



Department of Physics, Astronomy, and Materials Science
Colloquium, Spring 2009

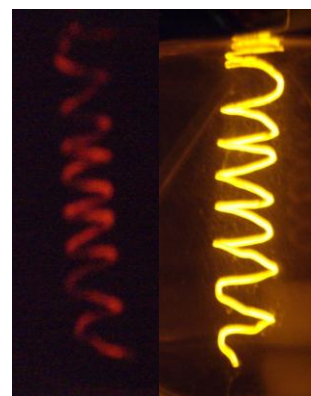
Electrogenerated Chemiluminescence of Encapsulated Luminophores

Dr. Mark M. Richter

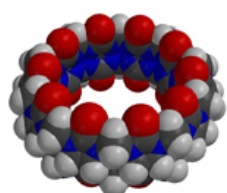
Professor, Department of Chemistry
Missouri State University, Springfield, MO 65897

4:00 to 5:00 pm, Thursday, April 16, 2009

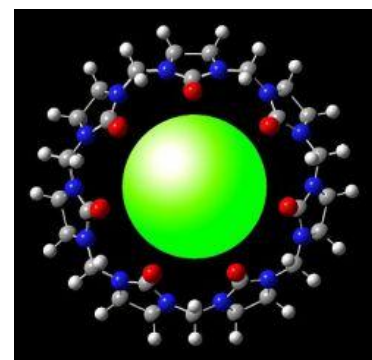
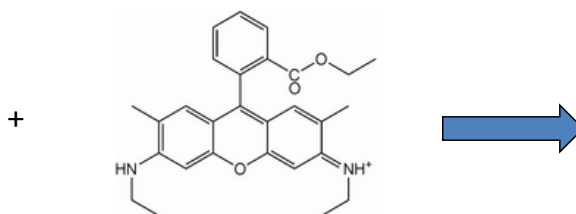
Kemper Hall Room 100



Cucurbit[n]urils are small barrel- (or pumpkin-) shaped molecules with a cavity that is capable of forming strong complexes with neutral and positively charged molecules. When combined with fluorescent dyes increased luminescence intensity and brightness, enhanced photo stability, protection towards fluorescence quenchers, and increased solubilization of the dyes in water are often observed. Therefore, the effect of cucurbit[7]uril on the spectroscopy, electrochemistry and electrogenerated chemiluminescence (ECL) of the fluorescent dye Rhodamine 6G are being explored. The presentation will also discuss the principles and applications of ECL (the generation of excited states at electrodes) and, if time permits, the effects of fluorinated solvents on transition metal excited states.



Cucurbit[7]uril



Contact: Dr. Lifeng Dong
Tel.: (417) 836-3755 or (417) 836-3153
E-mail: LifengDong@MissouriState.edu