Postdoctoral position

Colloid and polymer science in nanocapsules and nanocomplexes

Timing: Summer 2020 for two year appointment


Advisor: Keith Johnston, kjp@che.utexas.edu, 512-471-4617, che.utexas.edu/faculty-staff/faculty-directory/johnston/

Collaborator: Guihua Yu, MSE ghyu@austin.utexas.edu. http://tmi.utexas.edu/tmi-people/guihua-yu-assistant-professor/

Academic discipline: Colloid and polymer science, Polymer nanocapsules/nanoparticles, nanoparticles at interfaces, polymer grafting, polymer synthesis (not major component)

Project description:

We will synthesize and characterize novel polymer nanocapsules with important practical applications relevant to many fields. The interest has grown markedly in the last few years in applying nanoparticle science to subsurface reservoirs to facilitate oil and gas recovery and image subsurface reservoirs. Controlled release with stimuli responsive polymer nanocapsules offers many new opportunities.

The candidate should have a Ph.D. in engineering, chemistry, or materials science and engineering with preference given to those who have experience in colloid and interface science and polymer synthesis and characterization.

Must be a highly productive, results-oriented individual who is able to generate and execute original ideas and solutions that contribute to the success of the project. Strong communication, organization, and planning skills and a high level of technical aptitude and creativity are required for success in this position.