

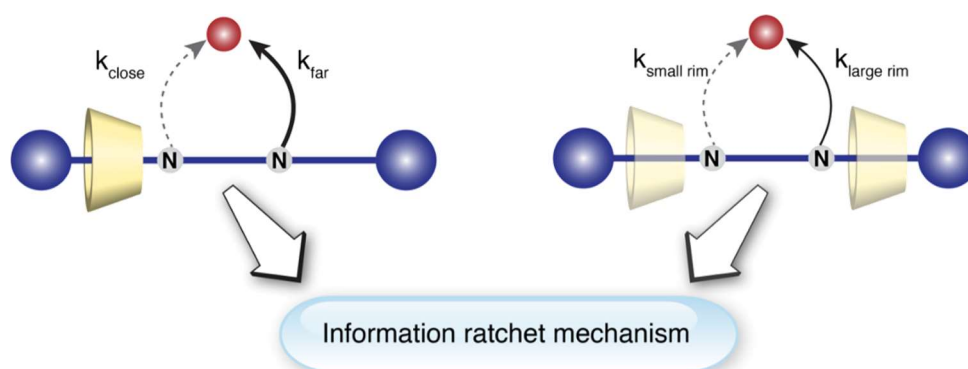
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“Blue Sky and Applied Chemistry of Cyclodextrin Rotaxanes”

Abstract: Oligo- and polyrotaxanes containing native and functionalized cyclodextrins are perfect candidates for preparing modular bimodal imaging agents, which we studied in detail on the rotaxation reaction of α -cyclodextrin with cationic or anionic axes.

We can tune the properties by appropriate functionalization of the cyclodextrin. [1–2]

These results are the stepping stones for the further development of more complex systems of polyrotaxanes with functionalized cyclodextrins such as, for example, our bimodal polyrotaxanes for MRI and fluorescence imaging [3].



Selected references:

- [1] S. Cherraben, J. Scelle, B. Hasenknopf, G. Vives, M. Sollogoub. *Org. Lett.* **2021**, 23, 7938-7942.
- [2] J. Scelle, H. Vervoitte, L. Bouteiller, L. M. Chamoreau, M. Sollogoub, G. Vives, B. Hasenknopf. *Chem. Sci.* **2022**, 13, 2218-2225.
- [3] J. Scelle, A. Guenet, E. Morel, S. Adam De Beaumais, M. Menand, V. Marvaud, C. S. Bonnet, E. Toth, M. Sollogoub, G. Vives, B. Hasenknopf. *Chem. Eur. J.* **2014**, 20, 10915-10920.