

Nanoparticle Preparation for Novel Biocatalysis

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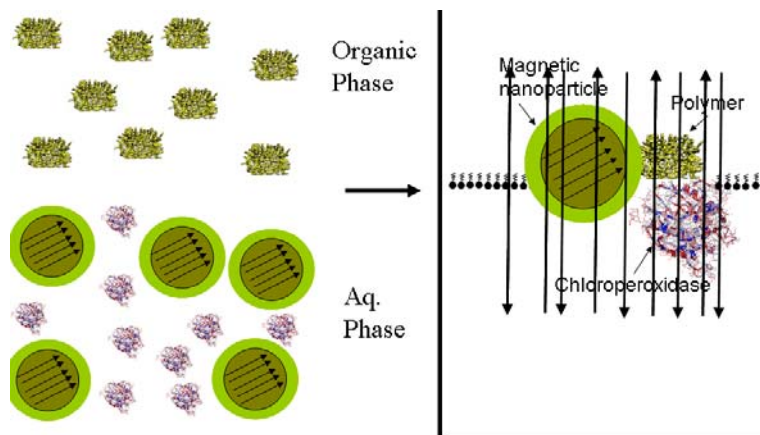
NNIN Facility utilized: Characterization Facility

● DESCRIPTION OF WORK

- ◆ Nanoparticle-nanofiber preparation
- ◆ Biocatalysis with nanomaterials
- ◆ Nanostructure for protein stabilization

● MAJOR OBSERVATIONS

- ◆ Nanostructure improves protein stability
- ◆ Catalysis at nanoscale promises novel processing technology



Interface-assembled magnetic nanoparticles for novel biocatalysis

Publications

- Bilal El-Zahab, **Ping Wang***. Particle-Attached NADH for Methanol Production from CO₂ Catalyzed by Coimmobilized Enzymes. **Biotechnology Bioengineering**, 99(3), 508-514, 2008.
- 31. Hongfei Jia and **Ping Wang***, Enzymatic synthesis of galactosyl lactic ethyl ester and its polymer for use as biomaterials. *Journal of Biotechnology*. 132, 314-317, 2007.
- 30. Xueyan Zhao, Bilal El-Zahab, Ryan Brosnahan, Justin Perry, **Ping Wang***, An Organic Soluble Lipase for Water-Free Synthesis of Biodiesel. **Applied Biochemistry and Biotechnology**. 143(3), 236-243, 2007.
- 29. W. Liu and **Ping Wang***. Synthetic Biotechnology with Sustainable Coenzyme Regeneration. **Biotechnology Advances**, 25, 369-384, 2007.