

The CH/ π hydrogen bond. Implication in chemistry and biochemistry

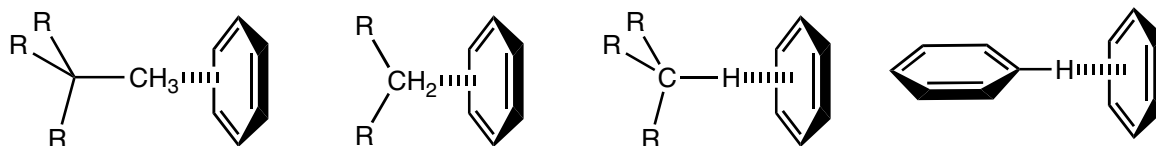
Professor Motohiro NISHIO

The CHPI Institute, 705-6-338 Minamioya, Machida-shi, Tokyo 194-0031, Japan

e-mail: dionisio@tim.hi-ho.ne.jp

website: <http://www.tim.hi-ho.ne.jp/dionisio>

The CH/ π hydrogen bond is the weakest extreme of hydrogen bonds that occurs between a soft acid CH and a soft base π -system (Figure).^[1] The implication in chemistry includes issues of conformation, crystal packing, and specificity in lattice and cavity inclusion complexes. The results obtained by analyzing the Cambridge Structural Database (CSD) will be reviewed.^[2] The role of CH/ π hydrogen bonds in biomacromolecules^[3] will be briefly presented. Recent high-level *ab initio* MO calculations have provided evidence that specific protein/substrate interactions and folded conformations reported for natural organic compounds such as α -phellandrene is explained in terms of CH/ π hydrogen bonds.^[4] This will be presented, if time allows.



Figure

References:

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