

THE ROTATIONAL SPECTRUM OF PYRIDINE-FORMIC ACID

LORENZO SPADA, QIAN GOU, *Dep. Chemistry 'Giacomo Ciamician', University of Bologna, Bologna, Italy*; BARBARA MICHELA GIULIANO, *Department of Chemistry, University of Bologna, Bologna, Italy*; WALTHER CAMINATI, *Dep. Chemistry 'Giacomo Ciamician', University of Bologna, Bologna, Italy*.

The rotational spectrum of three 1:1 complexes of pyridine with formic acid has been observed and assigned using pulsed jet Fourier transform microwave technique. The two subunits are held together through one O-H \cdots N hydrogen bond and one C-H \cdots O weak hydrogen bond, forming a seven-membering cyclic structure. The rotational spectrum of the pyridine-HCOOD isotopologue is considerably shifted towards lower frequencies, with respect to the "rigid" model, suggesting a considerable Ubbelohde effect, similar in nature to that observed in the bi-molecules of carboxylic acids.