

Supplementary Material

β - and δ -Amino acids (2,3- and 3,4-*trans*-CHA) as catalysts in Knoevenagel condensation and asymmetric aldol reactions

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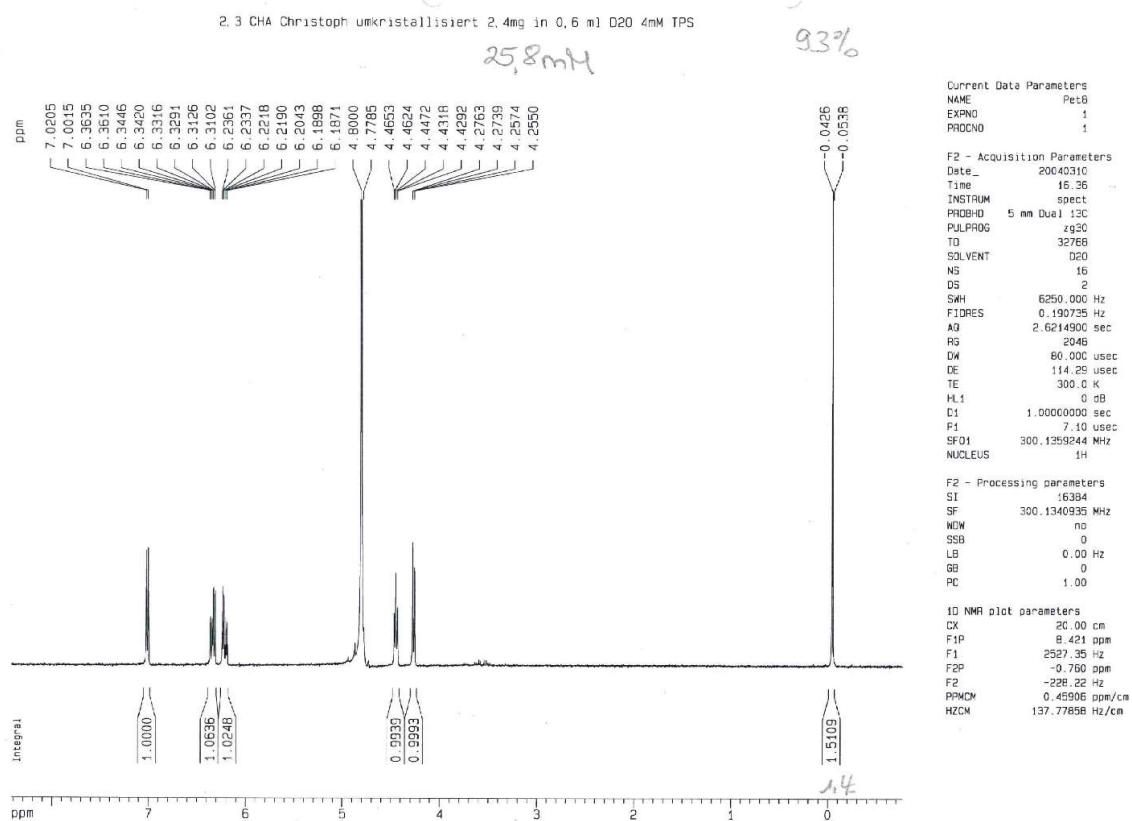


Figure 1: ^1H NMR spectrum of 3,4-*trans*-CHA (2) (300 MHz; D_2O ; 4 mM TSPNa).

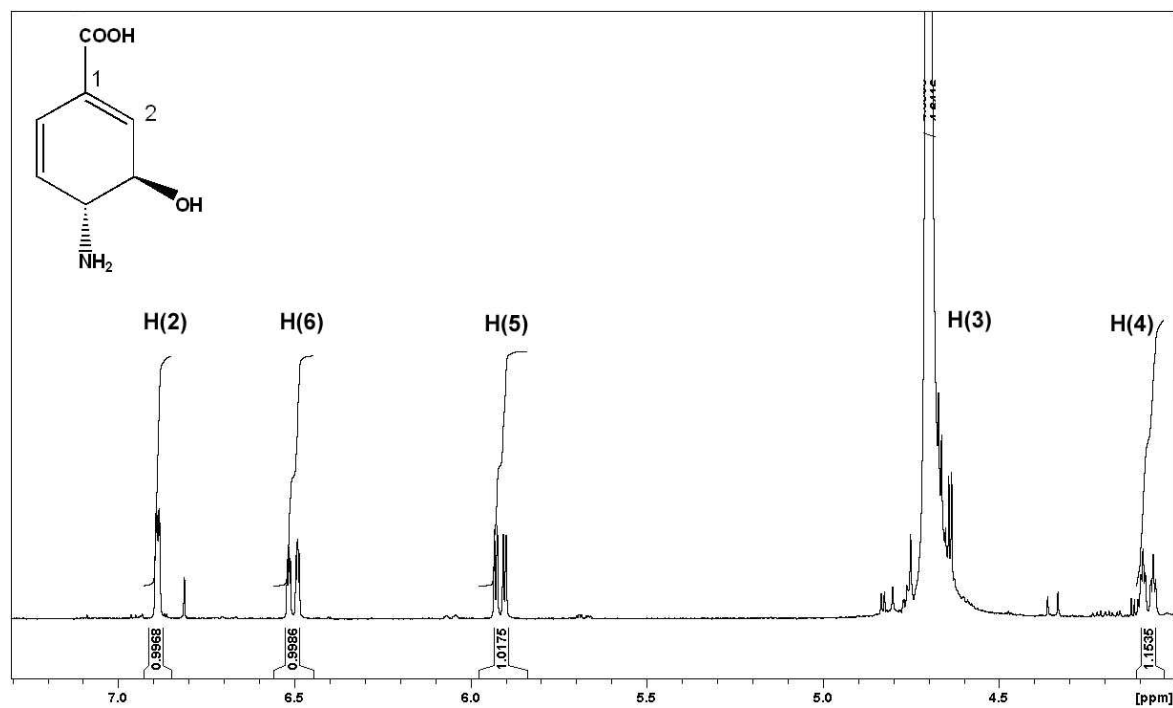


Figure 2: ^1H NMR spectrum of 3,4-*trans*-CHA (4) (400 MHz; D_2O ; 4 mM TSPNa).

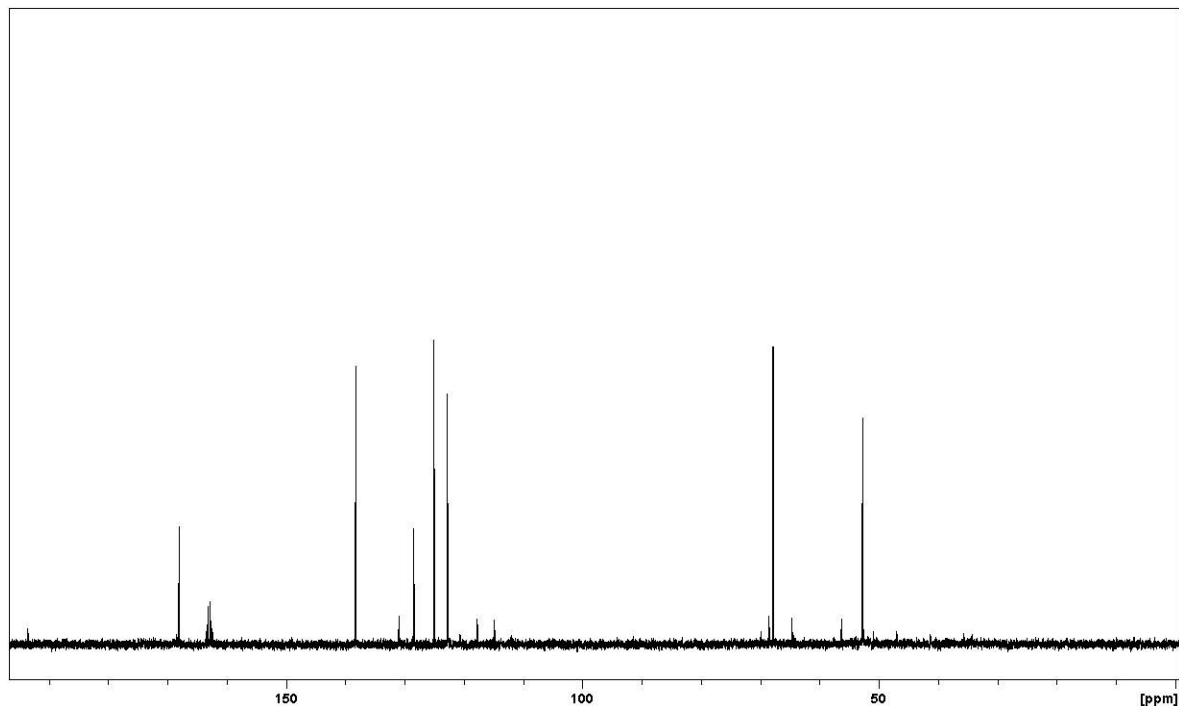


Figure 3: ^{13}C NMR spectrum of 3,4-*trans*-CHA (100 MHz; D_2O ; 4 mM TSPNa).

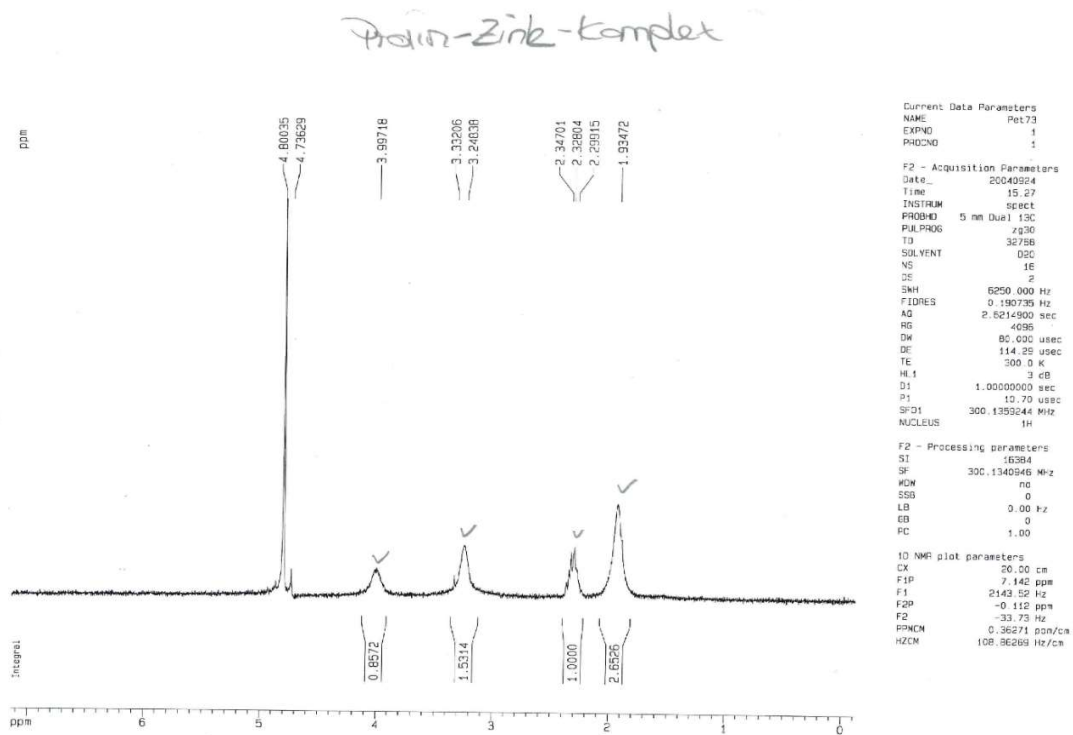


Figure 4: ^1H NMR spectrum of proline Zinc complex (**8**) (300 MHz; D_2O).

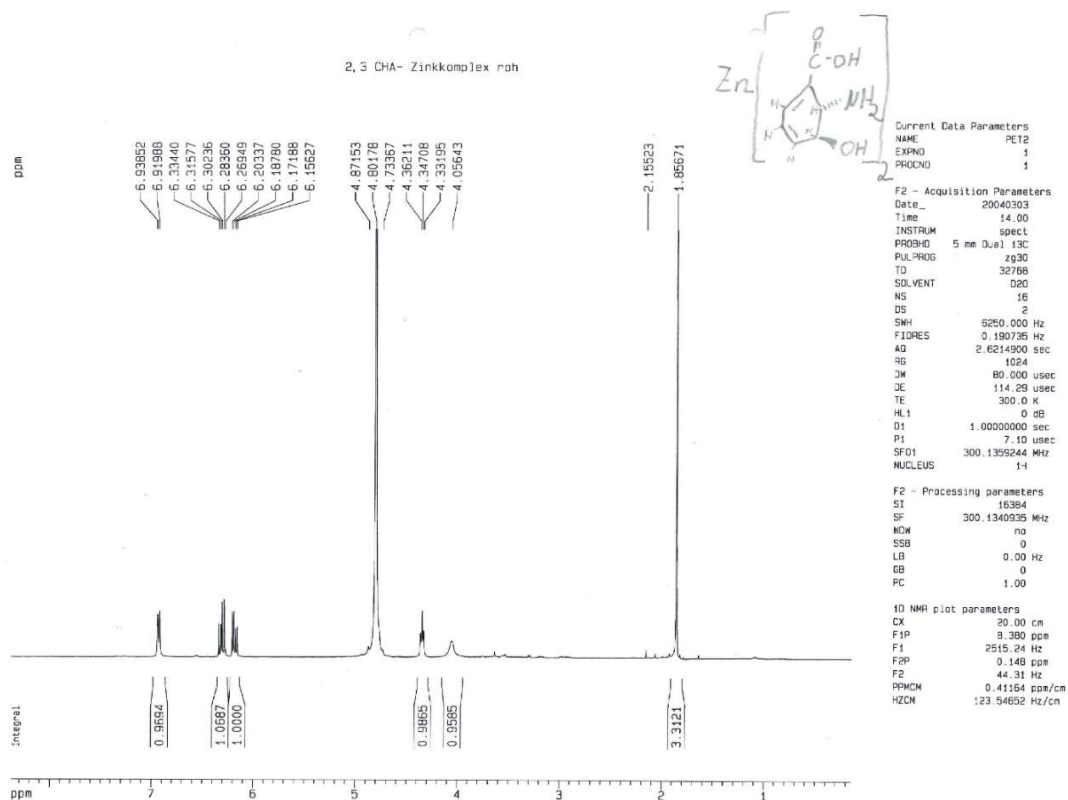


Figure 5: ¹H NMR spectrum of 2,3-*trans*-CHA Zinc complex (9) (300 MHz; D₂O).

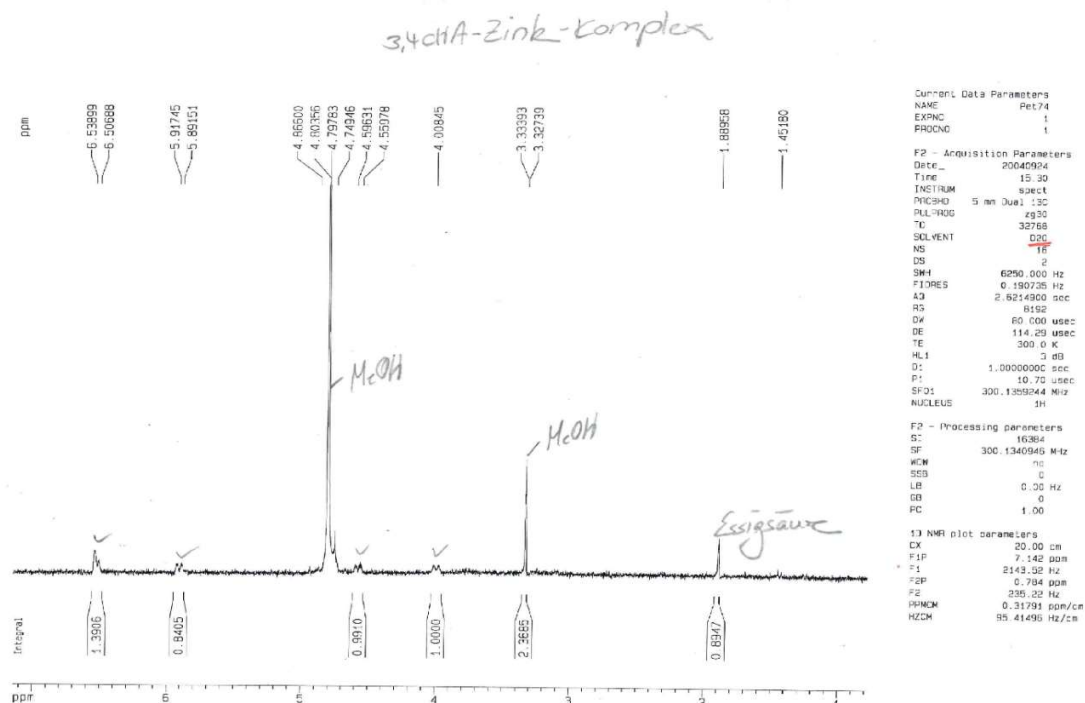


Figure 6: ¹H NMR spectrum of 3,4-*trans*-CHA Zinc complex (10) (300 MHz; D₂O).

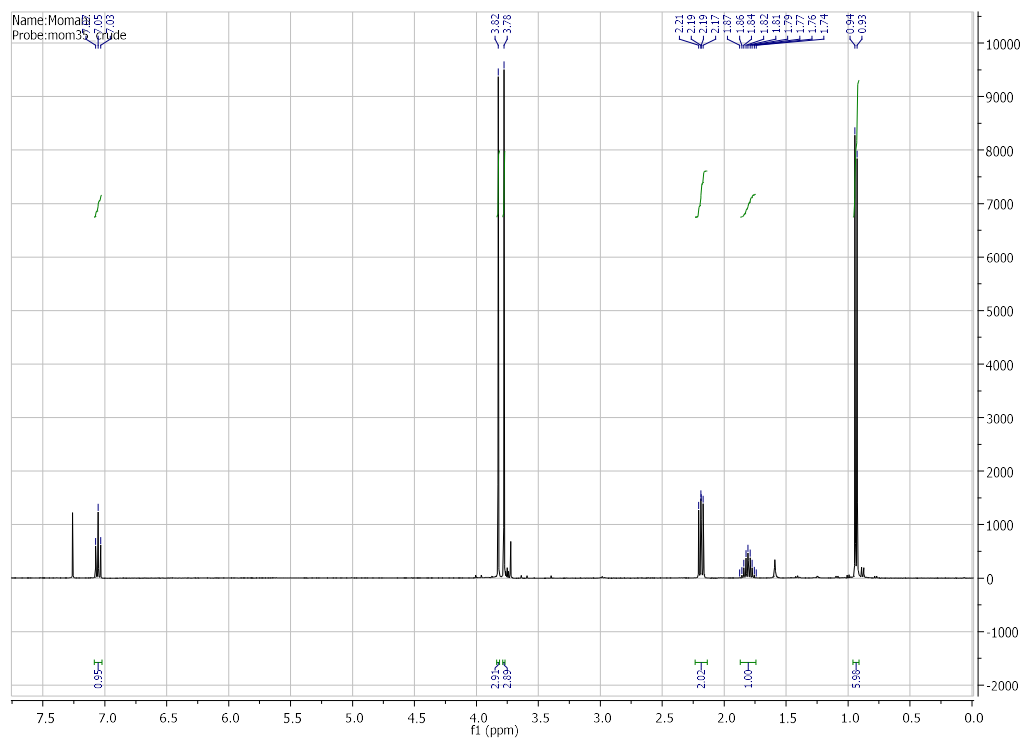


Figure 7: ¹H NMR spectrum of compound 13 (400 MHz; CDCl₃).

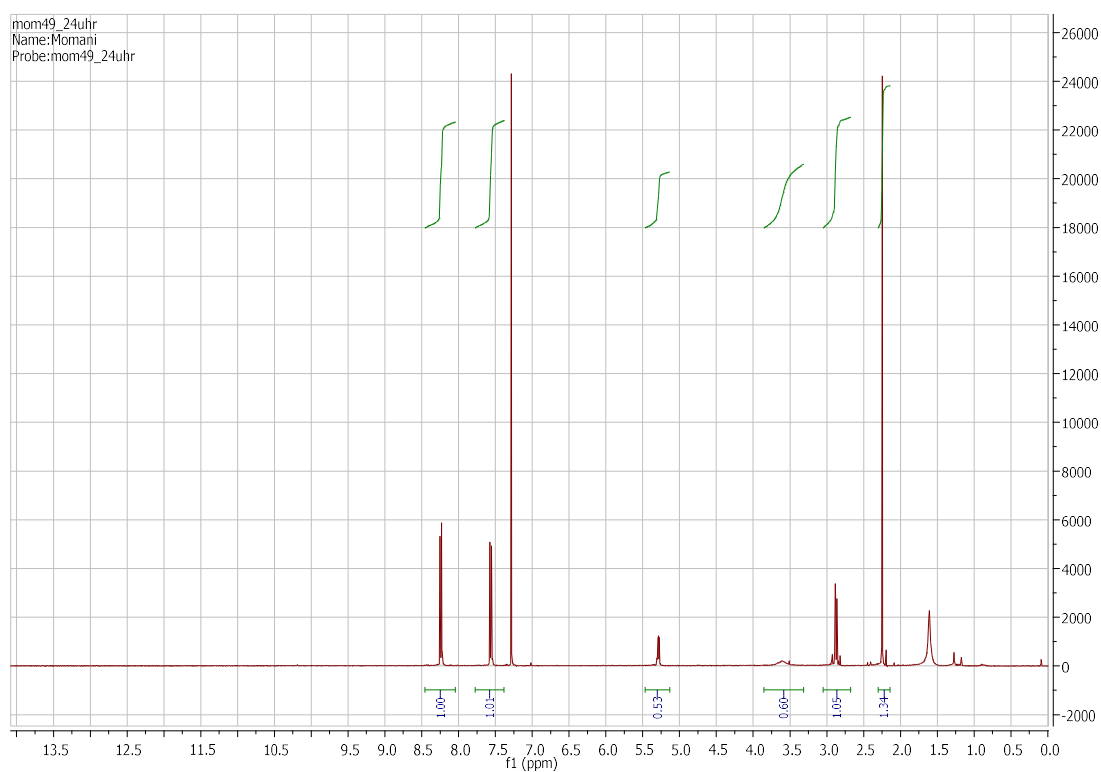


Figure 8: ¹H NMR spectrum of compound 16 (400 MHz; CDCl₃).

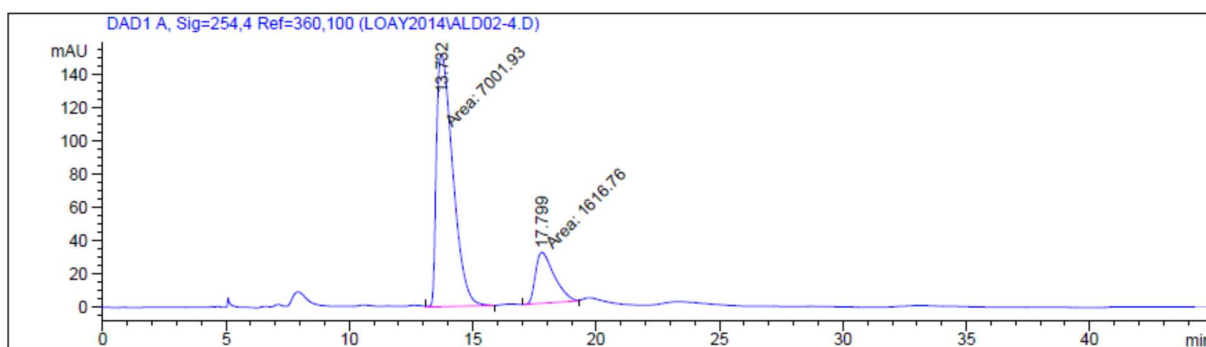


Figure 8: Chiral-phase HPLC chromatogram of compound **16** (Chiralpak AS, Daicel; eluent: 2-propanol/hexane (30:70); flow rate: 1.0 mL/min; detection: UV 254 nm).