

SE&T Colloquium Series-Winter 2013

Speaker	Dr. Cláudio Verani Department of Chemistry Wayne State University Host: Stephanie Brouet
Title	<i>Merging Redox and Amphiphilic Properties in Transition Metal Complexes</i>
Abstract	<p>Interest in the development of precursors for redox-responsive monolayers and thin films obtained by Langmuir-Blodgett or self-assembly methods may lead to high-end applications in information storage and catalysis. Our group has developed several new amphiphile molecular topologies and new families of ligands aiming at coordination complexes of transition metal ions such as iron, manganese, cobalt and ruthenium that act as redox-active modules for such films. In this seminar we will discuss progress on selected systems and report on advances made toward the understanding of their electronic, redox and amphiphilic behavior. Focus will be given to the probing of the origin of electrochemical processes associated with the supporting electrolyte, the organic linker, and the sequence by which the metal center and the ligand get oxidized. The organization of some of these species as films at the air/water and air/solid interface will also be discussed.</p>
Date	Tuesday, March 12
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.