viscometry but more than indicated by the theoretical consideration, are not affected. Below, detailed changes and corrected figures are provided.

The second sentence in the first paragraph in Sect. 4.2 Linear stability results:

The aspect ratio ($r_p = 340$) and interaction coefficient ($C_l = 0.05$) has been chosen such that the calculated effective viscosity is equal to $\mu_s/\mu_f = 1.4$ at the concentration of the experiments (see Fig. 6).

is to be replaced with:

The aspect ratio ($r_p = 340$) and interaction coefficient ($C_l = 0.05$) have been chosen such that the calculated effective viscosity is equal to $\mu_s/\mu_f = 1.2$ at the concentration of the experiments (see Fig. 6).

The last sentence in the first paragraph of the discussion:

The same trend is seen in the theoretical consideration: the relative effect on viscosity is larger than the effect on stability measured by $Re_{c,s} = Re_{c,f}$.

is to be replaced with:

The online version of the original article can be found under doi:[10.1007/s00707-013-0929-8](https://doi.org/10.1007/s00707-013-0929-8).

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A different observation is made in the theoretical consideration: the relative effect on viscosity is similar to the effect on stability measured by $Re_{c,s} = Re_{c,f}$.

The third paragraph in the Discussion:

The relative effect of fibrils on bulk viscosity vs. relative effect on critical Reynolds number is measured by $(\mu_s/\mu_f)/(Re_{c,s}/Re_{c,f})$. The experimental values of this property is 1.3–1.4. Theoretically calculated values are plotted in Fig. 10 for different Φ , r_p and C_l . The variation is performed around the values marked with a solid circle in Fig. 6. The effects of Φ and r_p in (a, b) are considerable, whereas there is somewhat of plateau for $0.05 < C_l < 0.5$ in (c). For the (physically reasonable) values of Φ and r_p used, this plateau occurs at approximately 1.2, i.e. somewhat lower than observed in experiments. The level of this plateau is of course strongly dependent on Φ and r_p as indicated by the near-linear relations in (a, b).

is to be replaced with:

The relative effect of fibrils on bulk viscosity vs. relative effect on critical Reynolds number is measured by $(\mu_s/\mu_f)/(Re_{c,s}/Re_{c,f})$. The experimental values of this property is 1.3–1.4. Theoretically calculated values are plotted in Fig. 10 for different Φ , r_p and C_l . The variation is performed around the values marked with a solid circle in Fig. 6. The effects of Φ , r_p and C_l are around 10%. For the (physically reasonable) values used, the value is around 1, i.e. considerably lower than observed in experiments.

The last itemised conclusion:

The effect on bulk viscosity is larger than the effect on stability in both the experiments and the theoretical consideration.

is to be replaced with:

The effect on bulk viscosity is larger than the effect on stability in the experiments but similar in the theoretical consideration.

The corrected versions of Figs. 6 and 10 are provided on the next page.

Fig. 6 Effects of parameters in case I on the suspension viscosity on the fibril stress model used. In both **a** and **b** the effective viscosity, μ_s/μ_f , is shown versus the aspect ratio r_p . The values chosen in the results are marked by (●) and (■). In **(a)** the volume fraction, $\Phi = 308$ ppm, is kept constant and the interaction coefficient is varied, with the values $C_l = 0, .0001, 0.01, 0.05, 1$. In **(b)** the interaction coefficient is kept constant at $C_l = 0.05$ and the volume fraction is varied with the values $\Phi = 10^{-4}, 2 \cdot 10^{-4}, 3.08 \cdot 10^{-4}, 5 \cdot 10^{-4}, 10^{-3}$.

Fig. 10 The ratio between relative viscosity and increase in critical Re, $(\mu_s/\mu_f)/(Re_{c,s}/Re_{c,f})$, for different values of Φ , r_p and C_l . The variation is performed around the *solid points*, which are the same as the *solid circles* in Fig. 6 ($\Phi = 308$ ppm, $r_p = 340$, $C_l = 0.05$)