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Anion Selectivity and Catalytic Potential of a Bidentate Halogen Bonding Receptor

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GRC 2015 Abstract

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Anion Selectivity and Catalytic Potential of a Bidentate Halogen Bonding Receptor

Anion recognition is a growing field in organic chemistry. Many interactions can be employed to sequester anions from their surroundings: hydrogen bonding, electrostatic forces, metal complexation, covalent binding and hydrophobic effects. However, compared to the others, halogen bonding is relatively underexplored. As a non-covalent interaction with strict requirements, halogen bonding is showing a promising future in molecular recognition and catalysis. Here is presented the results of anion titration studies, computational data, and x-ray structures of one such halogen bonding molecule.