

A JET FTIR SPECTROMETER FOR THE DETECTION OF WEAK ABSORPTION BANDS

M. HEPP, R. GEORGES and M. HERMAN, *Laboratoire de Chimie Physique Moléculaire, CP160/09, Université Libre de Bruxelles, B-1050, Belgium.*

We used the combination of a Fourier transform interferometer with a large slit-jet^a to record weak absorption bands such as overtone and combination bands of medium sized molecules. Under typical conditions, the jet is produced from a 16 cm long, 40 micron wide slit at a stagnation pressure of 1.5 atm. Initially gaseous and liquid samples can be handled. The set-up will be described and its performance illustrated by new, unpublished results to be further detailed in other contributions to the meeting. We shall in addition specifically focus on new data on ethane, recorded between 2800 and 3100 cm⁻¹ and between 4000 and 4500 cm⁻¹.

^aR. Georges, M. Bach and M. Herman, *Mol. Phys.*, 90 (1997), 381; R. Georges, J. Liévin, M. Herman and A. Perrin, *Chem. Phys. Letters* 256 (1996) 675.