John van Geuns Foundation lecture by Prof. Laurent Bonneviot
Laboratoire de Chimie, Ecole Normale Supérieure de Lyon

Tuesday 21.11.2017, 11am, D1.115

Bio-inspired designing of active metal ions in confined space of mesoporous silicas

Enzymes host catalytic sites that can operate selectively at moderate temperatures. Chemists can find diverse and useful inspirations from Mother Nature to design selective adsorbents and catalysts and thereby improve chemical processes, moving closer to greener chemistry and a sustainable development. This lecture will provide examples of bio-inspired copper, iron and manganese catalysts based on an oxidase structural model active and selective in oxidation reactions. The molecular metal environment and vicinity were achieved using molecular patterning, hydrophobic treatments and ligand grafting in the confined space of the nanopores of mesoporous silicas.

Laurent Bonneviot is professor at Laboratoire de Chimie, Ecole Normale Supérieure de Lyon in Lyon, France, where he heads the **Hybrid Materials group**. He started a research career at the CNRS in Paris in 1979, and received his PhD in 1983 at the University of Pierre & Marie Curie in Paris under the supervision of Prof. Michel Che. In 1989 He moved to Laval University (Québec, Canada) where he was promoted to full professor in 1998. In 2000 he returned to France to his current position at ENS Lyon, where he was promoted at the exceptional class in 2015.

