

## The Chemistry Department

The Department of Chemistry is sponsoring a seminar featuring **Professor Mike Stieff**, who is Assistant Professor, School of Education at University of Maryland. Professor Stieff will discuss *Characterizing Student Problem Solving Strategies in Undergraduate Chemistry*. The presentation is scheduled for Thursday, November 5, at 4:00pm in Hunter 100 Auditorium. An abstract follows. Refreshments will be served beginning at 3:30 in Hunter Lobby.

**Stieff abstract:** Students' ability to visualize scientific phenomena is considered fundamental to learning science, and several studies have suggested that students with low visuo-spatial ability, and women in particular, are disadvantaged in studying science. However, recent studies have indicated that some scientific problems that have been assumed to require a spatial visualization strategy are often solved by analytic strategies. In this colloquium, Dr. Stieff explores the hypothesis that strategies alternative to canonical visualization are available on most science tasks and that low-spatial students are equally as successful as high-spatial students at using these strategies to problem solve. He discusses how problem solving strategies evolve in the context of current educational practice, the extent to which visualization and analytic strategies can be trained, and the impact of this training on student achievement .