



Faculté des arts et des sciences
Département de chimie
SÉMINAIRE CRMAA



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Self-Assembly on Semiconductor Surfaces



Metal nanostructures continue to be the focus of intense research because of their fascinating properties that can be distinctly different from their bulk counterparts, and thus show great promise for a range of applications. The challenge lies in fabricating large areas of high density metallic nanostructures, with feature sizes below 100 nm, in an economically feasible manner. While photolithography will justifiably remain a core technology with respect to upcoming, sub-65 nm nodes on the semiconductor industry association roadmap, cost considerations for mass manufacturing will be one potential constraint. As a result, there is interest in the development of complementary patterning strategies that involve large scale self-assembly, for use as a soft organic template for metal nanostructure development. In this proposal, we will outline our approaches towards the use of self-assembled block copolymer nanostructures on technologically relevant semiconductor materials, to produce sub 50-nm features, using approaches compatible with existing silicon-based fabrication.

Le mercredi 4 février 2009

Salle G-1015, 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.