

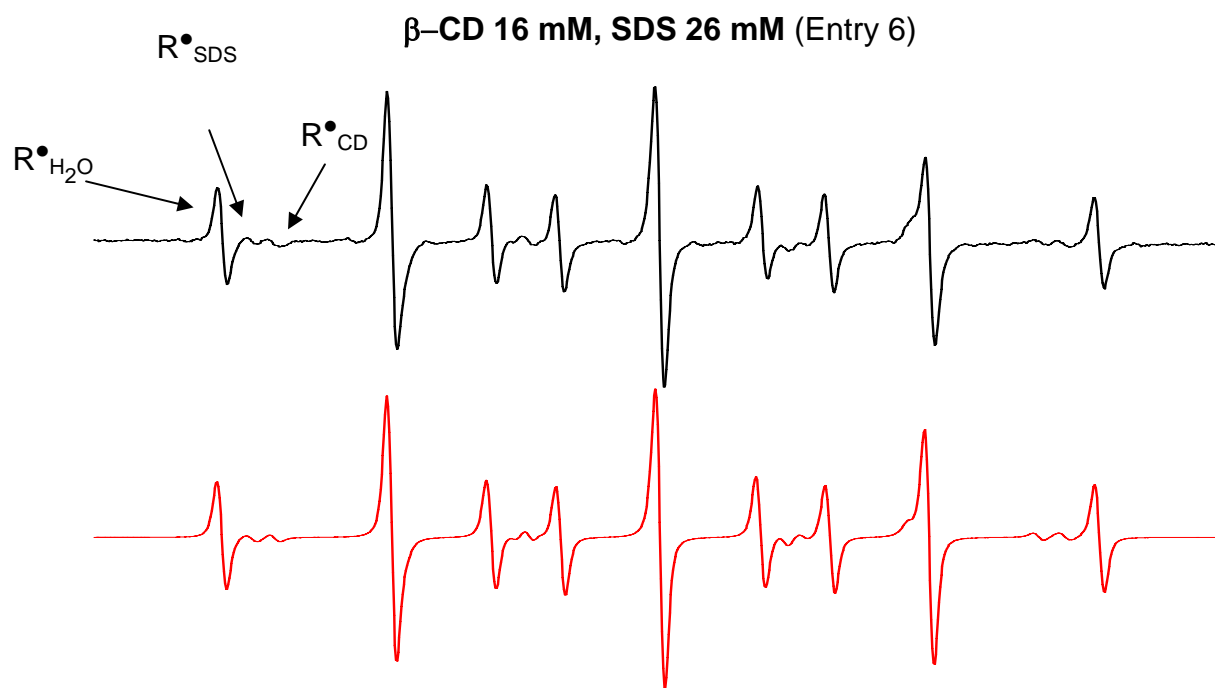
Supplementary Information for:

An EPR Method for Measuring the Rate of Distribution of Organic Substrates between Cyclodextrin, Micelles and Water

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EPR measurements. TBBN radical is generated by mixing a solution of the corresponding amine (0.8 mM) with a solution of the magnesium salt of monoperoxyphthalic acid (Aldrich, technical grade) 0.8 mM. In order to achieve a sufficiently large radical concentration, the mixed solution is generally heated at 60 °C for 1-2 min. Aliquots from a concentrated surfactant and CD solution are added to the solution of nitroxide to yield the required concentrations. Samples are then transferred in capillary tubes (1 mm i.d.) and the EPR spectra are recorded by using the following settings: microwave power 5.0 mW, modulation amplitude 0.05 mT, modulation frequency 100 kHz, scan time 180 s. Digitized EPR spectra were transferred to a personal computer and were analyzed using digital simulations carried out with a program developed in our laboratory and based on a Monte Carlo procedure (M. Lucarini, B. Luppi, G. F. Pedulli and B. P. Roberts, *Chem.-Eur. J.* 1999, **5**, 2048).

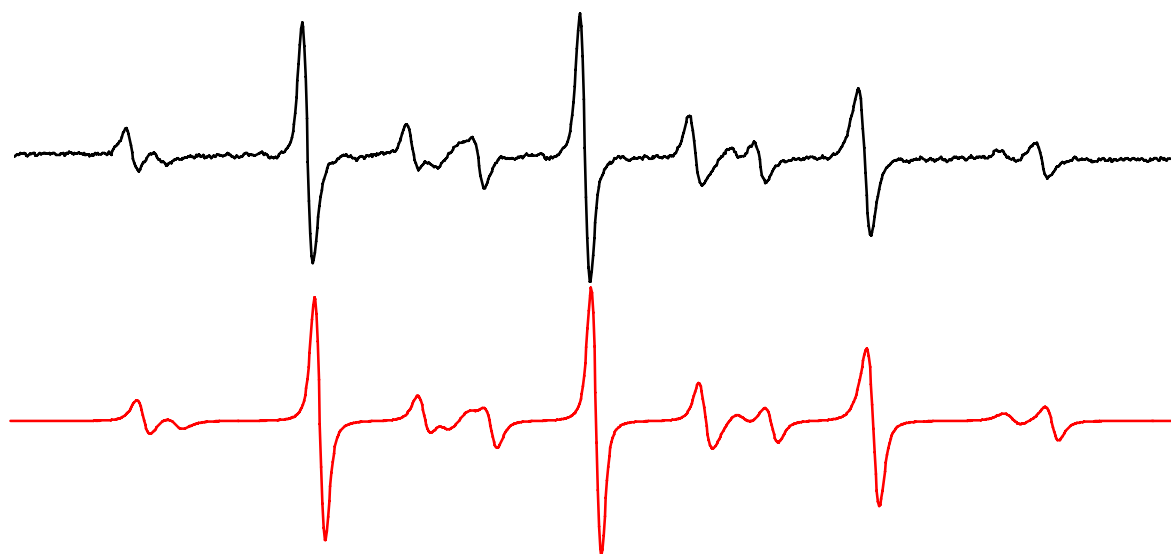
CE experiments were performed by analyzing the electrophoretic behaviour of *tert*-butyl benzyl ketone (0.06 mM dissolved in water/methanol 88/12, v/v), using a sodium phosphate 10 mM (pH 8.0) running buffer, containing either β -CD and DM- β -CD at 16 mM and 20 mM, respectively. *Tert*-butyl benzyl ketone was prepared following literature procedure (F. Perez, C. Jaime and X. Sánchez-Ruiz, *J. Org. Chem.* 1995, **60**, 3840).



β -CD 16 mM, SDS 50 mM (Entry 8)



DM- β -CD 5.3 mM, SDS 33 mM (Entry 9)



DM- β -CD 20 mM, SDS 33 mM (Entry 10)



DM- β -CD 20 mM, SDS 53 mM (Entry 11)



DM- β -CD 20 mM, SDS 105 mM (Entry 12)



TM- β -CD 20 mM, SDS 53 mM (Entry 14)

