



Faculté des arts et des sciences  
Département de chimie  
**SÉMINAIRE CRMAA**



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### **Bridging the Molecular to Macroscopic Divide Using Fluorescence: Application to the Study of Associative Polymers**

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Water-soluble associative thickeners (ATs) are water-soluble polymers onto which hydrophobes have been covalently attached. In aqueous solution, associations between the hydrophobes result in the formation of polymeric aggregates which hinder the flow of the solution and increase the solution viscosity. Since the polymeric aggregates are not locked in place by permanent covalent bonds, applying shear to an AT solution disrupts the hydrophobic associations and leads to a drop in viscosity, a phenomenon referred to as shear thinning. The peculiar viscoelastic properties of aqueous solutions of ATs are due, for a large part, to the interactions taking place at the molecular level between the hydrophobes. This fact has led to a division of the research conducted on ATs between studies being done at the macroscopic level using rheology and at the molecular level using techniques such as fluorescence.

**Le mercredi 23 janvier 2008**

Salle X-XXX, Pavillon Roger Gaudry

**11 h 30**

Le Département de chimie organise annuellement plusieurs séries de conférences et séminaires et tient à remercier particulièrement ses commanditaires qui rendent ces programmes possibles : **AstraZeneca, Boehringer Ingelheim, Centre de recherche sur les matériaux auto-assemblés du FQRNT, Eisai, Fondation Barré, Isis Pharmaceuticals, IUPAC-Macro '90, MethylGene, Merck Frosst**. Les conférenciers prestigieux invités, dans le cadre des grandes conférences, offrent à la communauté scientifique de Montréal les meilleures présentations dans les différents domaines de pointe de la chimie.