

Abstract Submitted
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Optical Tweezers at Angelo State University ANDY RUSSELL,
TONI SAUNCY, Angelo State University — Simple plans for the development of an
optical tweezers apparatus can be found in current literature. The optical tweezers
is based on utilizing force gradients produced by well focused light and can be used
to manipulate very small samples ($<600\text{nm}$) without direct contact. The physics
required to understand the optical tweezers is accessible to undergraduate students,
making the experiment attractive for advanced undergraduate teaching labs. An
optical tweezers apparatus has been constructed at Angelo State University and is
currently being tested for its feasibility as a tool for investigating delicate biological
samples.

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