

Accessory Publication

Anomalies in the stereoselectivity of the Petasis reaction using
styrenyl boronic acids

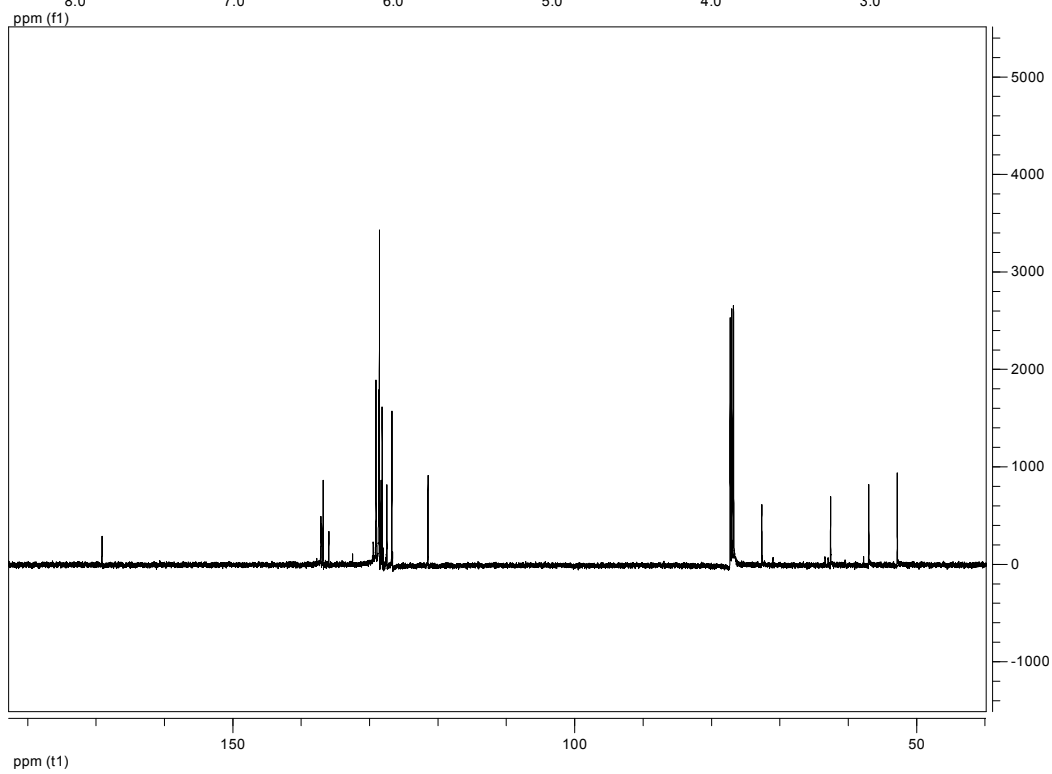
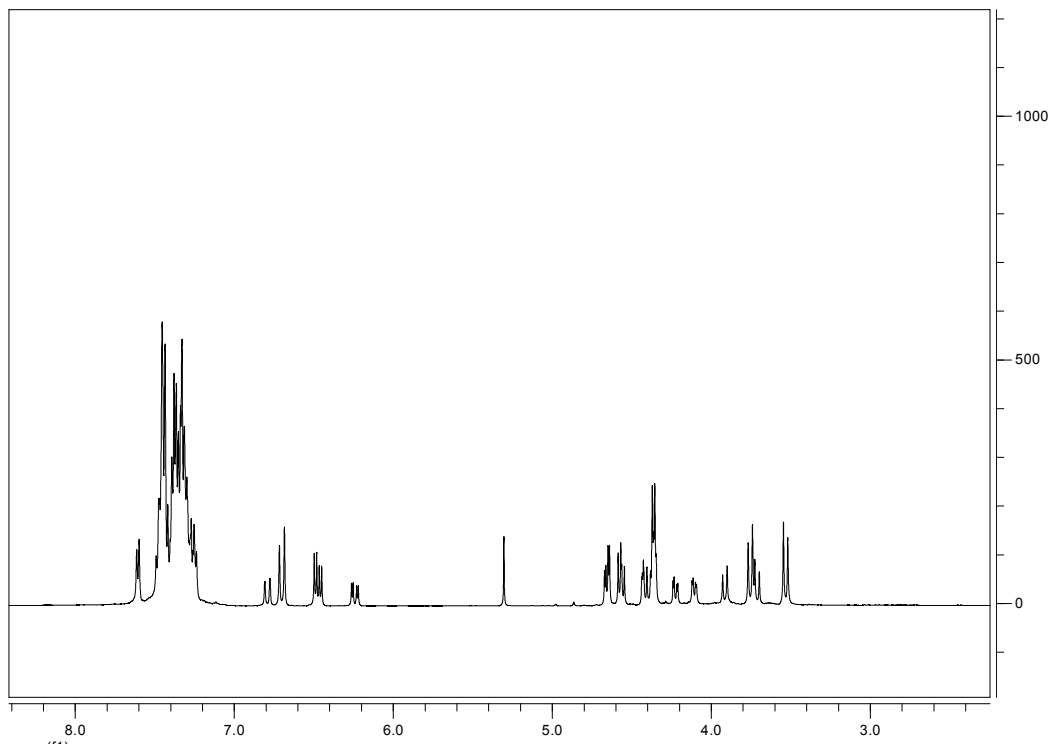
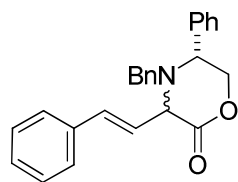
Quentin I. Churches, James K. Johnson, Nathan L. Fifer and Craig A. Hutton

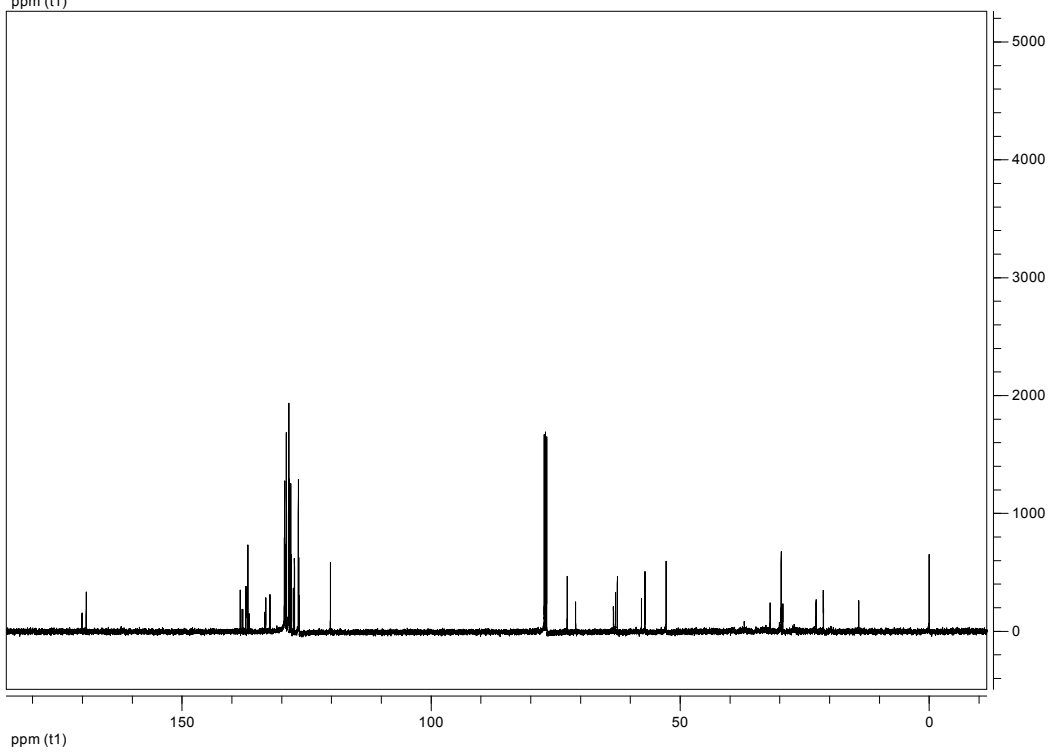
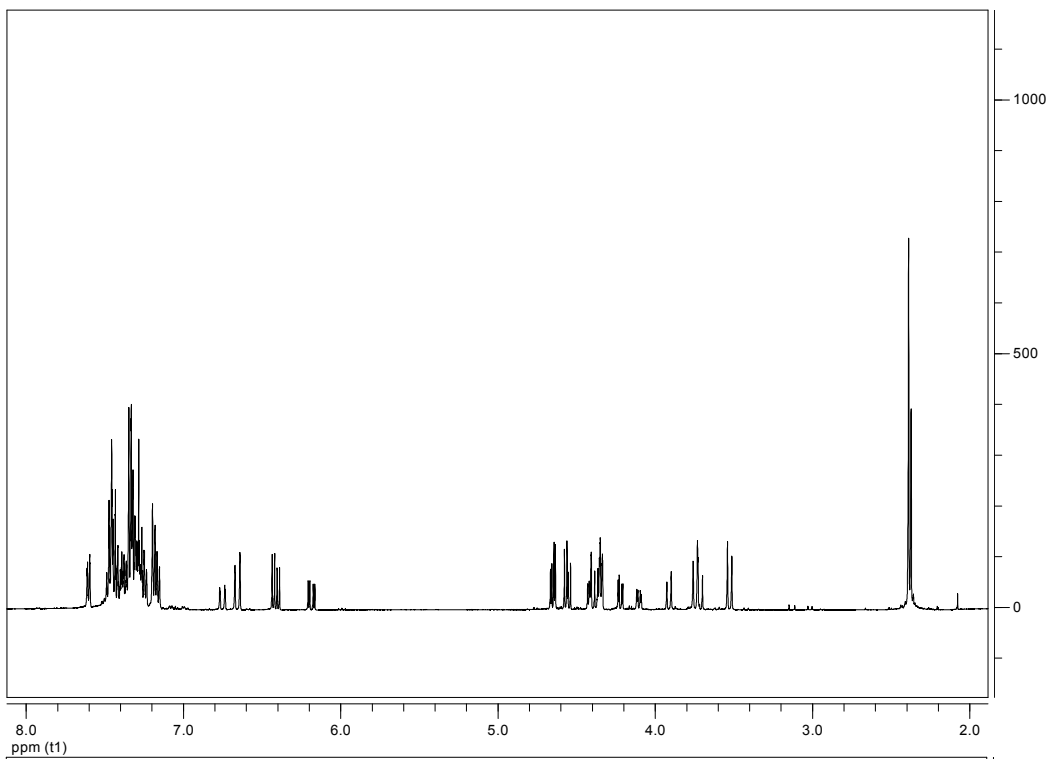
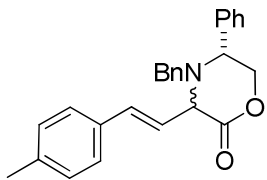
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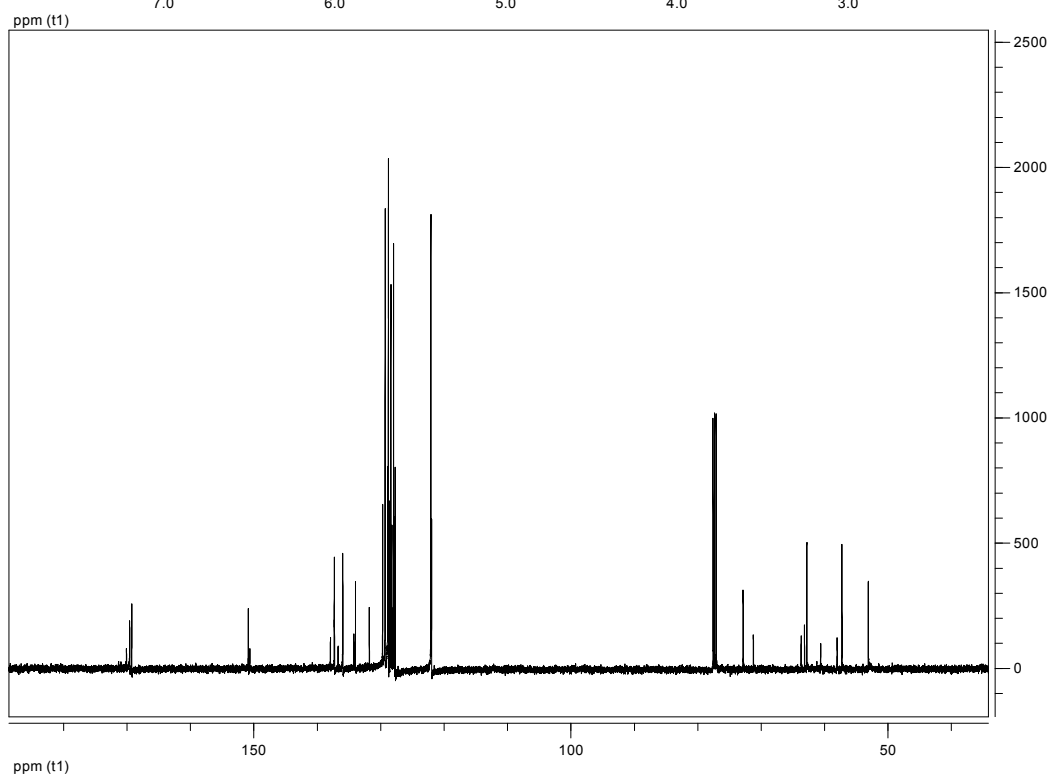
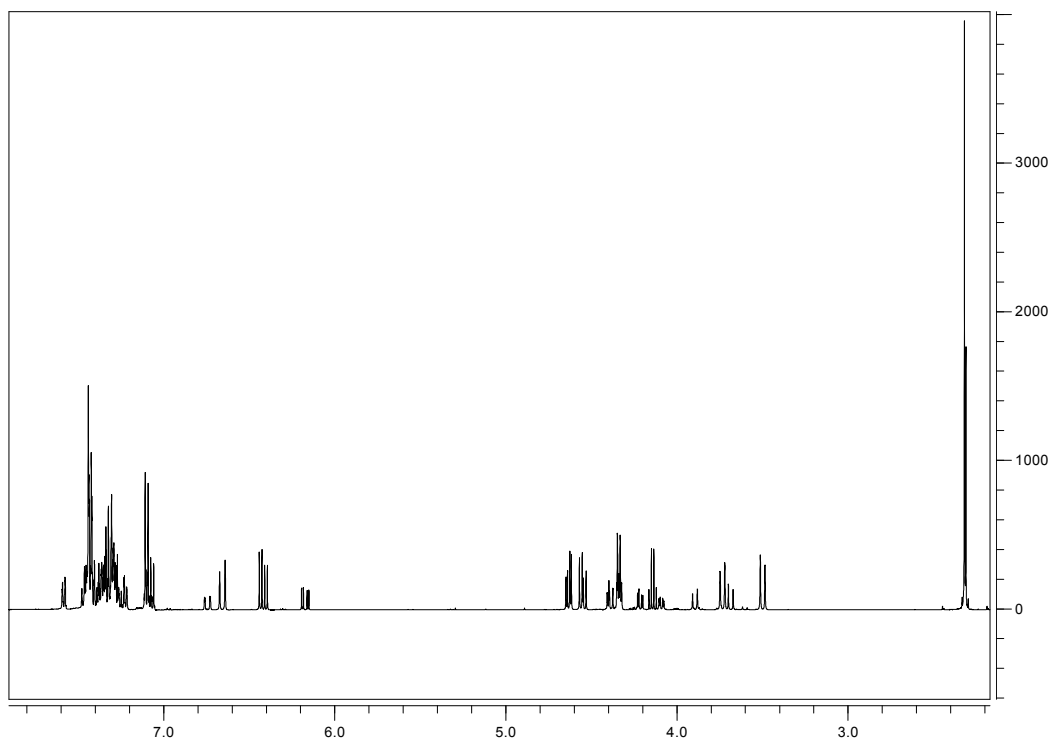
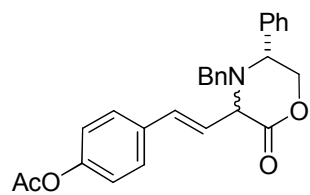
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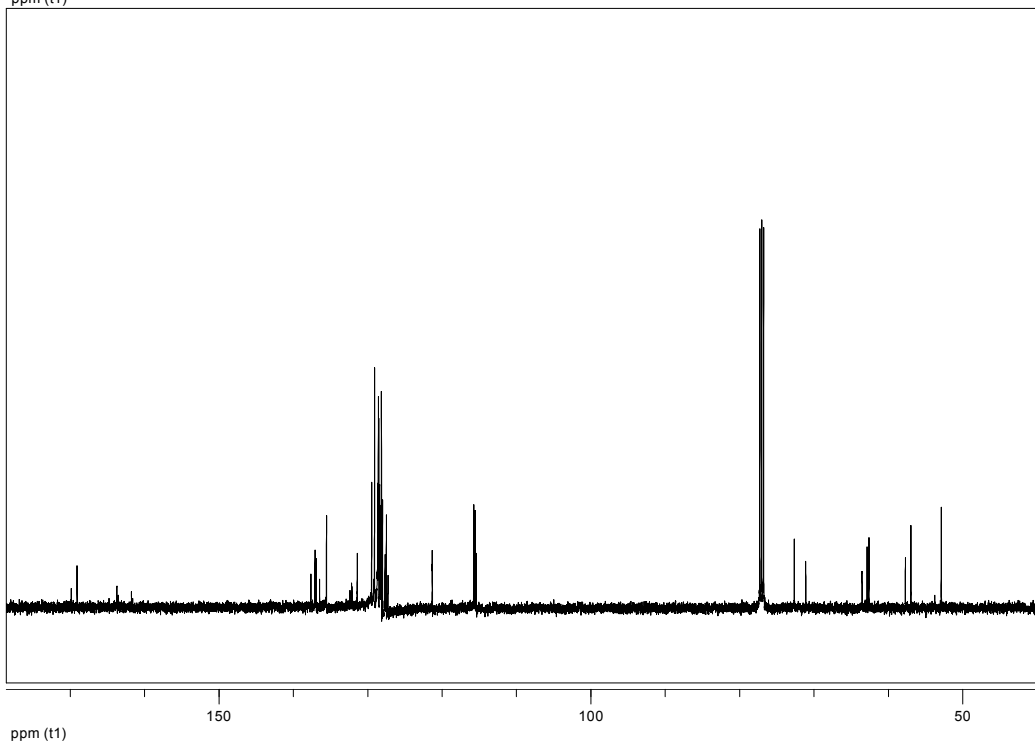
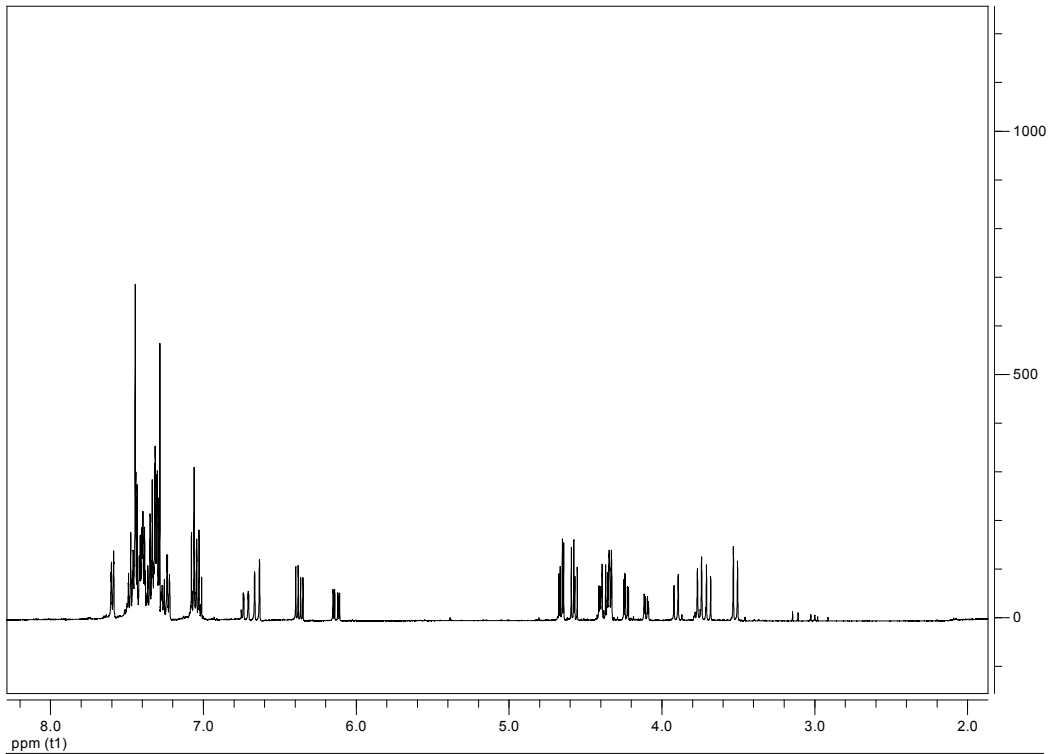
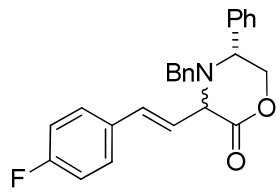
¹ H/ ¹³ C NMR of styrenyloxazinone 5a	2
¹ H/ ¹³ C NMR of <i>p</i> -methylstyrenyloxazinone 5b	3
¹ H/ ¹³ C NMR of <i>p</i> -acetoxystyrenyloxazinone 5c	4
¹ H/ ¹³ C NMR of <i>p</i> -fluorostyrenyloxazinone 5e	5
¹ H/ ¹³ C NMR of <i>p</i> -chlorostyrenyloxazinone 5f	6
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¹ H/ ¹³ C NMR of <i>p</i> -trifluoromethoxystyrenyloxazinone 5h	8
¹ H/ ¹³ C NMR of <i>p</i> -methoxystyrenyloxazinone 5i	9
¹ H/ ¹³ C NMR of dihydroxylation of 5a to give diols 10/11	10
¹ H NMR of diols 10/11 from reaction with no ligand/DHQD-IND/DHQ-IND	11

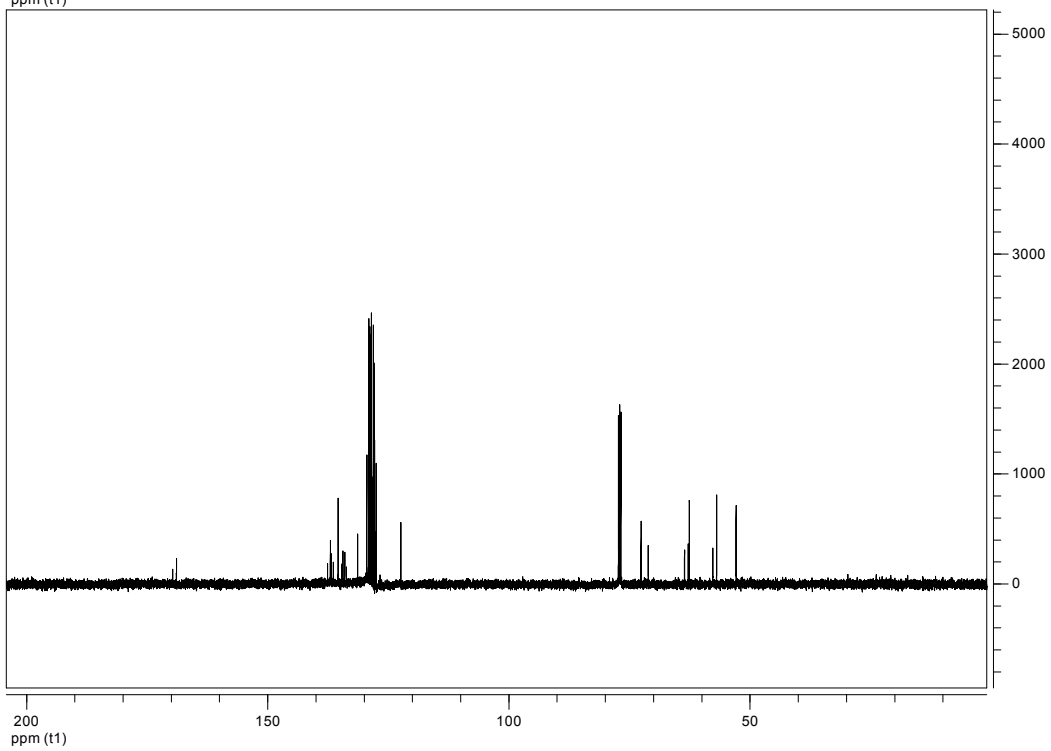
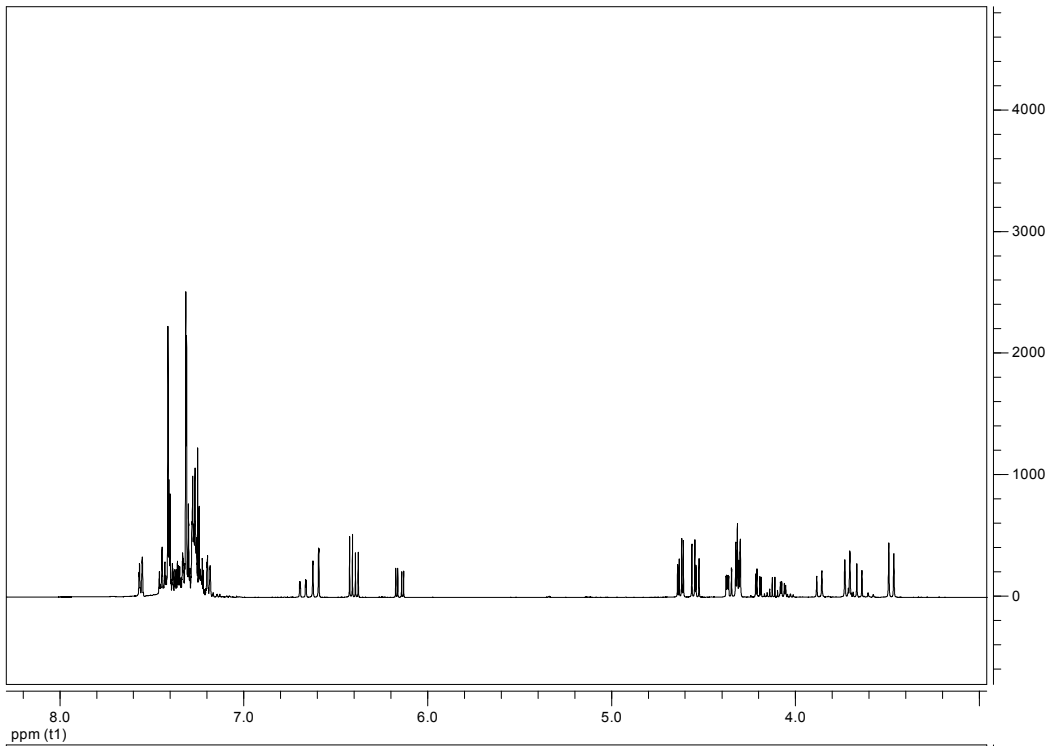
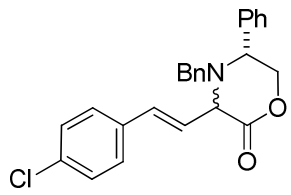
Note: Diastereomeric ratios do not match crude ratios reported in Table 1 due to differential isomerisation to α,β -unsaturated compounds **9** upon standing and during chromatography, as outlined in Scheme 4.

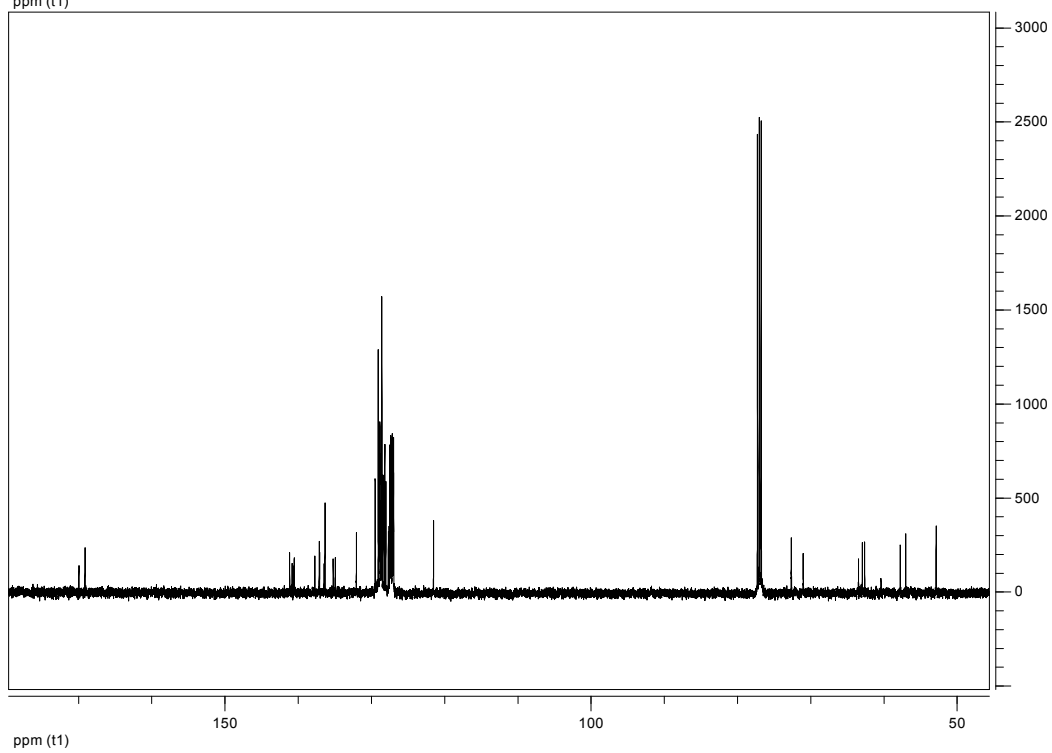
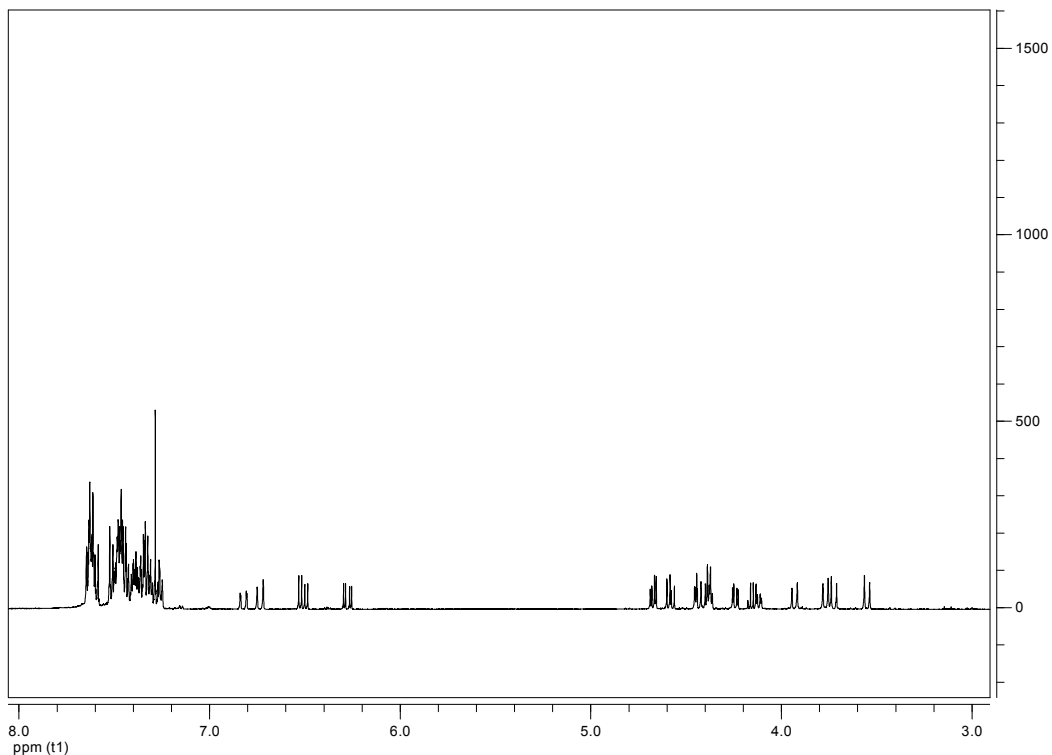
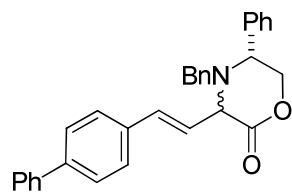


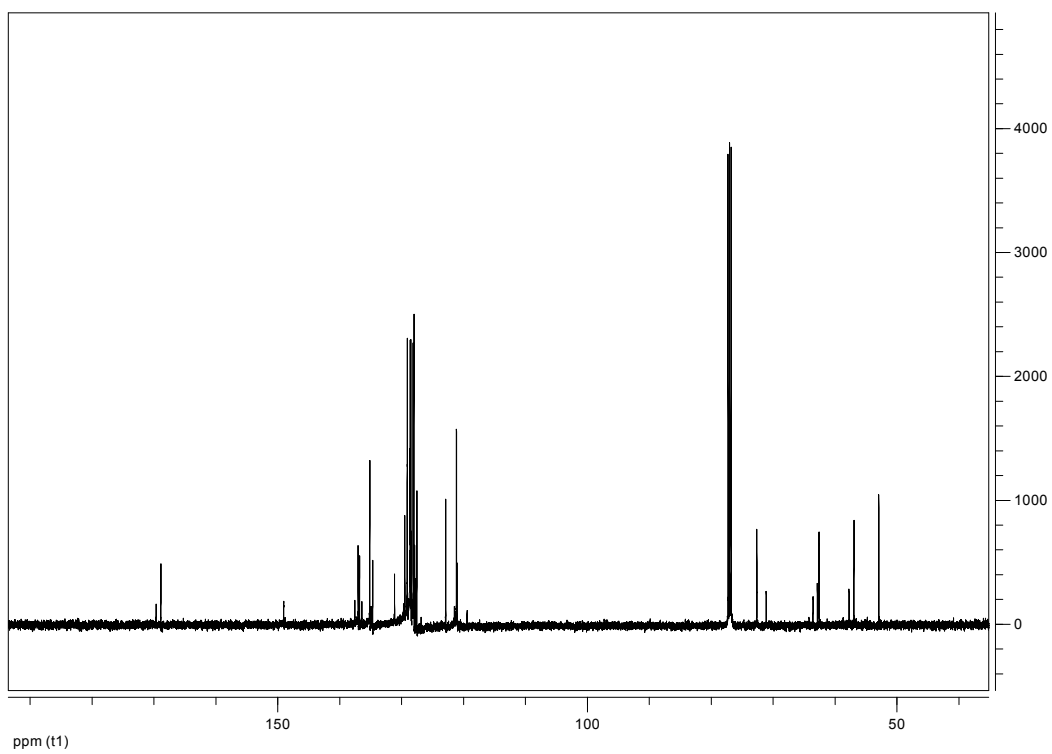
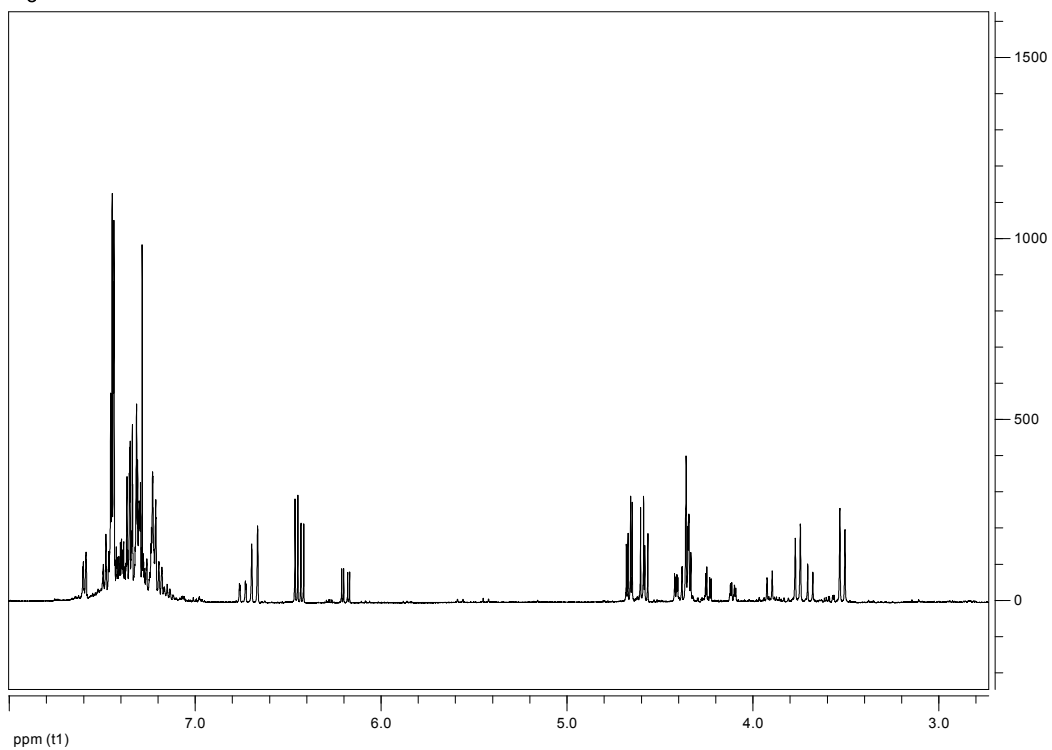
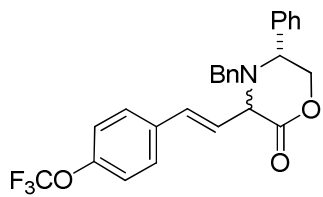


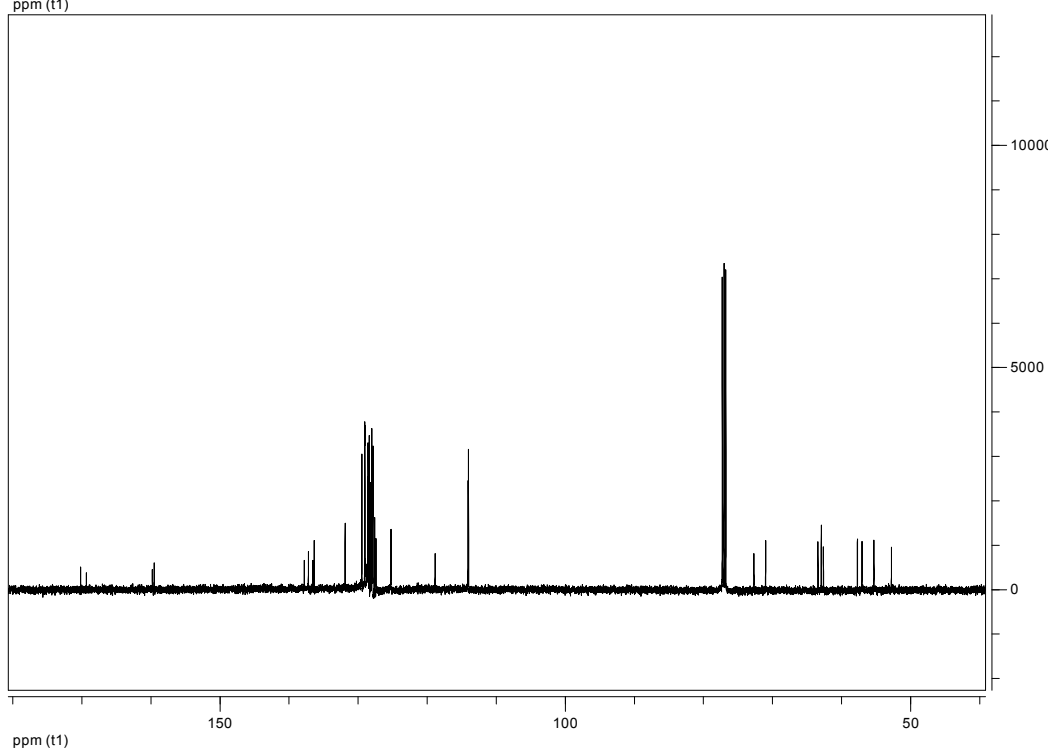
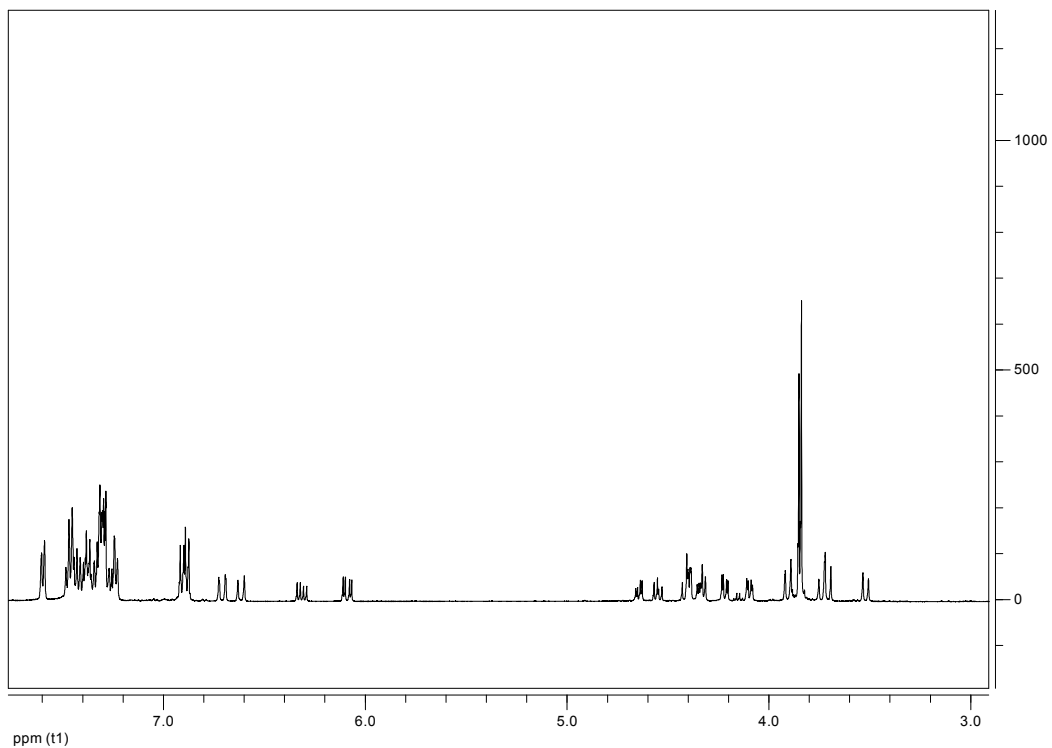
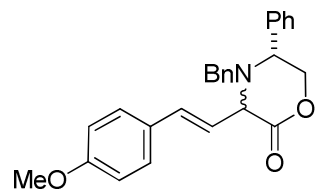


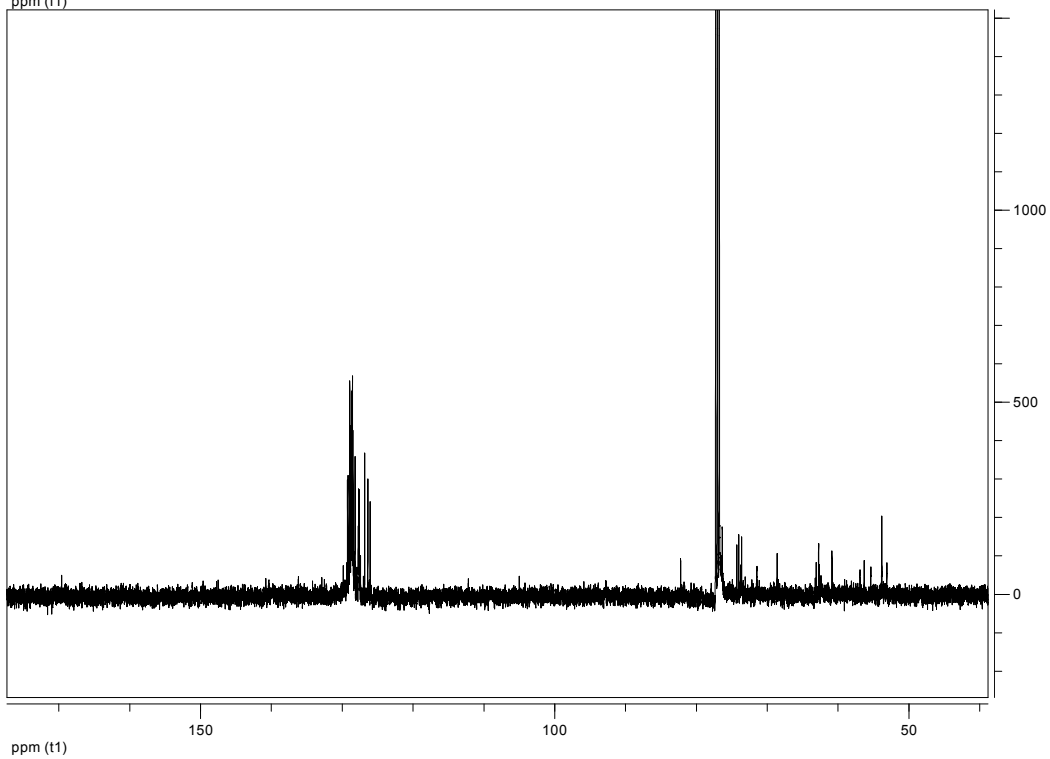
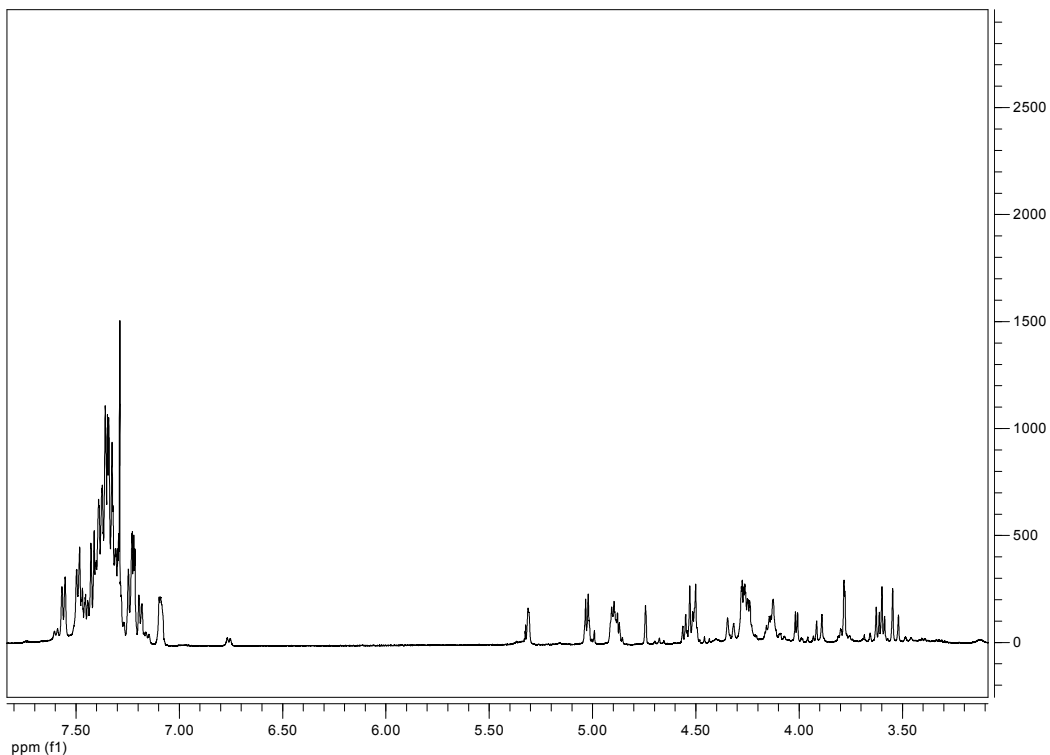
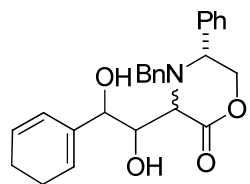












^1H NMR spectra of dihydroxylation reactions of **5a**:

top; with OsO_4 , NMO, no chiral ligand to give 1:1 mixture of isomers **10** and **11**

middle; in presence of DHQD-IND, to give isomer **10**

bottom; in presence of DHQ-IND, to give isomer **11**

