

For University, Community College, and High School Faculty

## Teaching Workshop:

### The Virtual Chemical Vapor Deposition (CVD) Laboratory

Oregon State University

Corvallis, OR

August 6-7, 2008



The Virtual CVD Laboratory allows your students to practice skills currently used in the microelectronics industry, in much the same way a flight simulator is used for training pilots. The laboratory is housed within a three-dimensional (3D) graphical user interface where students become familiar with the appearance of a cleanroom in a comfortable environment, similar to popular video games. CVD reactor operation and wafer measurements have costs associated with them adding a realistic economic constraint.



Come to the **Virtual CVD Workshop** and:

- Learn to enhance student understanding of experimental design in an authentic, real-world context.
- Participate in separate university, community college and high school breakout groups where model curriculum and assessment will be presented.
- Hands-on experiences to:



- Develop a CVD recipe relevant to nanoelectronics and nanotechnology
- Explore the relationship of CVD process parameters, e.g., temperature, pressure, gas flow
- Develop a measurement methodology that accounts for process and measurement error

**Travel funds available**  
**Also receive up to \$500 in stipend**

For more information and to apply:  
<http://cbee.oregonstate.edu/education>

Project Leader: Milo Koretsky ([koretism@engr.orst.edu](mailto:koretism@engr.orst.edu))  
Community College Coordinator: Dave Hata ([dhata@pcc.edu](mailto:dhata@pcc.edu))  
High School Coordinator: Adam Kirsch ([Adam.Kirsch@Corvallis.K12.OR.US](mailto:Adam.Kirsch@Corvallis.K12.OR.US))  
Project Evaluator: Edith Gummer ([gummere@nwrel.org](mailto:gummere@nwrel.org))  
Funded by NSF CCLI DUE 0717905 (Phase 2)

