

Synthesis and applications of mechanically interlocked molecules

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Our research focus is on the synthesis and applications of mechanically interlocked molecules such as rotaxanes and catenanes including in catalysis, drug delivery, and sensing. We also develop new methods to access such molecules, including stereoselective methodology for mechanically stereogenic rotaxanes and catenanes. In this short lecture I will give an overview of our research, highlighting, key synthetic breakthroughs, and examples of prototypical functional interlocked structures.