第10回機能物質化学講演会のお知らせ

日時:2012年6月18日(月)午後3時~午後4時30分場所:J棟505室

概要:アムステルダム大学 Van't Hoff Institute for Molecular Sciences の Albert M. Brouwer 教授が来日するにあたり、本学 相模原キャンパスで光駆動分子運動についての講演会を開催 いたします。

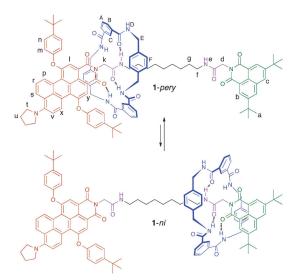


講演題目: Light-initiated molecular motion in hydrogen-bonded rotaxanes 講演概要:

Mechanically interlocked molecules provide an excellent platform for the study of controlled motion in molecular assemblies in which the constituent parts have moderately weak interaction, yet cannot dissociate due to the mechanical bond.

In rotaxanes, a ring is captured on a molecular thread. In the systems we studied the ring can bind by means of hydrogen bonds to two different locations on the thread. The movement back and forth between the two sites is called "shuttling". In order to control this process, we use laser photolysis techniques.

The presentation will focus primarily on the question how the ring actually moves, which we studied by varying the structure of the rotaxane system. The question whether rotaxane molecular shuttles can be considered "molecular machines" is left for the audience to answer.



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