

Chemistry Seminar

"Hydrogen Bond Arrays:
The Power of Cooperativity"

Dr. Steven Kaas

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Wednesday, Oct. 27
12:00 noon
WSB-122



Abstract: Hydrogen bonds are the dominant motif for organizing three-dimensional structures of biomolecules such as carbohydrates, nucleic acids, and proteins, and serve as templates for proton transfer reactions. Acid- and base-catalyzed reactions are also ubiquitous in nature and are widely exploited in academic and industrial settings. In this presentation, our initial efforts in the characterization and development of easy-to-handle, non-corrosive, non-toxic, and presumably environmentally friendly, bio-inspired acids and bases, which make use of hydrogen bond arrays, will be described. Cooperativity is found to be a powerful force in nature.

Dr. Kaas will meet with students at 1:00 p.m. in WSB-344.