



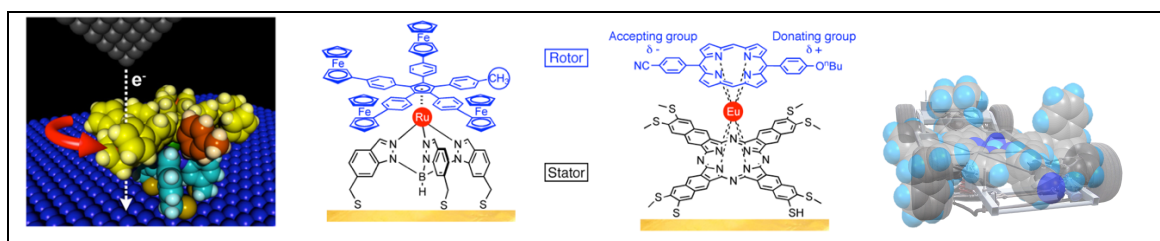
Prototype of molecular machines : molecular motors, gears and vehicles

Gwénaél Rapenne

University Toulouse III Paul Sabatier, France and
Nara Institute of Science and Technology, Japan

Advances in the imaging and manipulation of single molecules by STM has stimulated much interest in the studies of technomimetic molecules,^[1] i.e. molecules designed to imitate macroscopic objects at the molecular level, also transposing the motions that these objects are able to undergo.

I will present the design and synthesis of molecular motors^[2-4] and gears^[5-9] built around a ruthenium(II) or an europium(III) center as well as a family of nanocars^[10] qualified for the 2nd Nanocar Race which took place in March 2022.



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