

P034 An investigation of the substrate specificity of the *retro*-Claisenase 6-oxo camphor hydrolase

Cheryl Hill and Gideon Grogan

*York Structural Biology Laboratory, Department of Chemistry,
University of York,
Heslington, York, YO10 5YW, UK.*

The natural reaction of 6-oxo camphor hydrolase is the desymmetrisation of prochiral 6-oxo camphor to give (2*R*,4*S*) ?-campholinic acid with an enantiomeric excess of >95%. The substrate specificity of the enzyme has been investigated using a range of symmetrical bicyclo[3.3.0]octane-2,8-diones and asymmetric diketones bicyclo[4.3.0]nonane-2,9-dione and bicyclo[5.3.0]decane-2,10-dione. The enantiomeric excesses of the acids formed were measured by gas chromatography of methyl ester derivatives.