

Supporting Information 1:

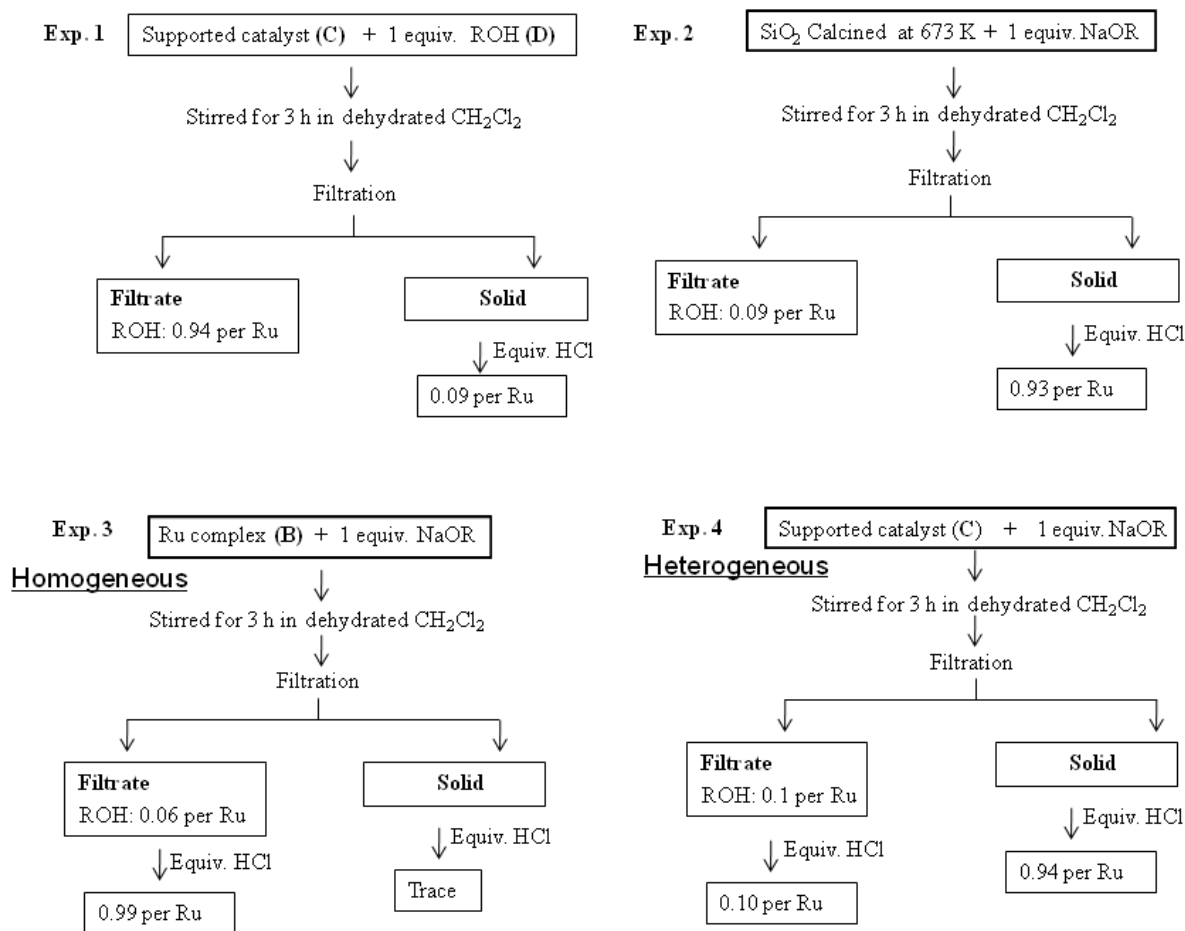


Figure Quantitative analyses of the coordination of the template (D) on the homogeneous and heterogeneous Ru complexes. Exp. 1: Measurement of the adsorption of ROH (D) on SiO₂. Exp. 2: Measurement of reaction of NaOR with Si-OH on SiO₂. Exp. 3: Measurement of the coordination of the template by the reaction of NaOR on the homogeneous Ru complex (B). Exp. 4: Measurement of the coordination of the template by the reaction of NaOR on the heterogeneous Ru complex (C).

Supporting Information 2:

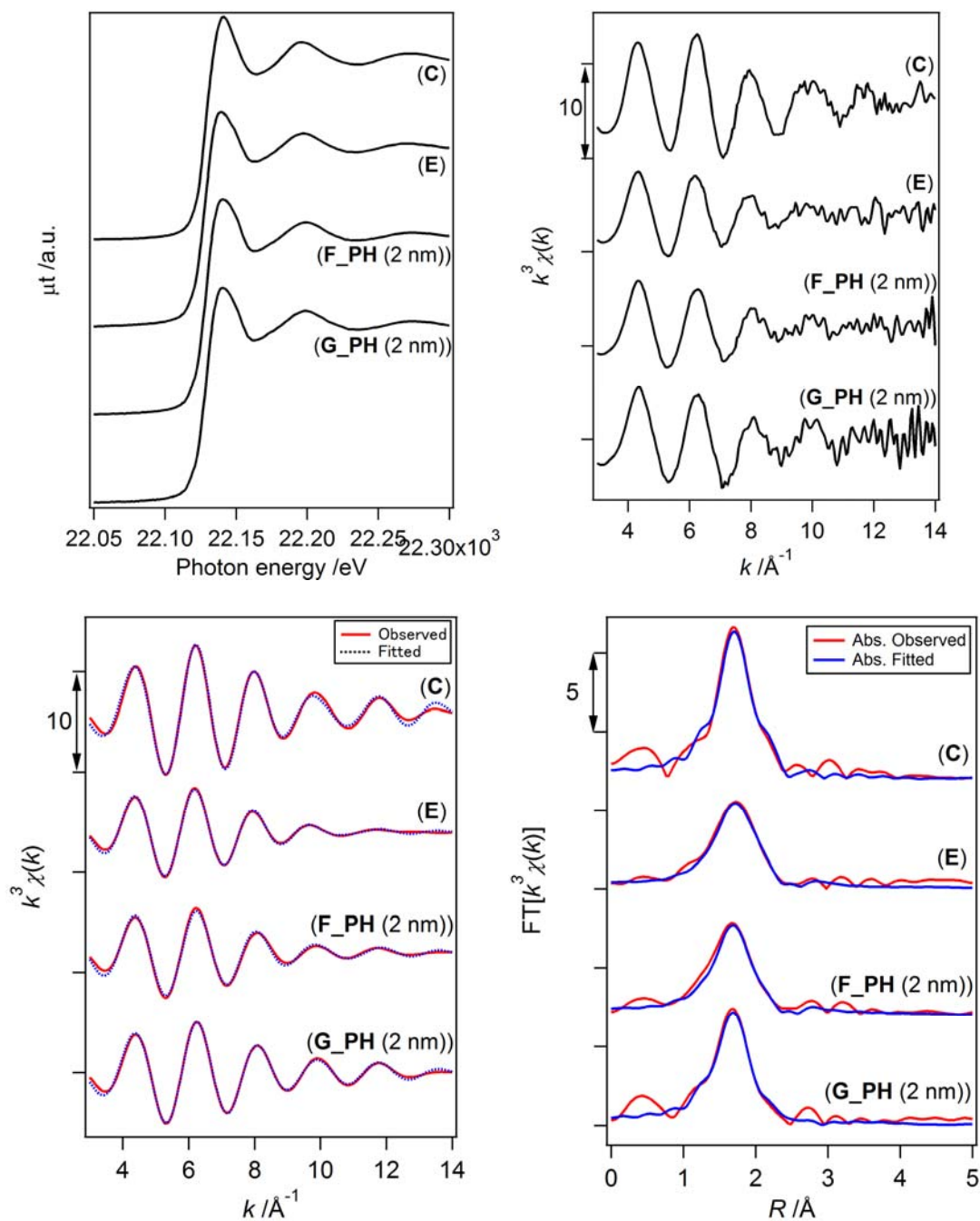


Figure Ru K-edge XAFS for (C), (E), (F_{PH}) (2 nm height), and (G_{PH}) (2 nm height) measured at 20 K. (Top, left) XANES, (top, right) observed EXAFS oscillations, (bottom, left) EXAFS oscillations for curve-fitting, and (bottom, right) observed EXAFS Fourier transforms.

Supporting Information 3:

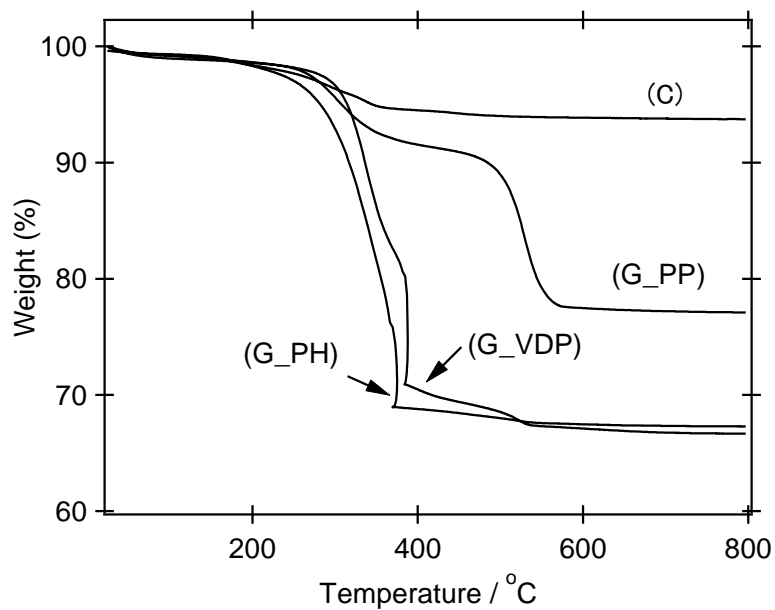


Figure TGA analyses for (C), (G_PH) (2 nm height), (G_VDP) (2 nm height), and (G_PP) (2 nm height).

Supporting Information 4:

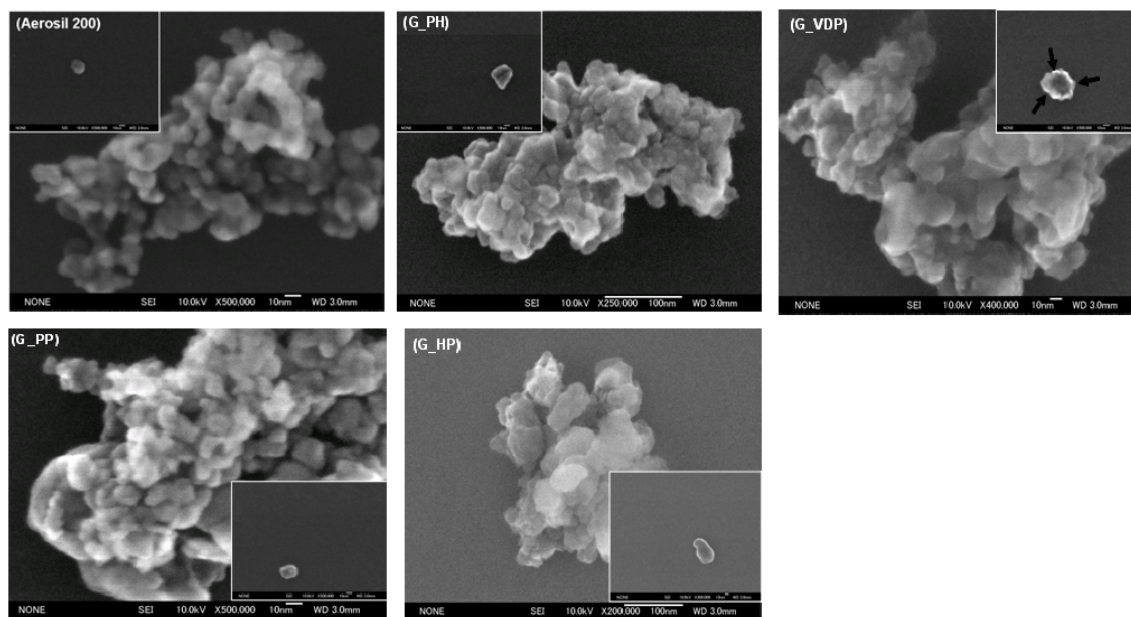
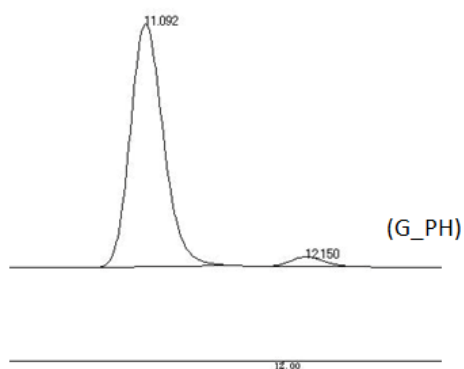
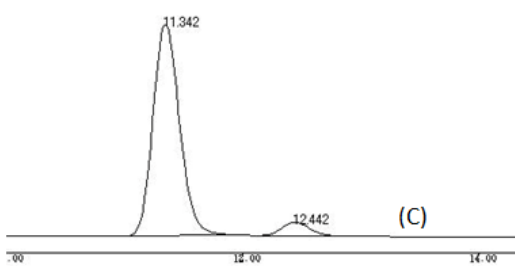
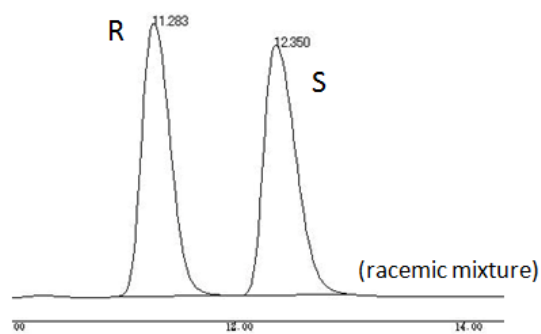


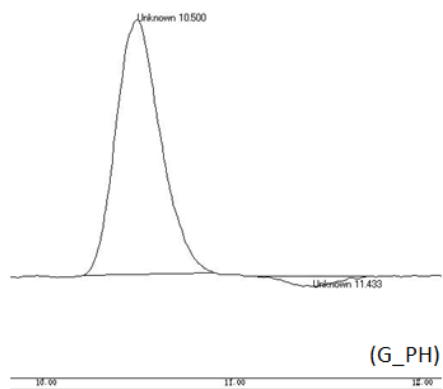
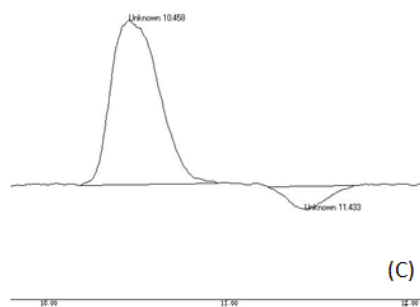
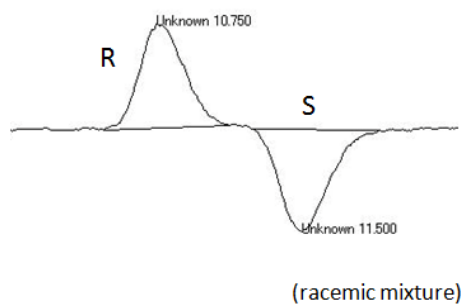
Figure SEM images of Aerosil 200 (support) and the molecularly imprinted catalysts (G_PH, G_VDP, G_PP, and G_HP) (2 nm height).

Supporting Information 5:

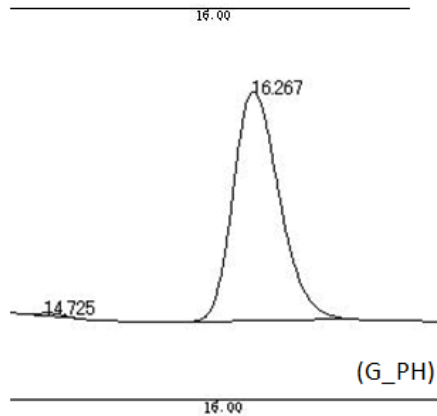
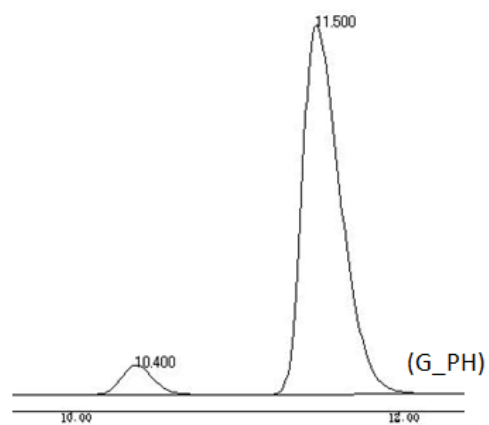
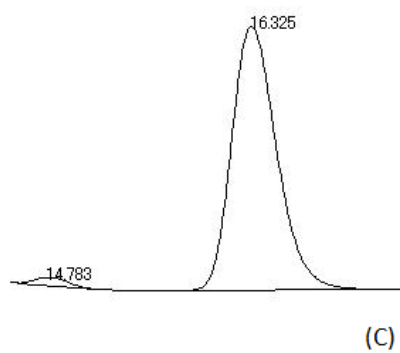
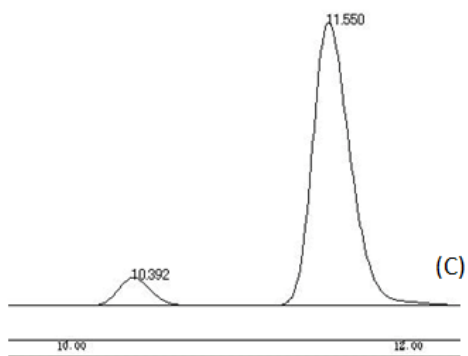
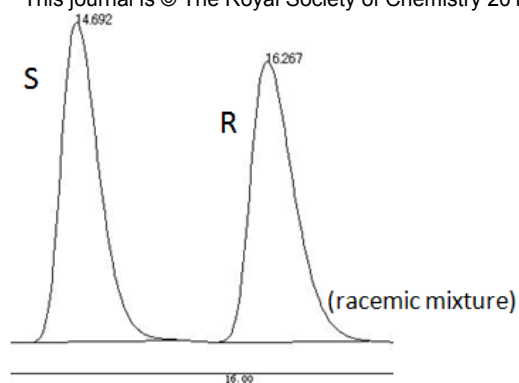
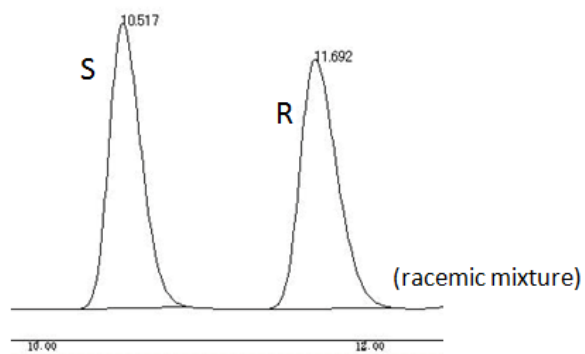
HPLC charts of Table 3



Entry 1
Chiralcel OB-H, IPA/n-hexane = 4/96, 1.0 ml/min, 303 K
UV detector

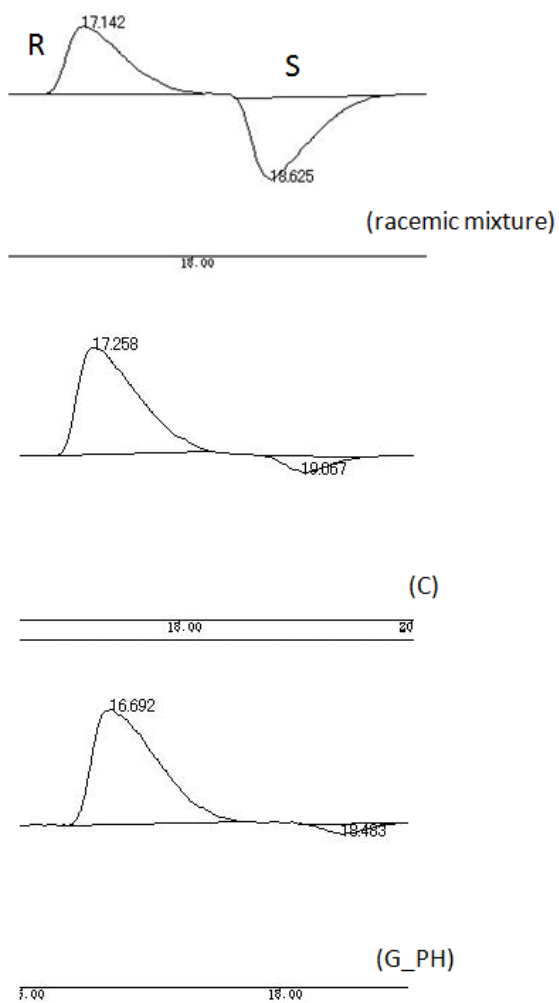


Entry 2
Chiralcel OD-H, IPA/n-hexane = 2/98, 1.0 ml/min, 303 K
CD detector

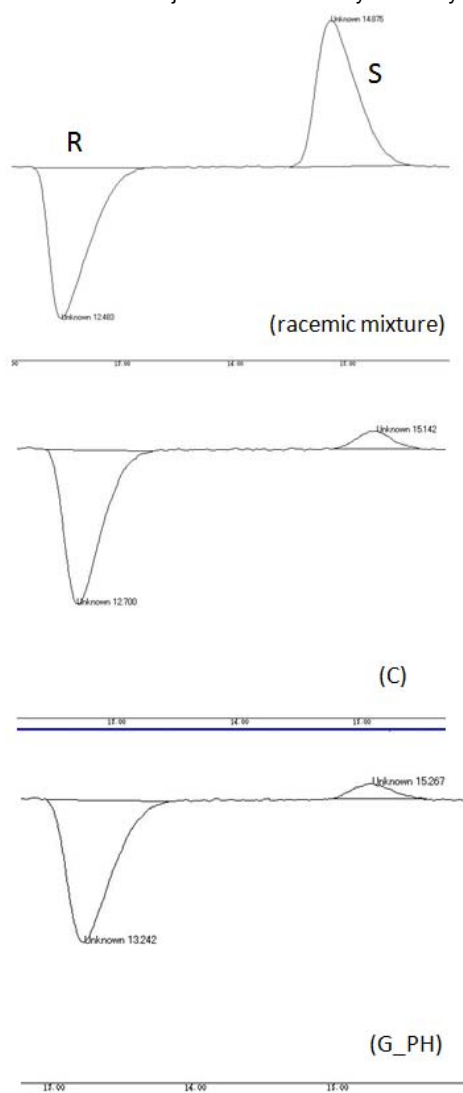


Entry 3
Chiralcel OB-H, IPA/n-hexane = 3/97, 1.0 ml/min, 303 K
UV detector

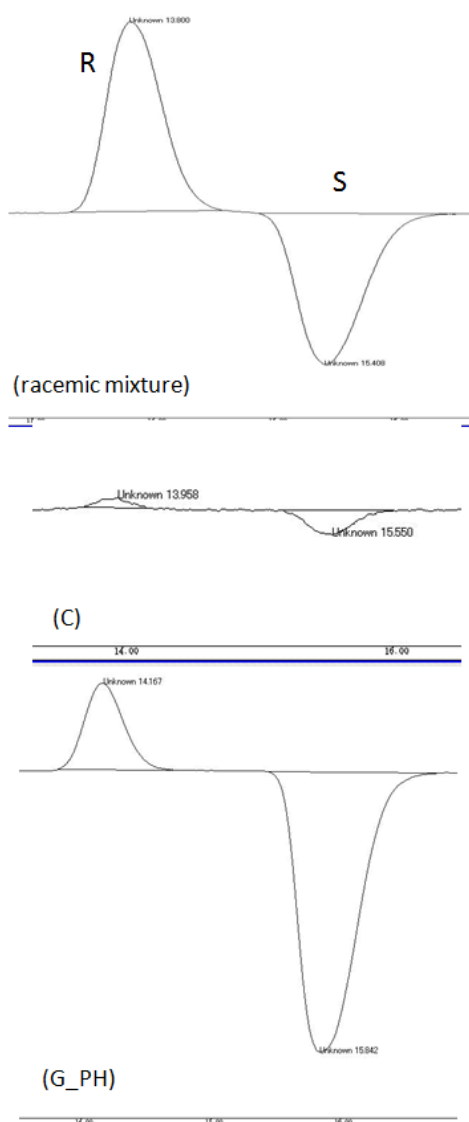
Entry 4
Chiralcel OD-H, IPA/n-hexane = 2/98, 1.0 ml/min, 303 K
UV detector



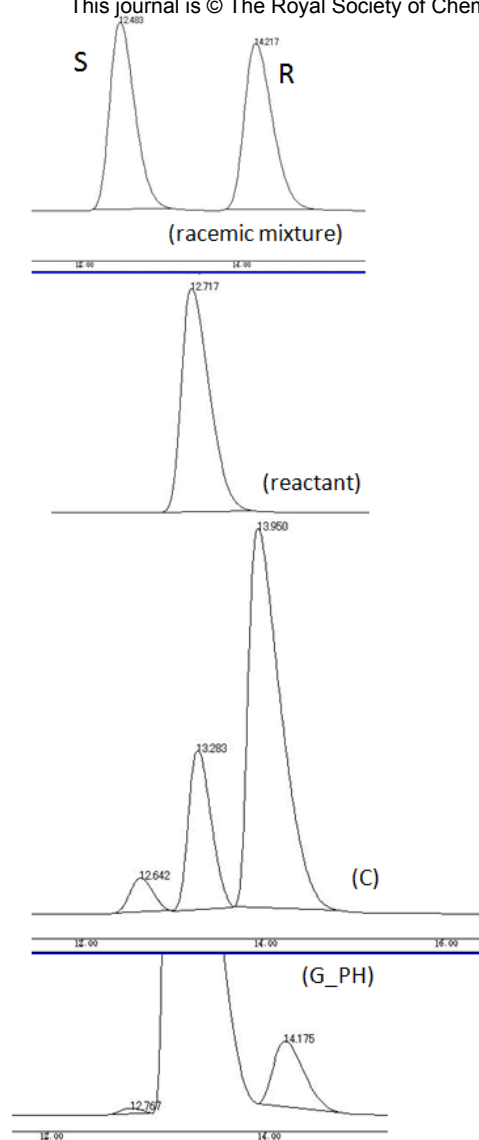
Entry 5
Chiralcel OD-H, IPA/n-hexane = 1/99, 1.0 ml/min, 303 K
CD detector



Entry 6
Chiralcel OD-H, IPA/n-hexane = 2/98, 1.0 ml/min, 303 K
CD detector



Entry 7
Chiralcel OD-H, IPA/n-hexane = 3/97, 1.0 ml/min, 303 K
CD detector



Entry 8
Chiralcel OB-H, IPA/n-hexane = 5/95, 1.0 ml/min, 303 K
UV detector