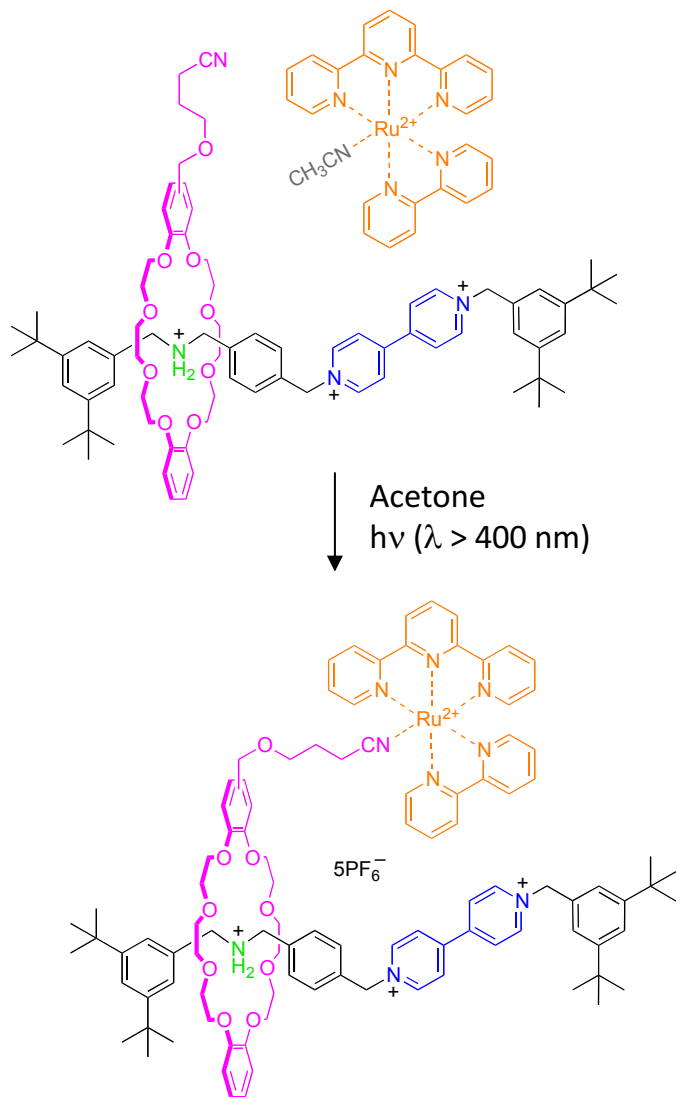


Towards artificial molecular transporters

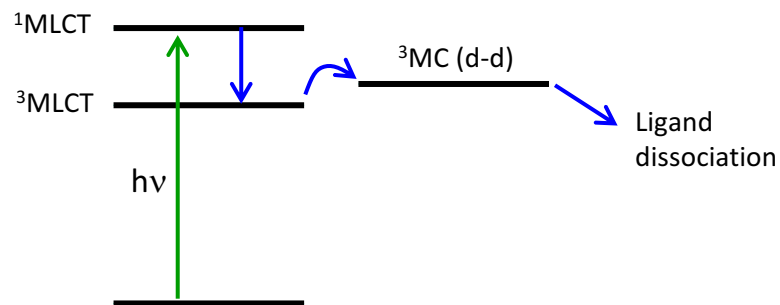
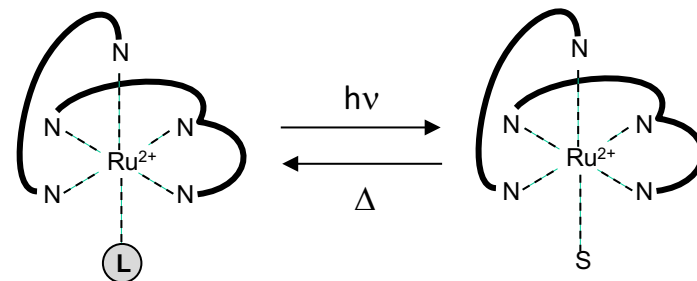


Inorg. Chem. **2004**, *43*, 8346-8354

Photochemical Expulsion of the Neutral Monodentate Ligand L in $\text{Ru}(\text{Terpy}^*)(\text{Diimine})(\text{L})^{2+}$: A Dramatic Effect of the Steric Properties of the Spectator Diimine Ligand

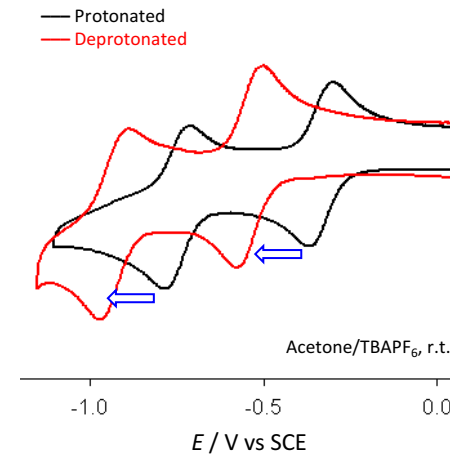
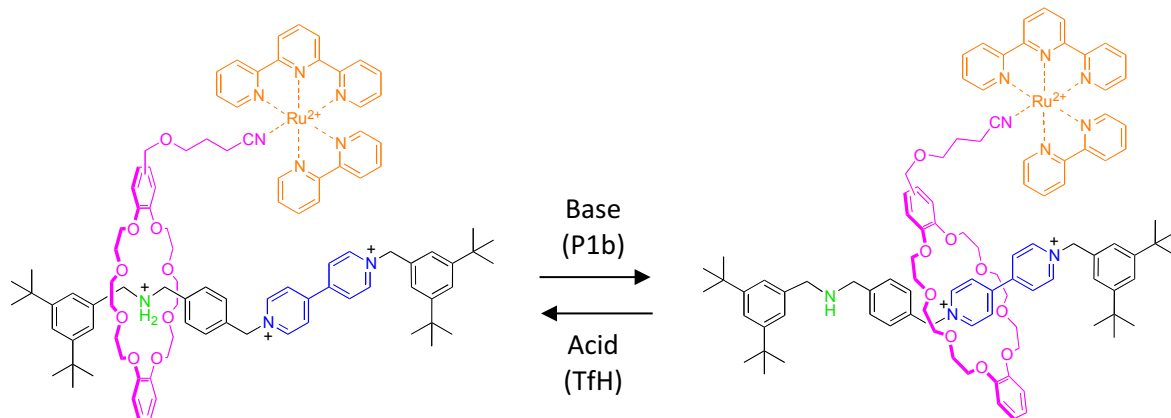
Sylvestre Bonnet, Jean-Paul Collin,* Jean-Pierre Sauvage, and Emma Schofield†

Laboratoire de Chimie Organo-Minérale, UMR 7513 du CNRS, Université Louis Pasteur, Faculté de Chimie, 4, rue Blaise Pascal, 67070 Strasbourg Cedex, France

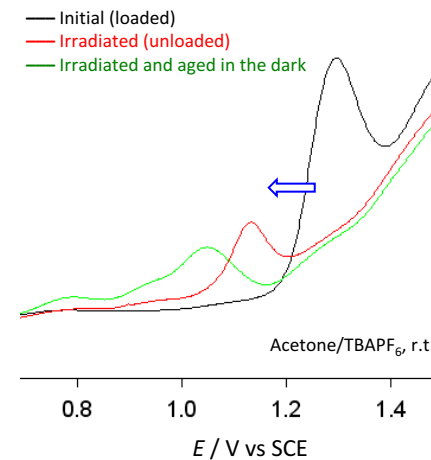
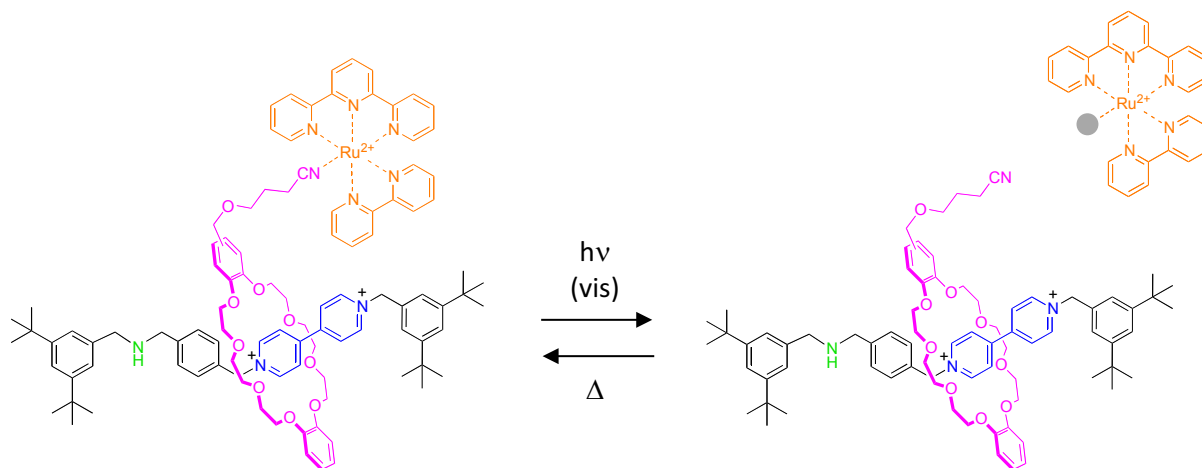


Towards artificial molecular transporters

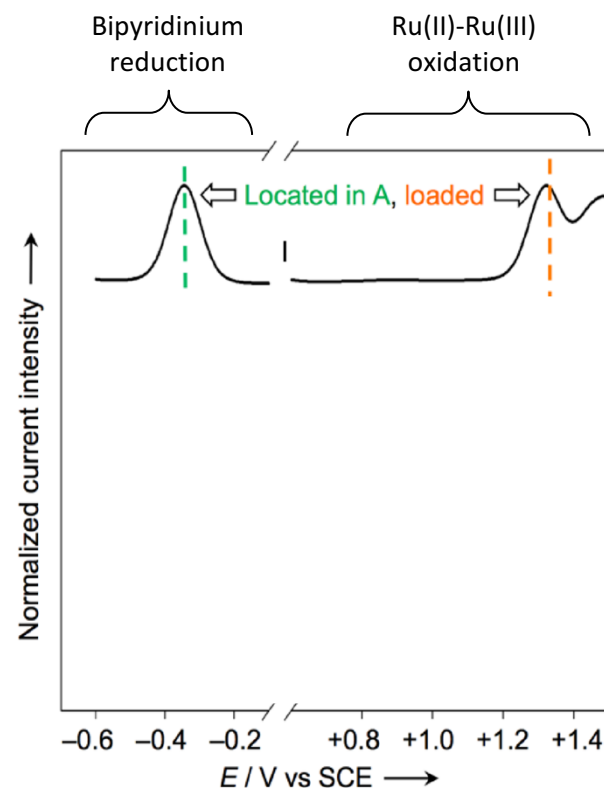
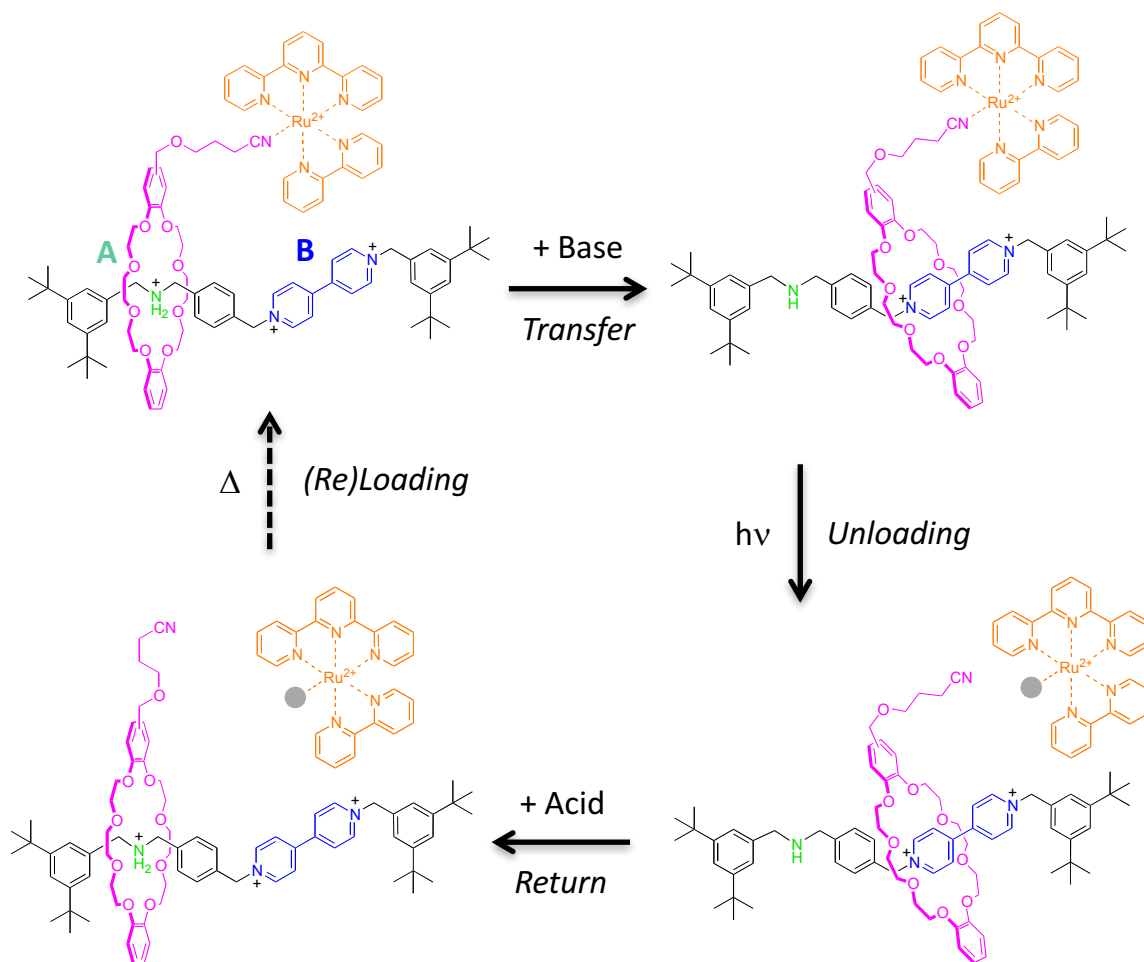
Base-acid driven displacement-replacement



Light controlled unloading-thermal reloading

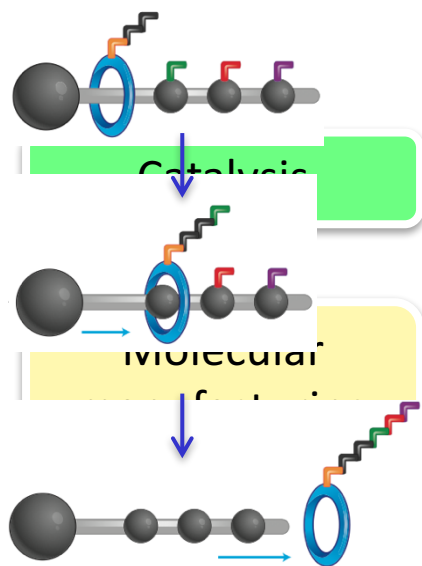
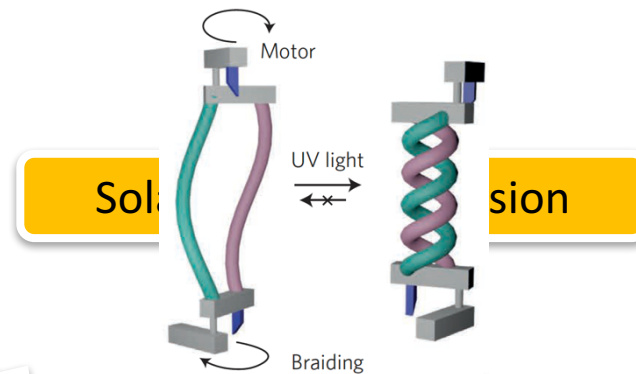
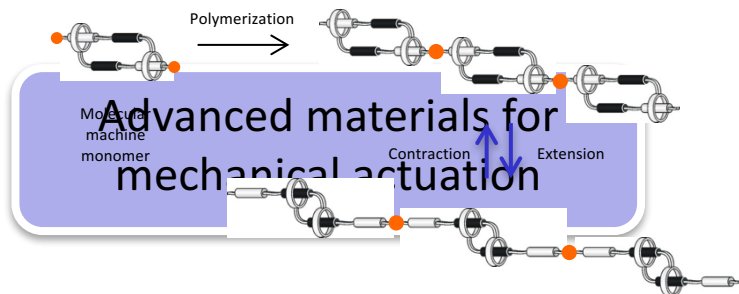


Towards artificial molecular transporters

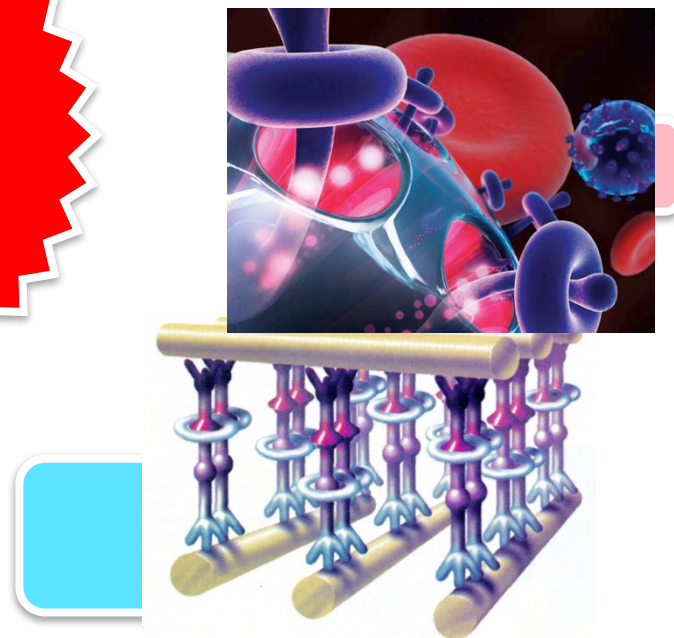


DPV, acetone/TBAPF₆, rt

Why do we need artificial molecular machines?



Radically new approaches



Why do we need artificial molecular machines?

“I feel a bit like the Wright Brothers” ... “People were saying, why do we need a flying machine? Now we have a Boeing 747 and an Airbus. That’s a little bit how I feel. The opportunities are great.”

Ben Feringa
phone call to the Royal Swedish Academy of Sciences, 5 October 2016

“What would be the utility of such machines? Who knows?” ... “I can't see exactly what would happen, but I can hardly doubt that when we have some control of the arrangement of things on a small scale we will get an enormously greater range of possible properties that substances can have, and of different things that we can do.”

Richard Feynman
talk at the American Physical Society meeting, 29 December 1959

Acknowledgments



Vincenzo
Balzani



Margherita
Venturi



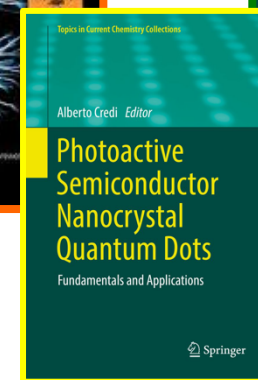
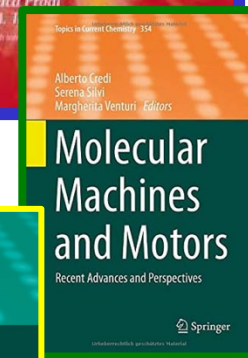
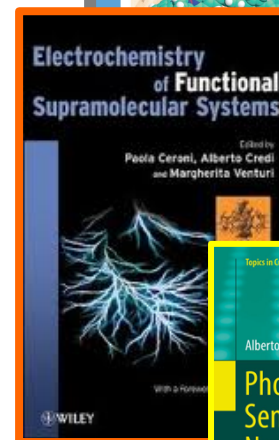
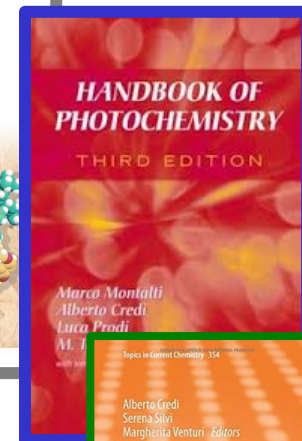
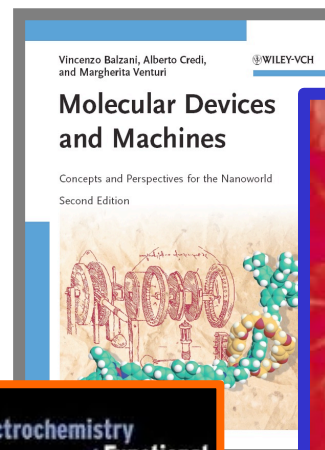
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