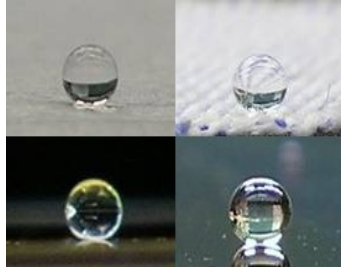
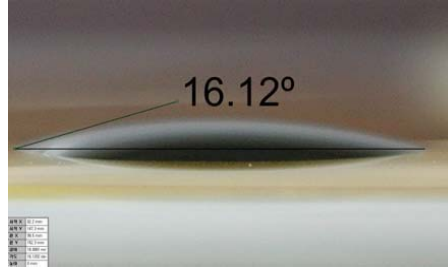




## Technology 077: Atmospheric Process Plasma



**Superhydrophobic  
nano-coating**



**Hydrophilic coating**



**1.5 meter treatment path**

### Description:

Atmospheric Process Plasma offers a unique and patented plasma coating application for cleaning, coating and surface modification enabling layer bonding without the presents of glue or acrylics. Manufacturers may enhance optical properties of surfaces: change the electric state, allow hydrophobic surfaces to be wet able, and non-wet able surfaces to become hydrophilic, without the constraints of large expensive vacuum chambers.

- Alters surface quality of materials for cleaning, coating and bonding.
- Treatment at room temperature versus high temperature of other plasma devices.
- Only super-hydrophobic solution.
- Only plasma device capable of 1.5 meter treatment path.
- Direct treatment application utilizes up to 30% less gas.
- Treatment cost can be minimized with respect to conventional vacuum plasmas that utilize low pressure chambers.
- Absence of a vacuum chamber creates versatile linear processing plasma. Conventional vacuum plasmas require batch applications that slow down production capabilities.
- Uses include cleaning, coating and surface modification for LCD, LED and SC wafers and film lamination; lab-on-a-chip; and nano and inkjet printing.
- Provide significant manufacturing savings and improve performance of a wide range of products in automotive, aerospace, electronics, medical sterilization & bio-chip markets.

### Development Status:

- Atmospheric Plasma Process Co. Ltd, was founded in 2006.
- In full scale production. Being utilized by Samsung overseas and fully operational at this time.
- Thorough IP protection in Korea. Applications filed in the United States, Japan, and China.

Additional information contact **Valerie Hase**, IC<sup>2</sup> Institute Global Commercialization Group at **512-797-7664** or [vhase@vtsaustin.com](mailto:vhase@vtsaustin.com). Video: [http://www.youtube.com/watch?v=G58g\\_iXWPQQ](http://www.youtube.com/watch?v=G58g_iXWPQQ)

