Different Approaches to Measuring Ultra Thin Film Layers of an Organic Light Emitting Diode

ZACHARY WILLIAMS, Stephen F. Austin State University — In this presentation, I will show the different approaches that were taken in order to measure the varying thicknesses of the layers that comprise an Organic Light Emitting Diode (OLED). These approaches made use of an STM, an SEM, and a TEM, in order to measure thicknesses of ultra thin layers (less than 100 nanometers). The results have shown that the TEM is the best option to accurately and efficiently measure the varying layers of our OLEDs.