CURRENT RESEARCH ON HYDROGEN-BONDED COMPLEXES AT THE UNIVERSITY OF VALLADOLID

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Investigation of hydrogen-bonded heterodimers formed by the six-membered ring heterocycles tetrahydropyran or thiane with HCl has recently evidenced the formation of both axial and equatorial hydrogen bonds[a] [b].

We have extended these studies to other complexes in which the proton acceptor molecule of the complex has non-equivalent binding sites. In this communication we present an analysis of the conformational preferences and structures of the hydrogen-bonded complexes thietane-HCl, methylenecyclobutane-HCl and cyclopentene oxide-HCl, investigated by molecular-beam Fourier transform microwave spectroscopy (MB-FTMW).

[a] S. Antolínez, J. C. López and J. L. Alonso, Angew. Chem., in press (1999)
[b] M. E. Sanz, J. C. López and J. L. Alonso, submitted (1999)