



Automne 2015

Conférence

au Département de chimie

CONFÉRENCIER

DATE

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TITRE

The interplay between organofluorine and alcohol groups: hydrogen bonding, lipophilicity and protein-ligand binding

RÉSUMÉ

Fluorination in the vicinity of functional groups results in the modification of a number of properties. The most known example is acid base properties of amines and carboxylic acids. We are interested in hydrogen bond properties. The talk will give an overview of recent work how fluorination modifies the intermolecular hydrogen bond donating capacity of alcohols, and how it affects the lipophilicity of alkanols. The first examples of intramolecular OH...F hydrogen bonding in acyclic, saturated fluorohydrins will be shown, and finally, we give the first example of a polyfluorinated sugar ligand having a higher affinity compared to the (hydroxylated) parent, with crystal structures even showing C-F mediated hydrogen bonding to bound water molecules. Some implications for drug design will be discussed.

La conférence aura lieu à 11h au POP-1168 du COPL
Cordiale invitation à toutes et à tous !

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