

# Screening Materials with the XIA UltraLo Alpha Particle Counter at Southern Methodist University

*Thursday, 11 April 2013 15:00 (80)*

Southern Methodist University in Dallas Texas houses one of only five existing UltraLo 1800 production model alpha counters made by XIA LLC. The instrument has an electron drift chamber with a 707 cm<sup>3</sup> or 1800 cm<sup>3</sup> counting region which is determined by selecting the inner electrode size. The SMU team operating this device is part of SuperCDMS screening working group, and uses the alpha counter to study the background rates from the decay of radon in materials used to construct the SuperCDMS experiment. We will present results from our initial calibration and screening runs with the XIA instrument, and will outline our plans for upcoming work to facilitate SuperCDMS to achieve it's goal to limit the experiment's beta backgrounds to a level of less than 0.003 events/cm<sup>2</sup>/day.

## Summary

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