

Abstract Submitted  
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**Atomic force microscope measurement of a polyethyleneterephthalate surface modified by an atmospheric pressure air plasma source<sup>1</sup>**  
SHUJUN YANG, Alabama A&M University, JIANSHENG TANG, Hunan First Normal College — An atmospheric pressure air plasma source was generated through dielectric barrier discharge (DBD). The modification of polyethyleneterephthalate (PET) surfaces by this plasma was investigated. PET strips were exposed to the plasma at the exit of the plasma source. Water contact angles were measured for surfaces modified with different processing parameters. Atomic force microscope (AFM) measurements on an unmodified PET surface and a modified PET surface showed the formation of a rougher surface by the plasma treatment. The PET surface profile change was due to an etching effect from the air plasma.

<sup>1</sup>NSF

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