THE FANTASIO SET-UP (II): HIGH RESOLUTION OVERTONE SPECTROSCOPY OF ACETYLENE CONTAINING VAN DER WAALS DIMERS

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We have used the CW-CRDS facility in the FANTASIO set-up described in the previous presentation to investigate acetylene-containing dimers formed in a supersonic expansion, in the 1.5 microns range. Ab initio calculations were also performed in some cases. The acetylene partners so far include argon[a], carbon dioxide[b] and nitrous oxide[c]. The results will be illustrated.

[a] C. Lauzin, K. Didriche, P. Macko, J. Demaison, J. Liévin, and M. Herman, J. Phys. Chem. A, in press (2009).
[b] C. Lauzin, K. Didriche, J. Liévin, M. Herman, and A. Perrin, J. Chem. Phys, submitted (2009).
[c] K. Didriche, C. Lauzin, P. Macko, M. Herman, and W.J. Lafferty, Chem. Phys. Letters, doi:10.1016/j.cplett.2008.12.037 (2008).