

## **Department of Chemistry Seminar Series Fall 2022**

Friday, September 23, 2022, 3:30 PM - HS1 O112 (Health Sciences)
Host: Fernando Uribe-Romo

Chemistry at interfaces: metal clusters, nanotubes, and anion receptors



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Macrocyclic arene compounds have played fundamental roles in the development of supramolecular chemistry. For the most part, research on these systems have laid the foundations to explore and establish noncovalent interactions, e.g., hydrogen bonding,  $\pi\cdots\pi$  stacking,  $C-H\cdots\pi$  interactions. My research group has taken the basic principles of macrocyclic arenes to design architectures enforcing metal—metal interactions towards the activation of small molecules, scaffolds capable of tubularly contorting aromatic systems, and frameworks able to bind anionic species for environmental remediation, all while retaining the intrinsic noncovalent interaction properties of these systems. In this seminar, I will abound in our progress in each of these areas constantly crossing the boundaries between organic-inorganic synthesis and materials chemistry.