The parameters used for all theoretical graphs were, unless stated otherwise:

Gap (h)	=	0.1 mm
Wire Radius (R)	=	0.825 mm
Wire Yield Stress (Y)	=	245 MN/m^2
Tube Length (L)	=	60 mm
Polymer Viscosity (n)	=	50 Ns/m^2
Critical Shear Stress (Tc)	=	0.6×10^6 N/m^2

These values can be considered 'typical' and were also used when estimating the experimental error (see Chapter 6.01). To aid comparison between the effects of changing various parameters the same graph axes were used throughout.

Assumptions were made, further to those already described in Chapter II, when calculating the theoretical results explained above.

Firstly the viscosity was assumed to be constant when in fact it is reduced by shear stress and increased by pressure. The effect of shear stress on viscosity can be measured (see Fig. 8) and a mean value may be assumed. It is impossible, however, to measure the combined effect of both high shear stress and high pressure although there is reason to believe they may, to some extent, cancel each other out. This problem is discussed more fully later.

It was also assumed that the transition from no slip to total slip takes place instantaneously at the velocity Vc when in practice it is more likely to take place over a small range of velocities. This gives the theoretical graphs a sharp peak where as the effect of the slip taking place over a range of velocity would be to "round-off" this peak.