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A Surface Plasmon Resonance Investigation of How Water Meets a Hydrophobic Surface. ADELE POYNOR, Allegheny College, Physics Department, COREY SHEMELYA — By definition hydrophobic substances hate water. Water placed on a hydrophobic surface will form a drop in order to minimize its contact area. What happens when water is forced into contact with a hydrophobic surface? One theory is that an ultra-thin low- density region forms near the surface. We have employed the surface-sensitive, quantum-optical technique of Surface Plasmon Resonance (SPR) to verify the existence of this region at the boundary.

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