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# ACCEPTED MANUSCRIPT

## Drop Velocity in a Rotating Liquid-Liquid System

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#### **Abstract**

Measurements of the drop velocity in the absence of mass transfer, for two liquid-liquid systems in a rotating liquid-liquid extractor unit have been carried out using a high-speed video camera. The drop velocity was measured as function of rotational speed, radius and physical properties.

These velocities were compared with those predicted from the equation of motion for the drop and it was found that the contribution of the history integral was important in predicting drop velocity.

Keywords: Centrifugation, Drop, Extraction, Particle.

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