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## Figure Captions

**Fig. 1** Volume-averaged size  $d_{43}(\mu\text{m})$  plotted against weight-percentage LBG (wt %) for the original emulsion prior to freezing. A)  $\cdots\blacklozenge\cdots$  pH 5.0, b)  $--\blacksquare---$  pH 5.5, c)  $- \blacktriangle -$  pH 6.0 and d)  $\rightarrow\blacktimes\leftarrow$  pH 6.5.

**Fig. 2** Volume-averaged size  $d_{43}(\mu\text{m})$  plotted against weight-percentage LBG (wt %) for emulsions after freeze-thaw cycle. A)  $\cdots\blacklozenge\cdots$  pH 5.0, b)  $--\blacksquare---$  pH 5.5, c)  $- \blacktriangle -$  pH 6.0 and d)  $\rightarrow\blacktimes\leftarrow$  pH 6.5.

**Fig. 3** The particle size distribution for emulsions a) initially prepared b) after freezing and thawing c) for freeze dried and reconstituted system. In each graph emulsions with several different LBG concentrations are shown: I) dashed line 0.0%, II) dash-dotted line 0.2%, III) long dashed line 0.4% and IV) solid line 0.6% LBG content.

**Fig. 4** Volume-averaged size  $d_{43}(\mu\text{m})$  plotted against weight-percentage LBG (wt %) for the freeze dried and reconstituted emulsions A)  $\cdots\blacklozenge\cdots$  pH 5.0, b)  $--\blacksquare---$  pH 5.5, c)  $- \blacktriangle -$  pH 6.0 and d)  $\rightarrow\blacktimes\leftarrow$  pH 6.5.

**Fig. 5** Creaming index plotted against weight-percentage LBG (wt %) for the same emulsion systems as those shown in Fig. 1, after 10 days of storage at room temperature.

**Fig. 6** Creaming index plotted against weight-percentage LBG (wt %) for the same emulsion systems as those shown in Fig. 2, i.e. following freeze-thawing and immediately obtained once emulsions reached room temperature.

**Fig. 7** Graph showing the consistency index obtained from a power law fluid behaviour applied to various emulsion systems, prepared at different pH and LBG content, prior to freezing.

**Fig. 8** Graph showing the flow behaviour index obtained from a power law applied to various emulsion systems, prepared at different pH and LBG content, prior to freezing.

**Fig. 9** Apparent viscosity (Pas) plotted against the shear rate ( $s^{-1}$ ) for three emulsion systems with different LBG content a) dashed line 0.0% b) dash-dotted line 0.2% and c) solid line 0.6% LBG. All systems were studied prior to freezing and had a pH=6.

**Fig. 10** The same as Fig. 9, but now with emulsions prepared at a pH value of 6.5.

**Fig. 11** Micrographs obtained with 400X magnification showing various emulsions all originally prepared at pH=6.5: a) initial emulsion with no LBG b) initial emulsion with 0.2% LBG c) the latter emulsion after 30 min post dilution d) the Emulsion containing 0.2% LBG after freeze-thawing cycle e) 0.0% LBG, following freeze drying and then reconstituted f) the same as (e) but with 0.2% LBG.

## Figures

Fig. 1

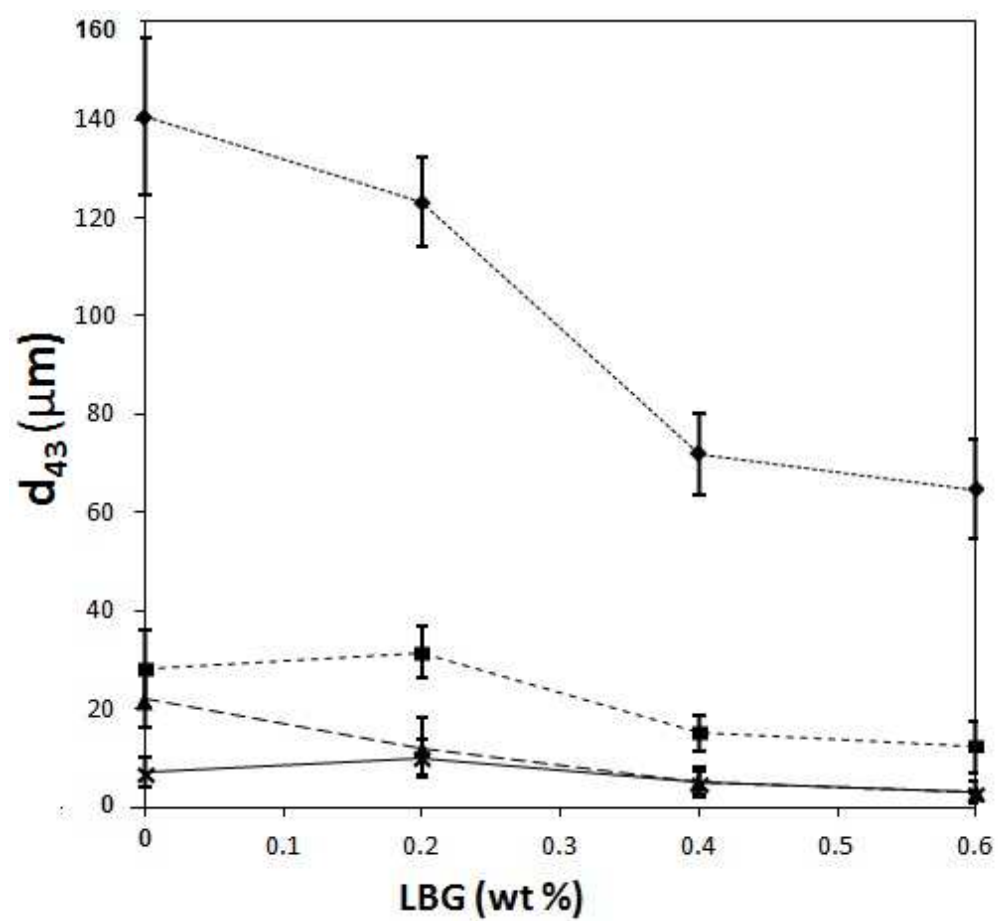


Fig. 2

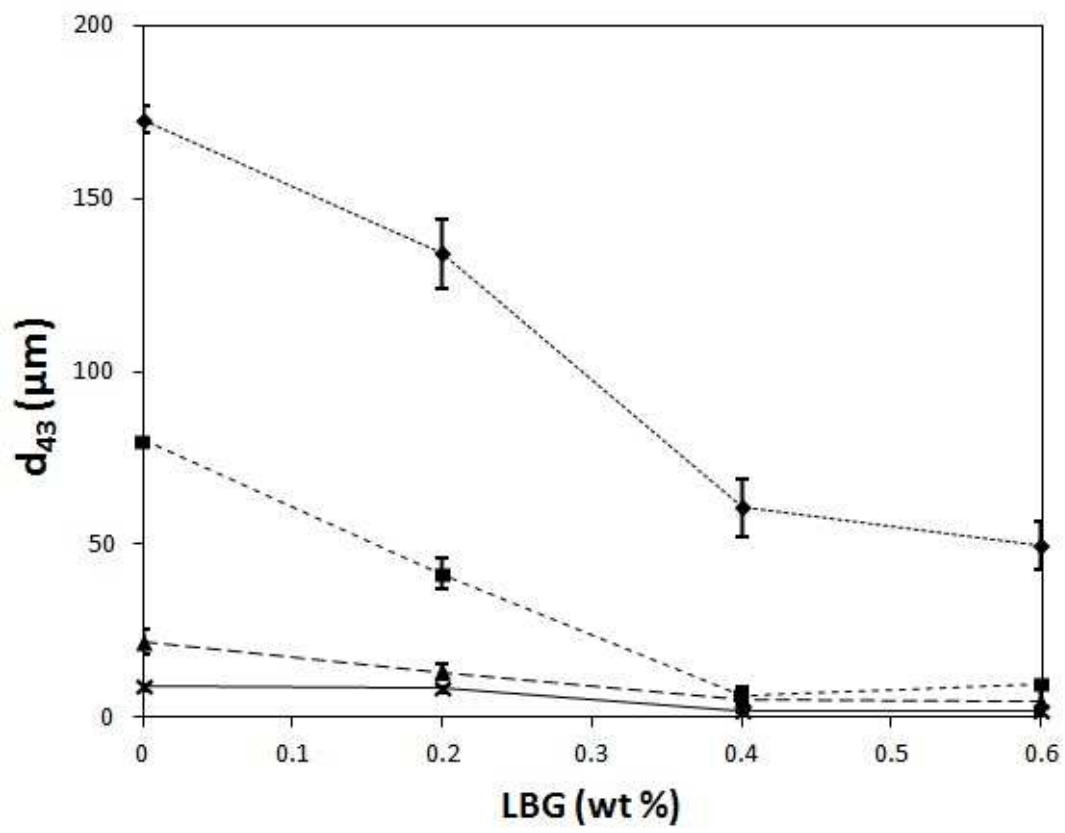
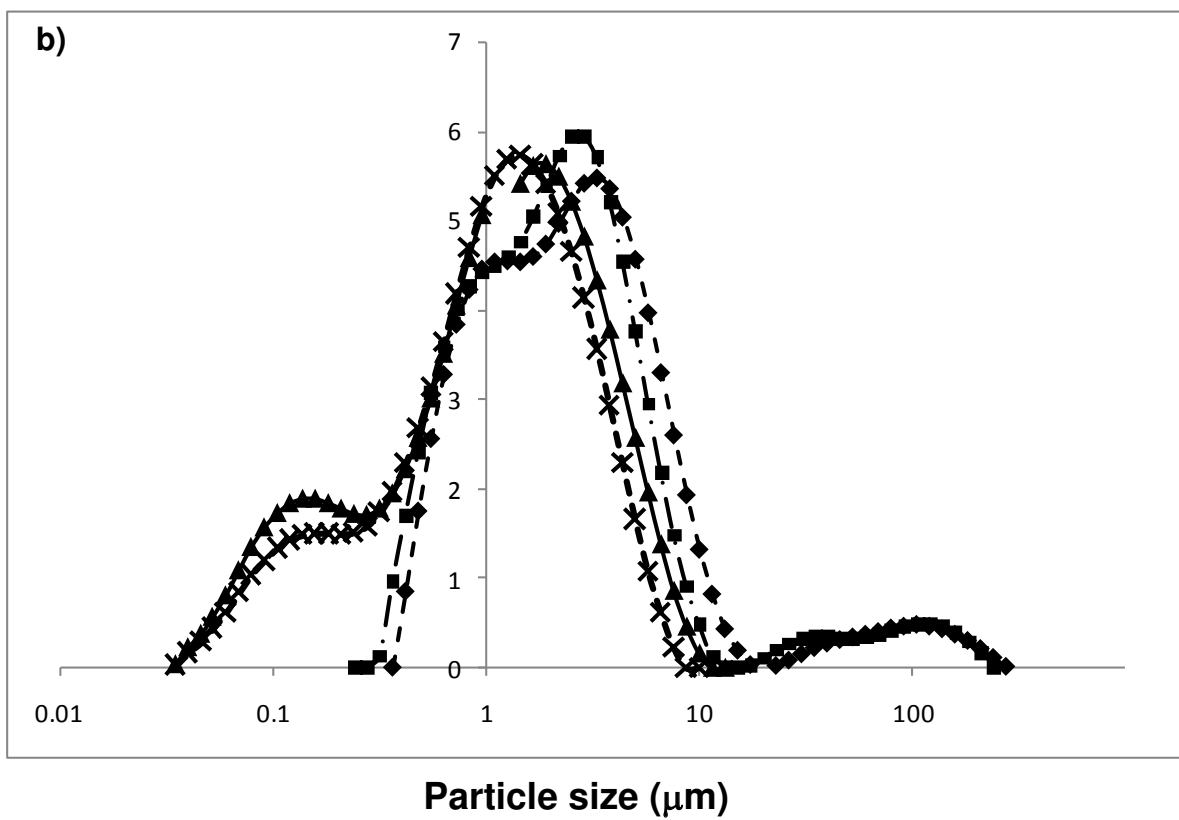
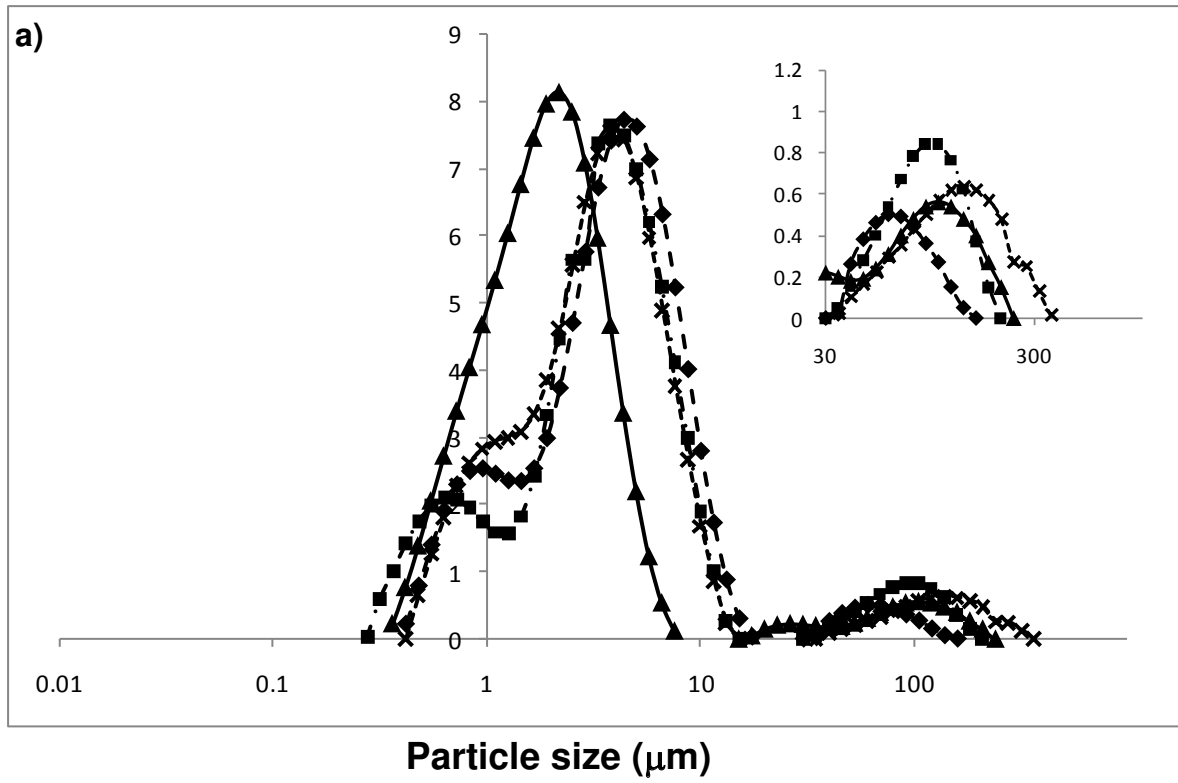


Fig. 3



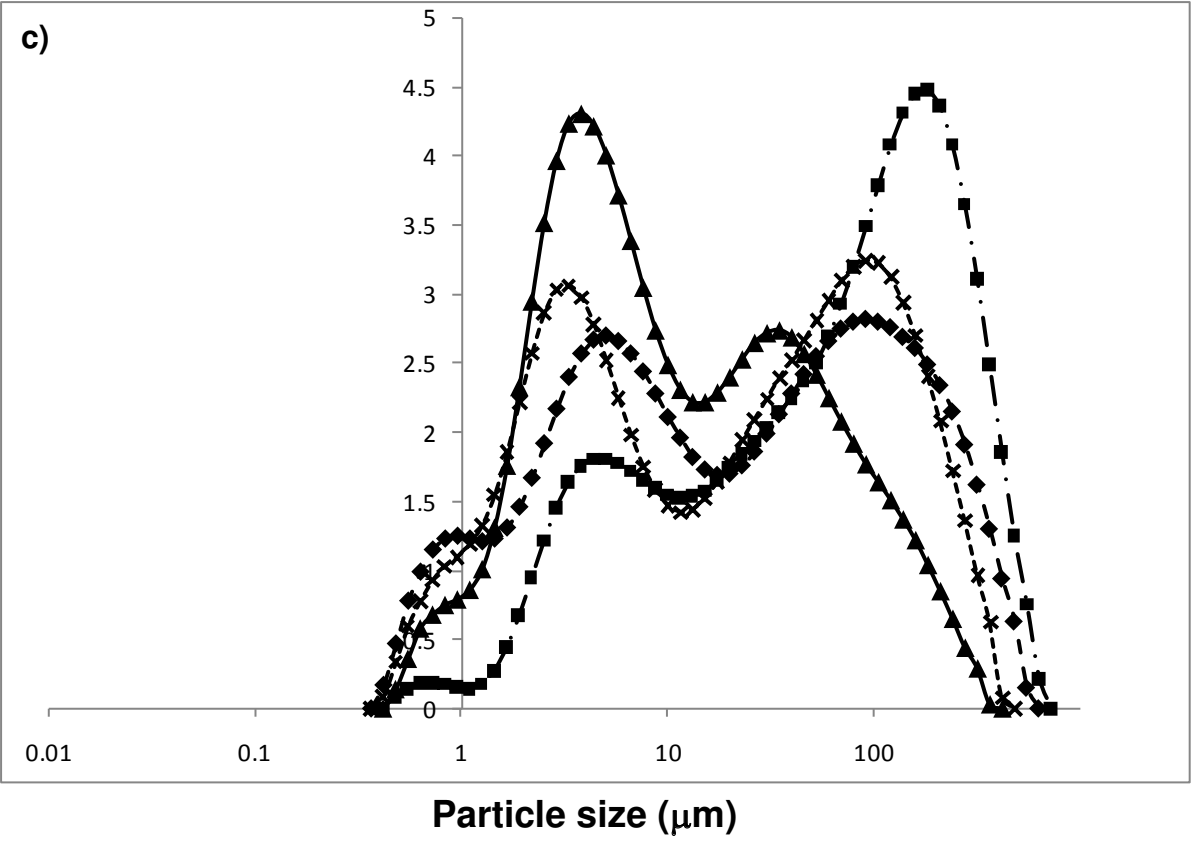


Fig. 4

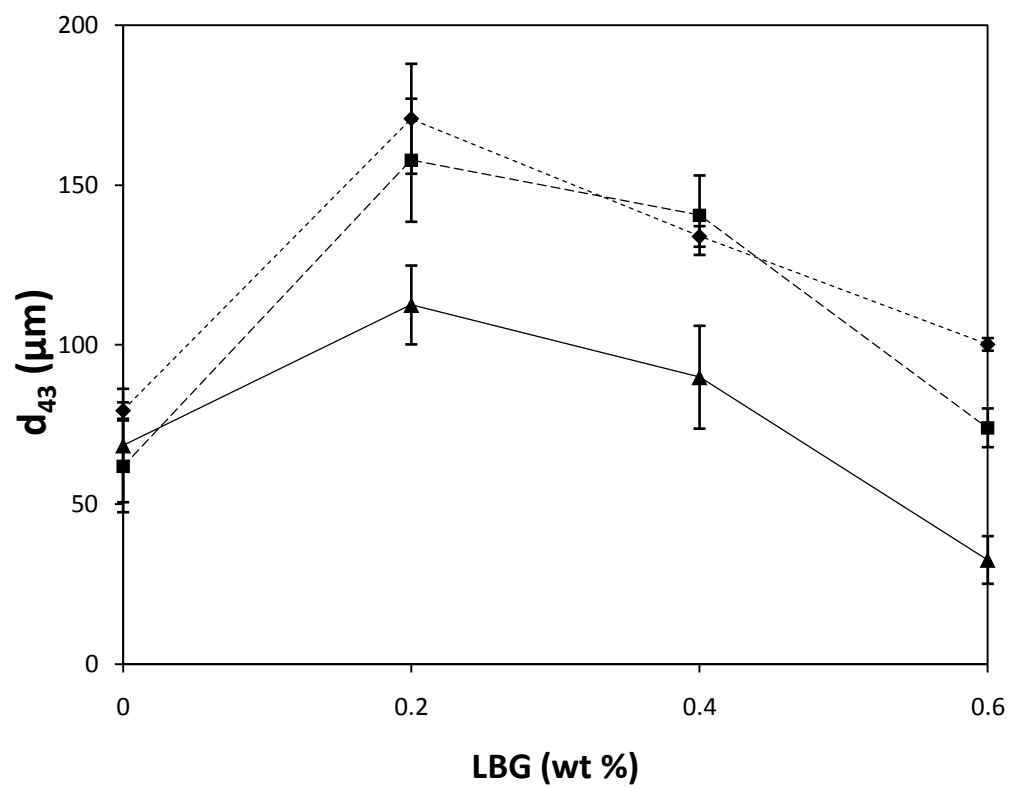




Fig. 5

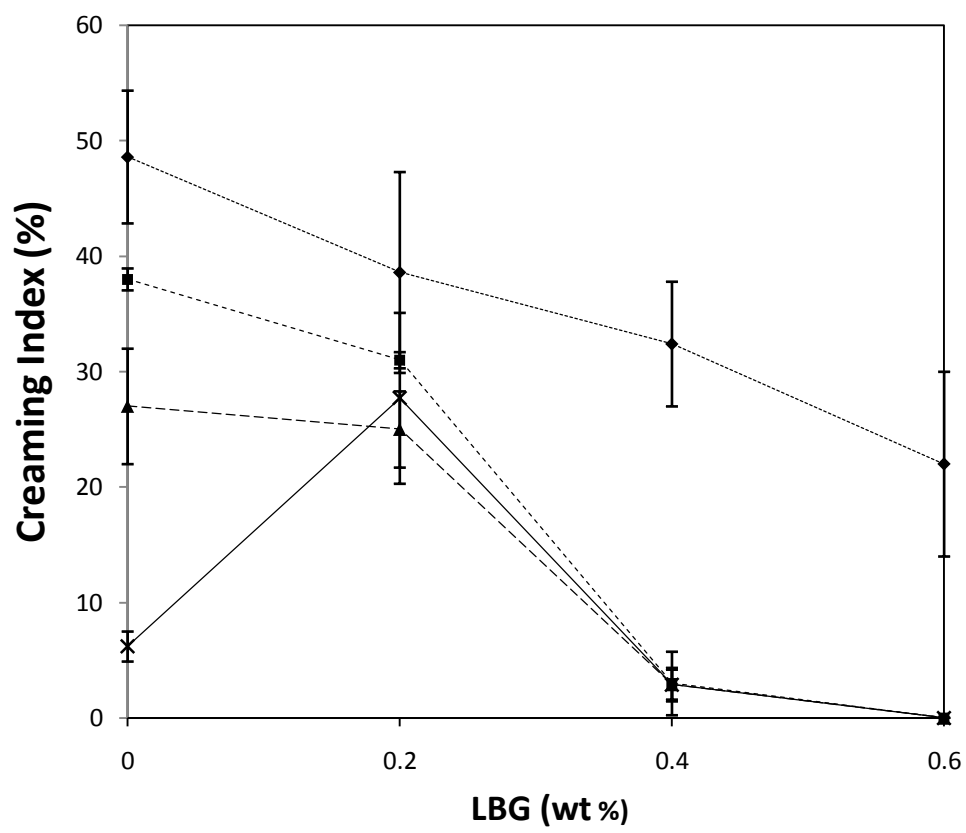
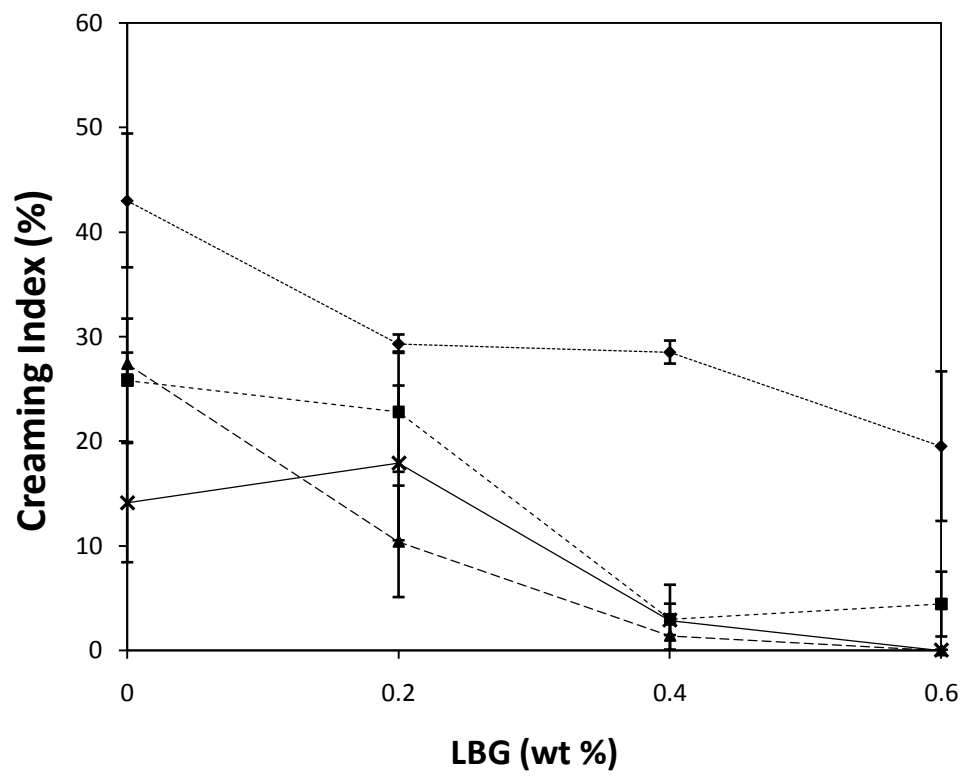
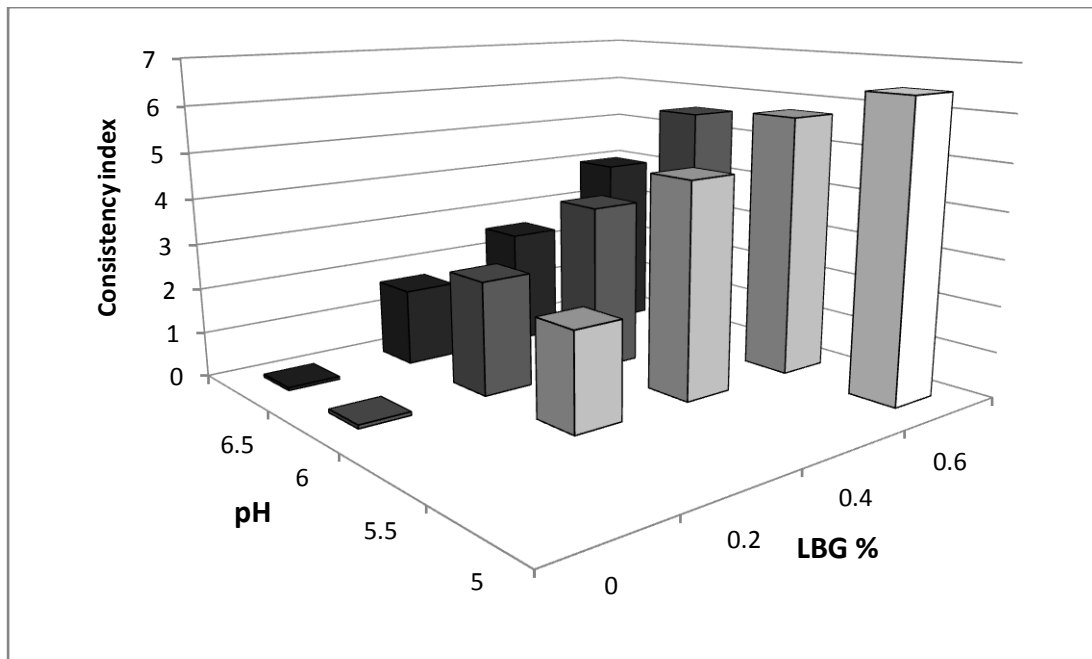


Fig. 6



**Fig. 7**



**Fig. 8**

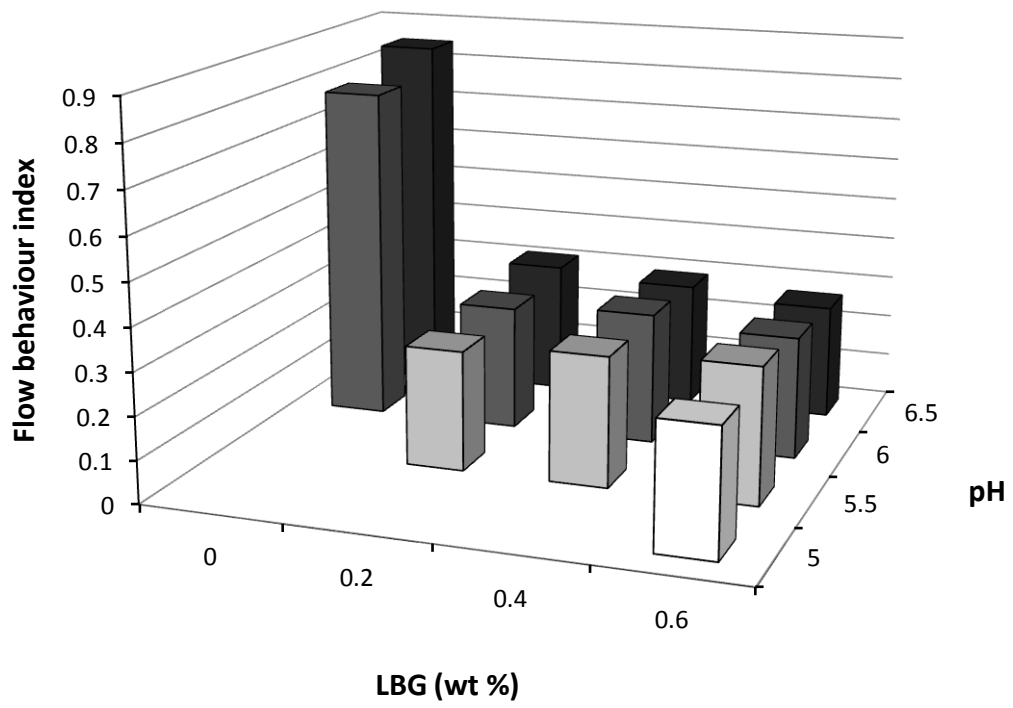


Fig. 9

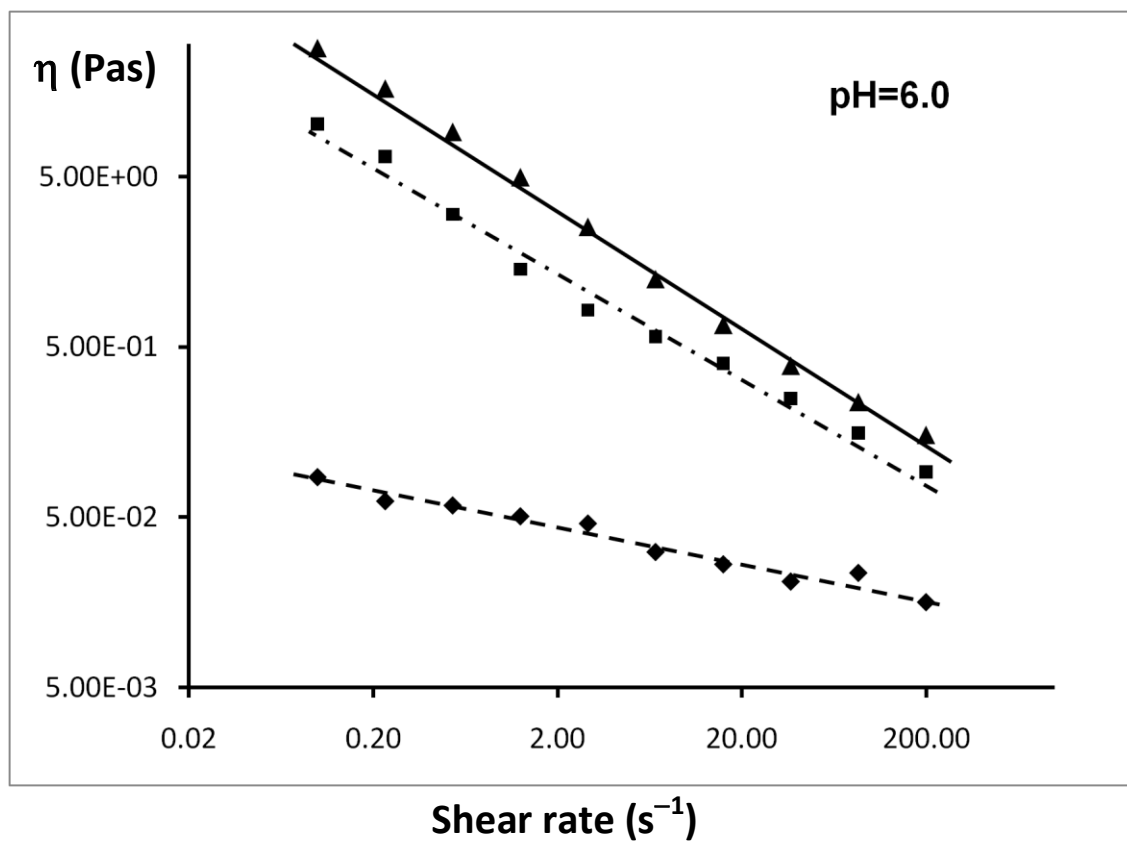
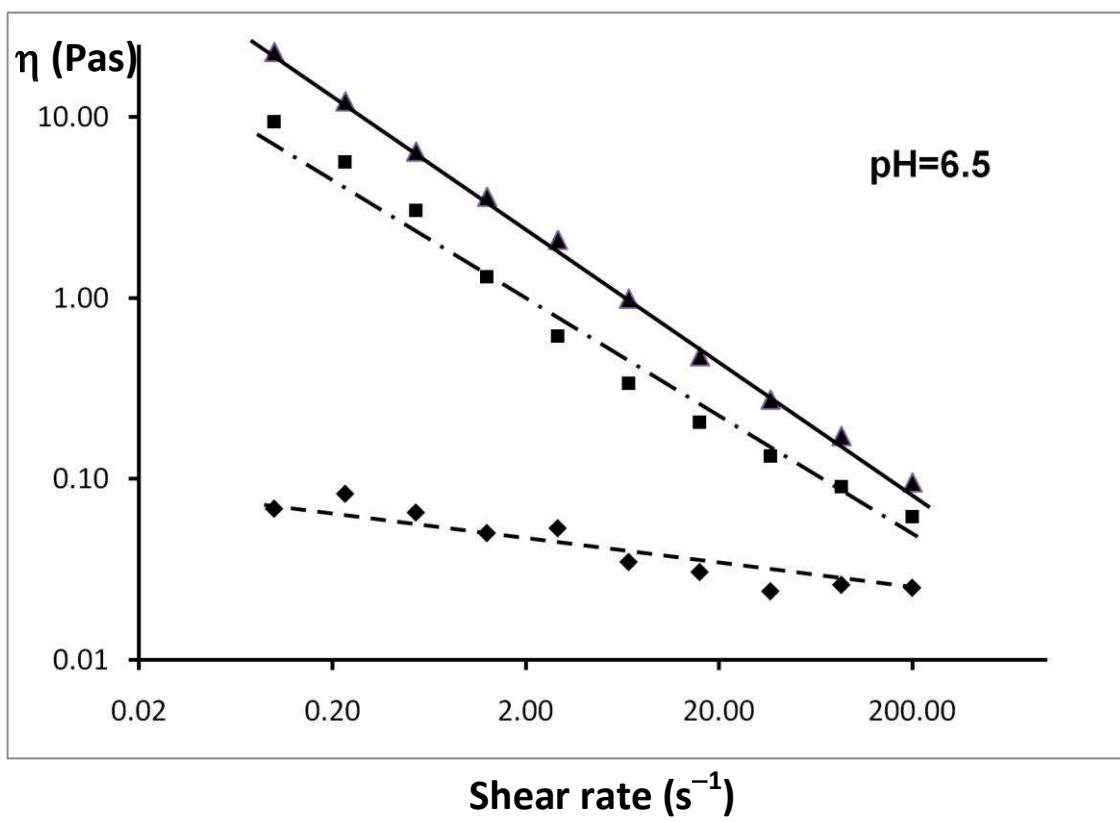


Fig. 10



**Fig. 11**

