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Subject: New Project Proposal Submission
Date: Thursday, May 21, 2009 10:30:08 AM

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Lab Address:	PERC
Department:	MSE and PERC
Title:	Synthesis and Characterization of Nanoparticles for Imaging and Therapy
Problem:	To synthesize and characterize multifunctional gadolinium oxide nanoparticles
Approach:	Multiple synthesis approach would be tried - e.g. Microemulsions and Aqueous Precipitation
Techniques/Equipment:	Techniques: Microemulsion; Surfactant less synthesis. Equipments for : Particle - Size, Distribution, zeta potential , elemental composition characterization, fluorescence etc.
Systems and Materials:	Specifically Gadolinium core silica shell nanoparticles will be prepared.
Goals:	1. synthesize and characterize gadolinium oxide nanoparticles 2. synthesize and characterize gadolinium oxide -silica shell nanoparticles
Relevant Industries/Applications:	Imaging and therapeutic companies.
Number of Students Requested:	1
Time Commitment:	15
Semesters Required to Complete Project:	2
Will this Project Satisfy Senior/Honor Research Requirements in your Department?	Yes

If not, Can the Scope of this Project be Expanded to Meet Senior/Honor Research Requirements?

Yes