Cornell Center for Materials Research



Goal: Diagnostic Test, Ovarian Cancer ELISA-format bioassay Higher sensitivity & earlier detection

CatAssays

Project 1- Expert: Synthesis of tetrazolium salts

(2011) Prof. Chad Lewis (Chemistry)- Affordable & resistant to chemical reduction (unwanted background reduction)

Impact: 2015 NCI Phase 1 SBIR

Project 2- Instrument: High resolution TEM

(2015) Prof. Lena Kourkoutis (Applied Physics)

- Size & structure of Gen-2 polymeric nanoparticles containing the Pd catalyst & surface functionalized w/streptavidin for binding to any biotinylated detection AB

"The CCMR enables start-ups, such as CatAssays, to cost-effectively tap into **the worldclass expertise and advanced equipment**, otherwise, **not available to start-up companies**, and provides very valuable assets **in pushing basic concepts to commercialization**. "Henry Gysling, Mark Lelental, Managing Partners, CatAssays, Rochester, NY.



Coat plate	Treat with	Add sample	Add Pd-labeled	Pd catalyzed
with	surface	Antigen hinds	detecting	redox reaction
capture	blocking	to capture AB	antibody	gives dye
antibody	agent	to cupturo 112		

Pd-catalyzed reduction of **a tetrazolium salt** Producing water-soluble Formazan dye