

Electronic Supplementary Information (ESI)

Isothermal titration calorimetry as a new tool to investigate chiral interactions at crystal surfaces[†]

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Isothermal titration calorimetry (ITC) experiments

The ITC measurements were performed with a VP-ITC calorimeter produced by MicroCal Inc. (Northampton, MA). The chiral ITC measurements were performed as follows: First 25 mg of each tyrosin enantiomers powders was manually grinded and suspended in 5 mL double distilled water. The reservoir cell was filled with 1.442 mL of solution of the L or D tyrosin and thermostated at 25⁰C. Stock solutions of 0.5M of either L- Threonine or L Phenylalanine in distilled water at pH = 7.10 were prepared. Injection volumes of 5.0 μ L were delivered during 30 min, with the time interval of 200 seconds between the injections and the reference cell was filled with water

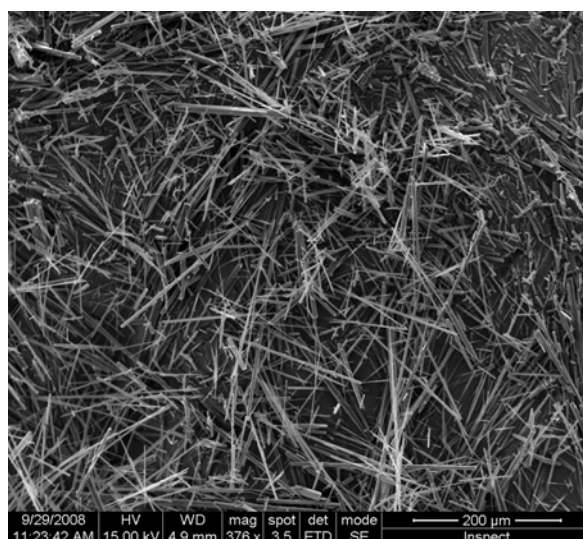


Figure S1 Scanning electron micrograph of L-tyrosine crystals crystallized from a supersaturated aqueous solution.

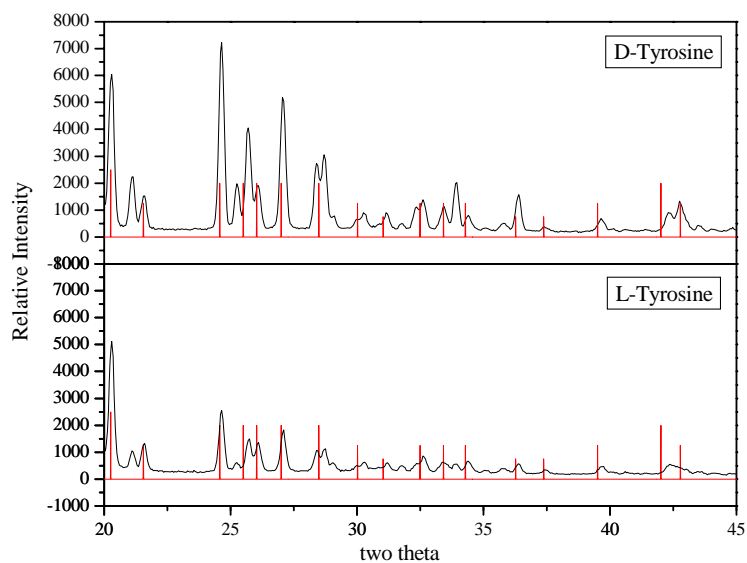
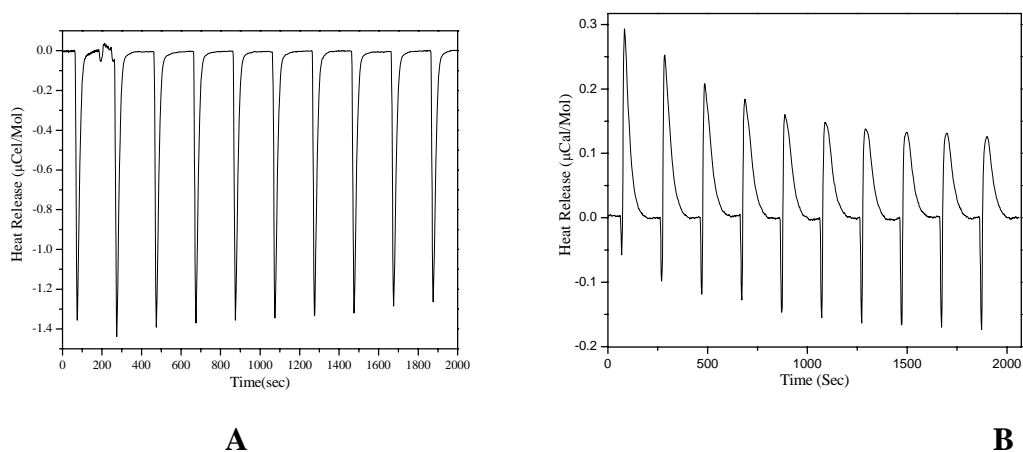


Figure S2 – X-ray diffraction pattern of L and D Tyrosin crystals



A

B

Figure S3 ITC profile of the heat flow per injection in dilution of (A) L- phenylalanine (B) L threonine.