The 888th IMS colloquium

Chiral Polytopic Ligands as Tools for the Synthesis of Metallo-Polymers. Application to Asymmetric Catalysis

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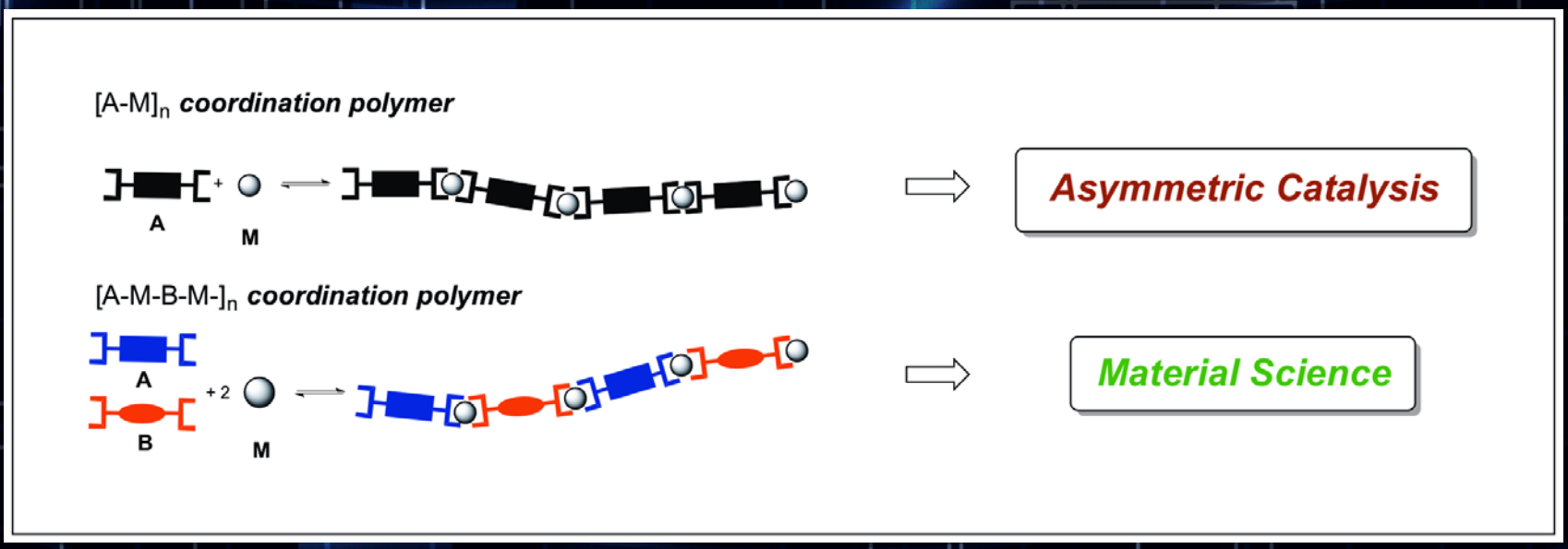
Date & Time: 2016/5/20 (Fri.) 16:00-
Place: IMS Research Building Room 201

Metallo-supramolecular polymeric assemblies incorporating metal ions and ditopic ligands offer the opportunity to build materials with properties and functions of interest both in fundamental research and for the development of new technologies. In the past decade, a wide variety of such metallo-supramolecular assemblies have been studied and have been shown to be an interesting class of stimuli responsive materials.

In the first part of the presentation, we will discuss how to self-assembly metal ions with two different ligands (A and B) to generate alternating coordination copolymers with regular alternating A and B units linked by metal ions $[A\text{-}M\text{-}B\text{-}M]_n$. Such a structure would be particularly interesting for various applications as it could benefit from the specific properties of building blocks.

In the second part, we will show how chiral metal-polymers can be used for the development of reusable asymmetric catalysts. Several examples will be presented and discussed in details.



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