

Abstract Submitted  
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**Revised Capillary Breakup Rheometer Method** LOUISE LU,  
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than integrate the one-dimensional equation of motion for a capillary breakup  
rheometer, we take the axial derivative of that equation. This avoids the deter-  
mination of the axial force with all of its complications and correction factors. The  
resulting evolutionary equation that involves either two or four derivatives of the  
capillary radius as a function of the axial coordinate determines the ratio of elon-  
gational viscosity to surface tension coefficient. We examine several silicone and  
olive oils to show the accuracy of the method for Newtonian fluids. We will discuss  
our surface tension measurement techniques and briefly describe measurements of  
viscoelastic materials, including saliva.

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