

Abstract Submitted
for the NWS11 Meeting of
The American Physical Society

Large Area Graphene Growth and Characterization¹ JENNA WARDINI, JOSHUA KEVEK, TRISTAN DEBORDE, ETHAN MINOT, Oregon State University — Graphene is an exciting new material with exceptional electronic properties. For graphene to become widely used in future electronics applications, optimization of the graphene growth processes is essential. At Oregon State University we have installed a new chemical vapor deposition (CVD) system to improve the quality of large-area (12" x 36") graphene films. Our CVD system has a number of unique capabilities including operating pressures below 10^{-6} Torr and water vapor cleaning to refresh the chamber walls. We will present an overview of the CVD process, the design of our system, and methods we use to characterize graphene surface coverage, grain size and atomic defects. Preliminary results from our growth system will be discussed.

¹This work was funded by the Oregon Nanoscience and Microtechnologies Institute.

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Date submitted: 19 Sep 2011

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