ON THE ADVANTAGES OF MATRIX-ISOLATION VIBRATIONAL CIRCULAR DICHROISM SPECTROSCOPY

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It is shown on the examples of R-2-amino-1-propanol [a] and N-acetyl-L-alanyl-N-methylamide [b] that matrix isolation vibrational circular dichroism spectroscopy is a useful method for simultaneous determination of the conformational distribution and absolute configuration of molecules with multiple conformers capable of strong intermolecular interactions, especially hydrogen-bonds. The technique could also be utilized for the characterization of reactive chiral species or weakly bound complexes of chiral molecules.

[a] G. Tarczay, G. Magyarfalvi and E. Vass *Angew. Chem.*, in press 2006.
[b] G. Pohl, G. Magyarfalvi, E. Vass, A. Perczel, G. Tarczay to be submitted.