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Retention Forces of Water Droplets on Polymers JONATHAN TAY-LOR, R. DE LA MADRID, F. GARZA, T. MICHEL, B. VIZENA, H. LUONG, Lamar Univiversity, R. DE LA MADRID, J. TAYLOR, F. GARZA, T. MICHEL, B. VIZENA, H. LUONG TEAM — The forces that make up the retention force between water droplets and a surface are complex, relying on size, contact angles, and substrate properties. Our experiment examines this retention force by studying drops subject to a centrifugal force on top (sessile) and on bottom (pendant) of a polymer plate. Intuitively, it would seem that a pendant drop would have a lower net retention force due to gravity, but our experiment shows this is often not the case for small drops and that the sessile drop will usually have the lower retention force.

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