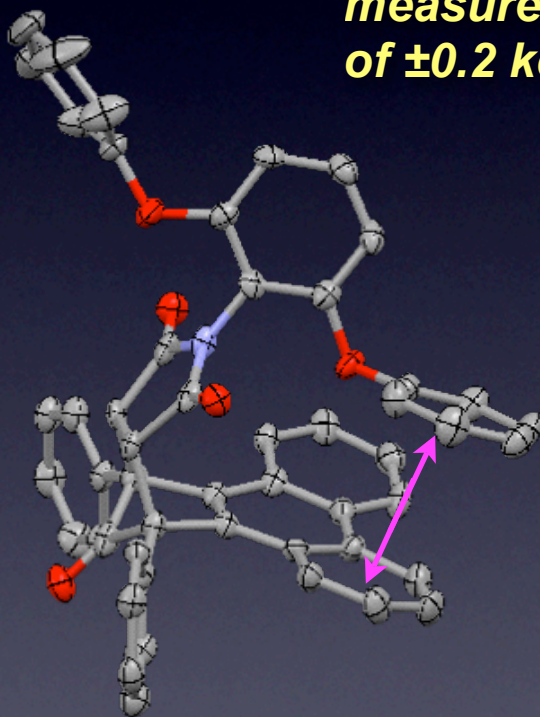


New model systems for the measurement of weak non-covalent interactions

Ken D. Shimizu, Department of Chemistry and Biochemistry,
University of South Carolina, Columbia SC 29208



We have developed a small molecule that can flip between two conformations which allows us to accurately measure intramolecular interactions with an accuracy of ± 0.2 kcal/mol.



Using this 'molecular balance' we have shown that there is a surprisingly strong solvophobic effect for arene-arene interactions in organic solvents that drives the formation of arene-arene and alkyl-arene complexes