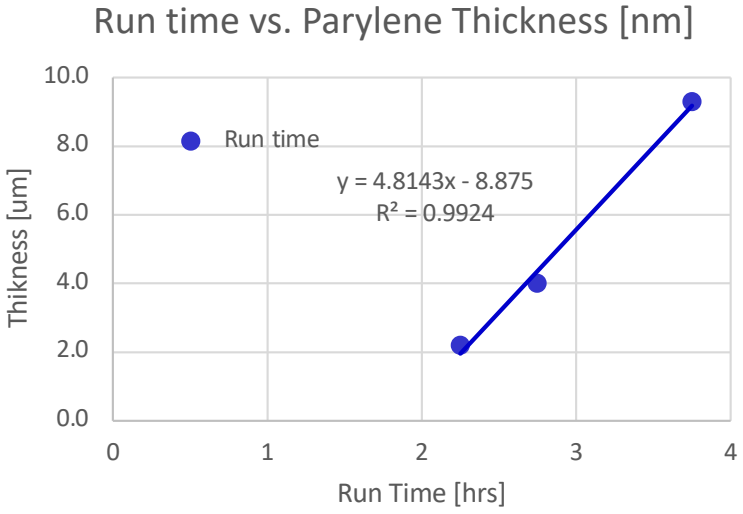
SCS Parylene Deposition System

SCS PDS 2010 Labcoter™ 2

- The PDS 2010 is a vacuum system used for the vapor deposition of Parylene polymer onto a variety of substrates. The clear polymer coating provides an extremely effective chemical and moisture barrier, with high dielectric and mechanical strength.

- The Parylene process sublimates dimer into a gaseous monomer. The monomer then polymerizes, at room temperature, onto the substrate. At the vacuum levels used, all sides of the substrate are uniformly impinged by the gaseous monomer, resulting in a truly conformal coating.

Parylene setup w/ top chamber (left) and Mechanical Chiller (right)



❖ **Run Time w/ Thickness (Amt of Dimer)**

Key Features:

- Wafer size: From small pieces up to 8”
- Can load non-flat samples
- Rotating Platter/sample holder
- Rough Vacuum
- Mechanical Chiller
- Semi-Automatic Run Mode

❖ **Uniformity: ~< 3% (4” wafer)**

“Dimer C” Wt. [g]	Thk Dektak * [um]	Unif % on 4” Si wafer (9 pts)*
2.0	2.2	1.9
5.0	3.97	2.6
10.0	9.3	2.4

* Zhiyu Yan, Sep. 2020

For info contact wangensteen@tamu.edu