

## Supporting Information

# Efficient HPLC enantiomer separation using a pillared homochiral metal-organic framework as a novel chiral stationary phase

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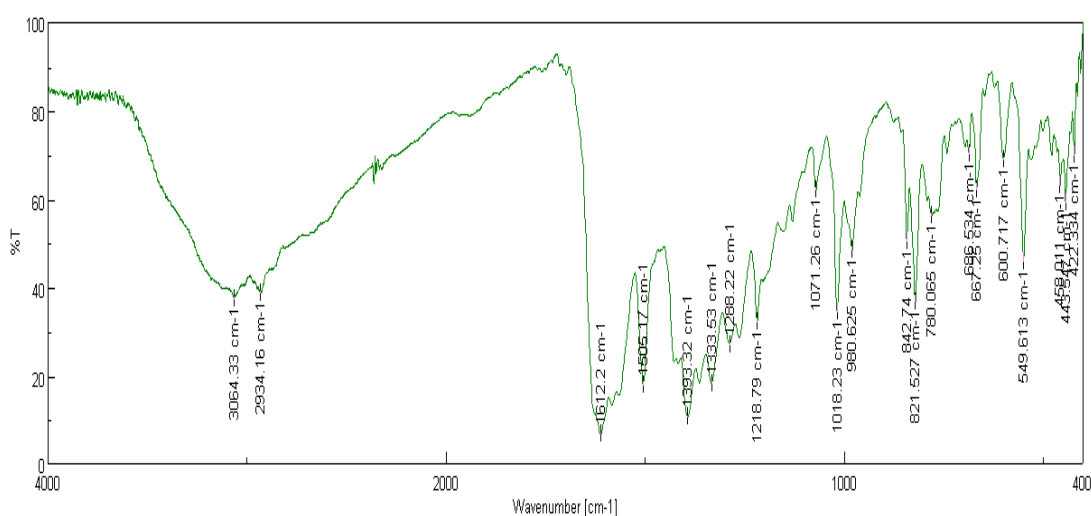


Fig. S1 IR spectrum of MOF-4

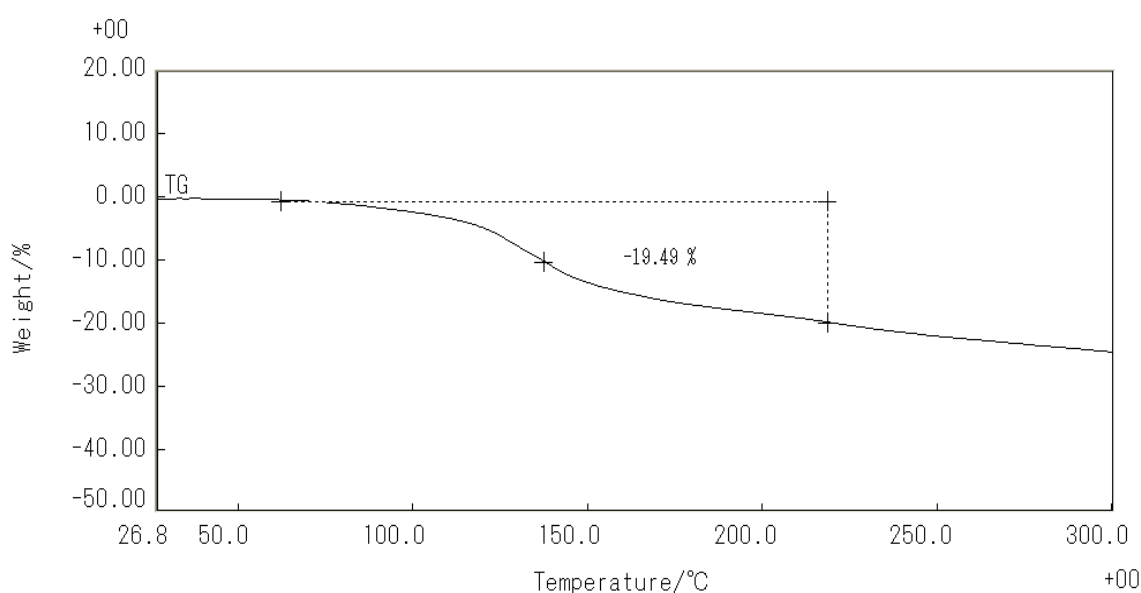


Fig. S2 TG trace of MOF-4

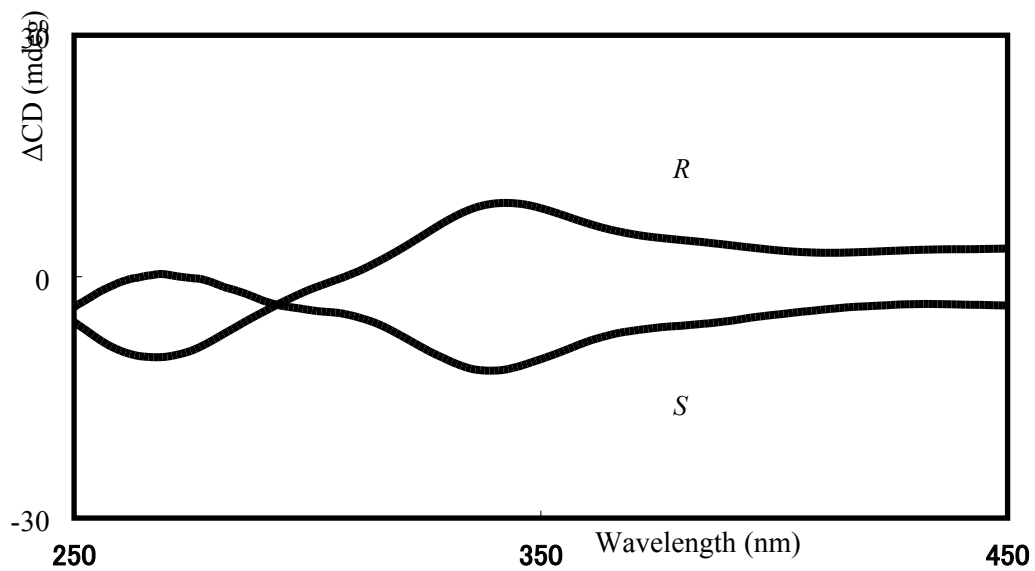


Fig. S3 CD spectra of MOF-4

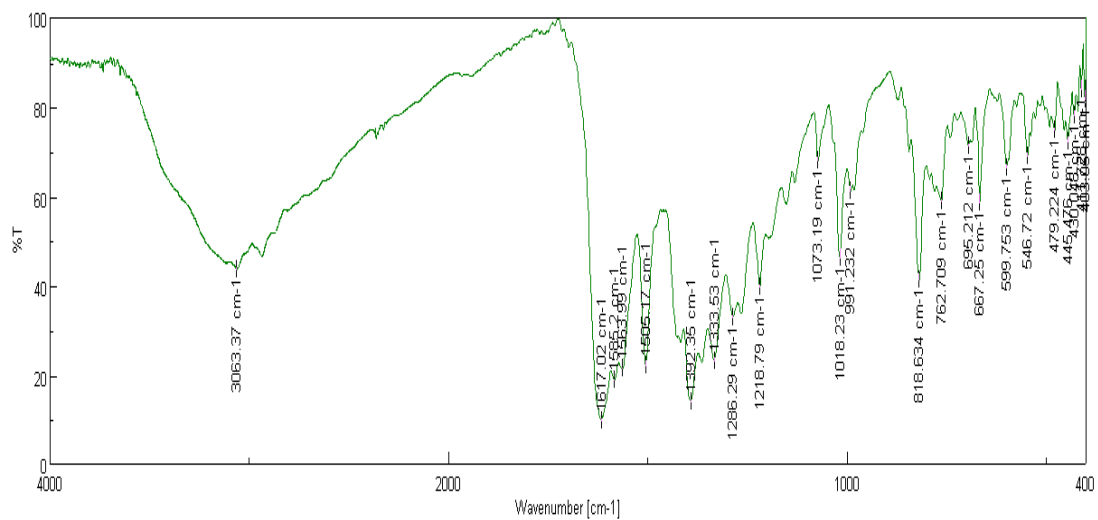


Fig. S4 IR spectra of MOF-5

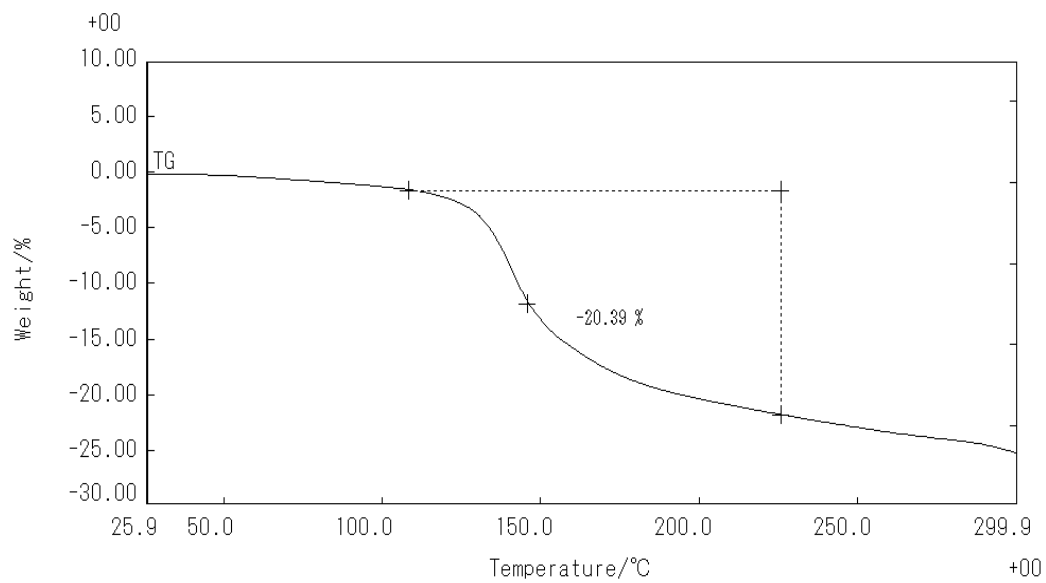


Fig. S5 TG trace of MOF-5

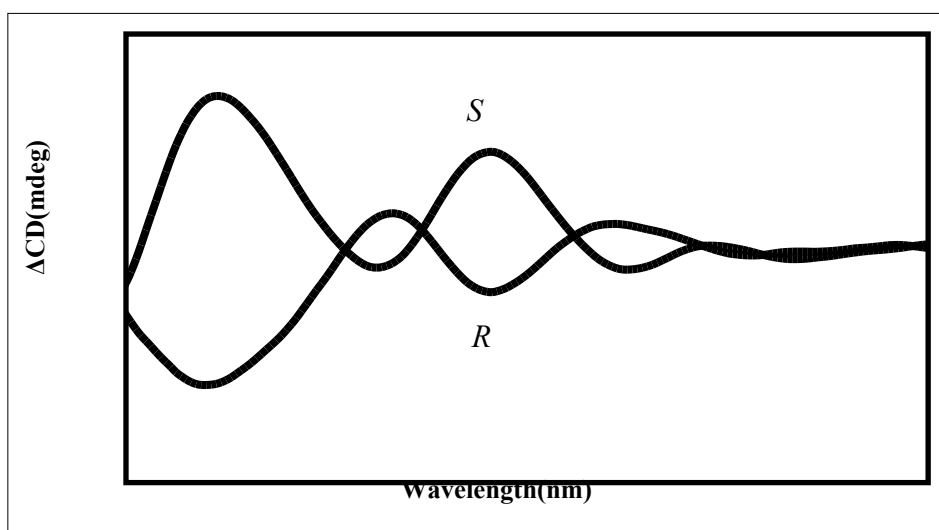
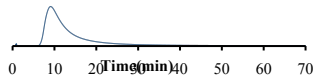
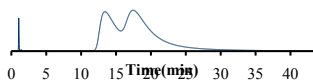
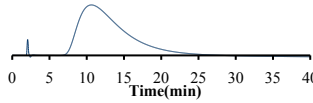

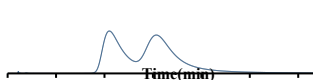
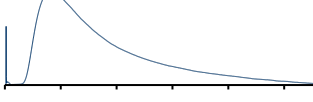






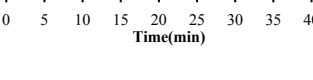
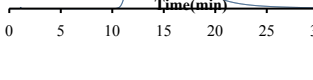
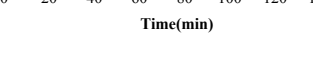
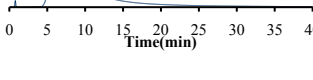
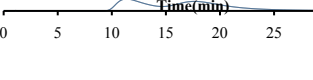
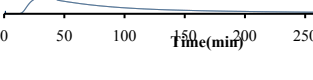
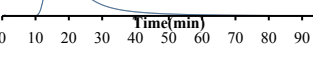
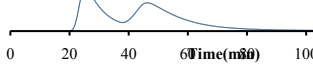
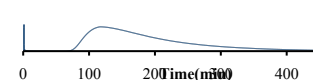
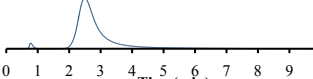
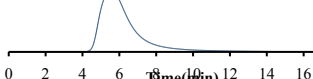
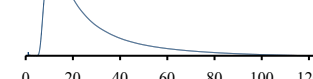
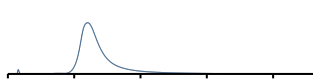








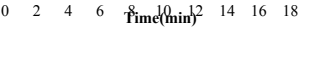
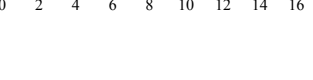
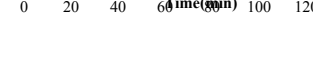
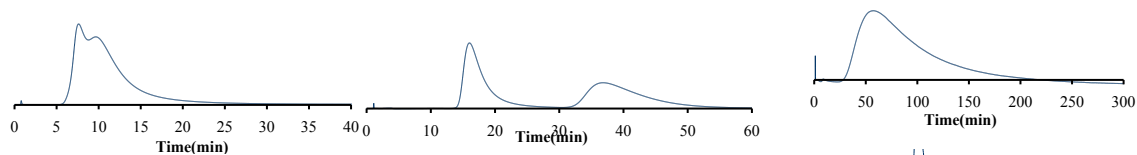


Fig. S6 CD spectra of MOF-5

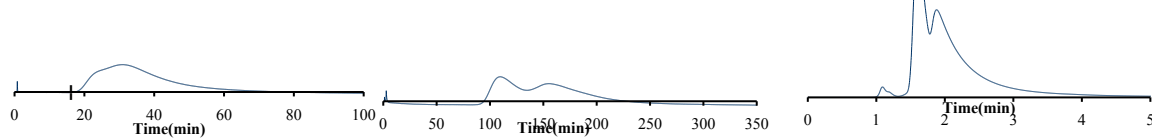
Table S1 Chromatographic data for the resolution of sulfoxides (Eluent: Hexane/2-PrOH = 90/10).

Sulfoxide	MOF-4	MOF-5	MOF-6
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
			

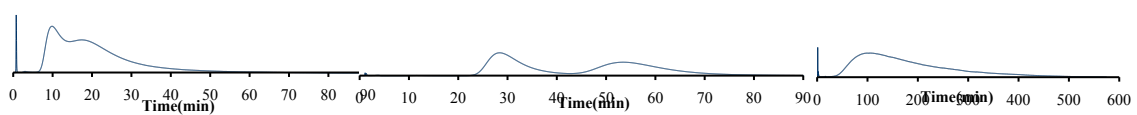
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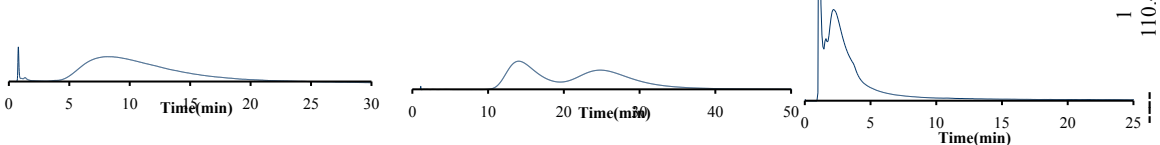
19



20



21



22

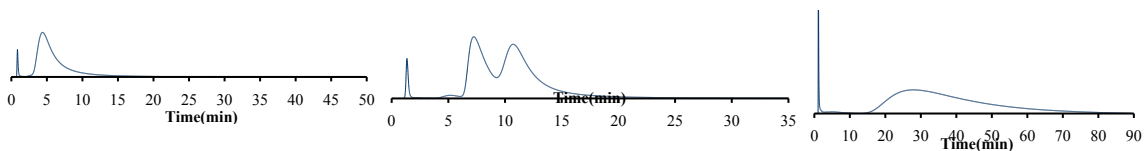
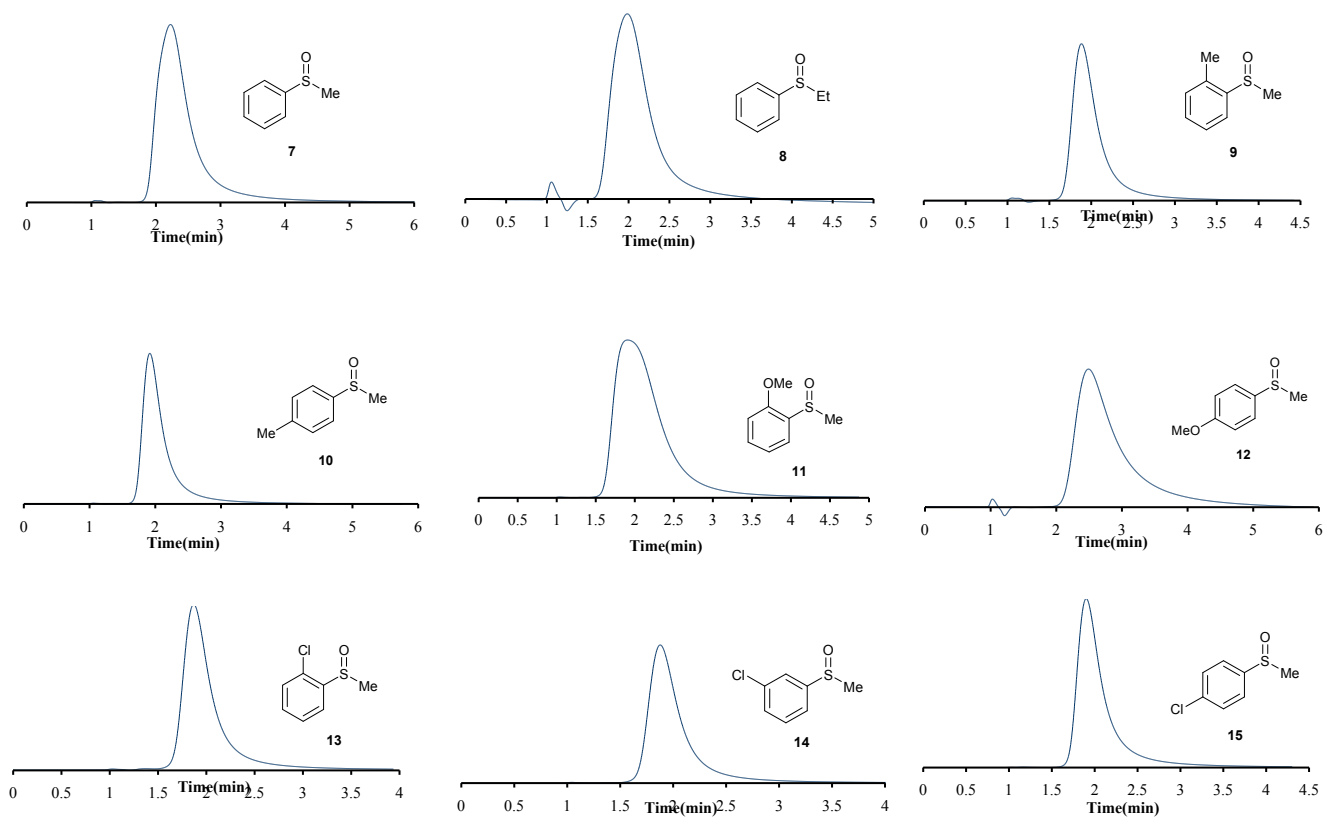


Table S2 Chromatographic data for the resolution of sulfoxides on MOF-5 (Eluent: Hexane/EtOH = 50/50).



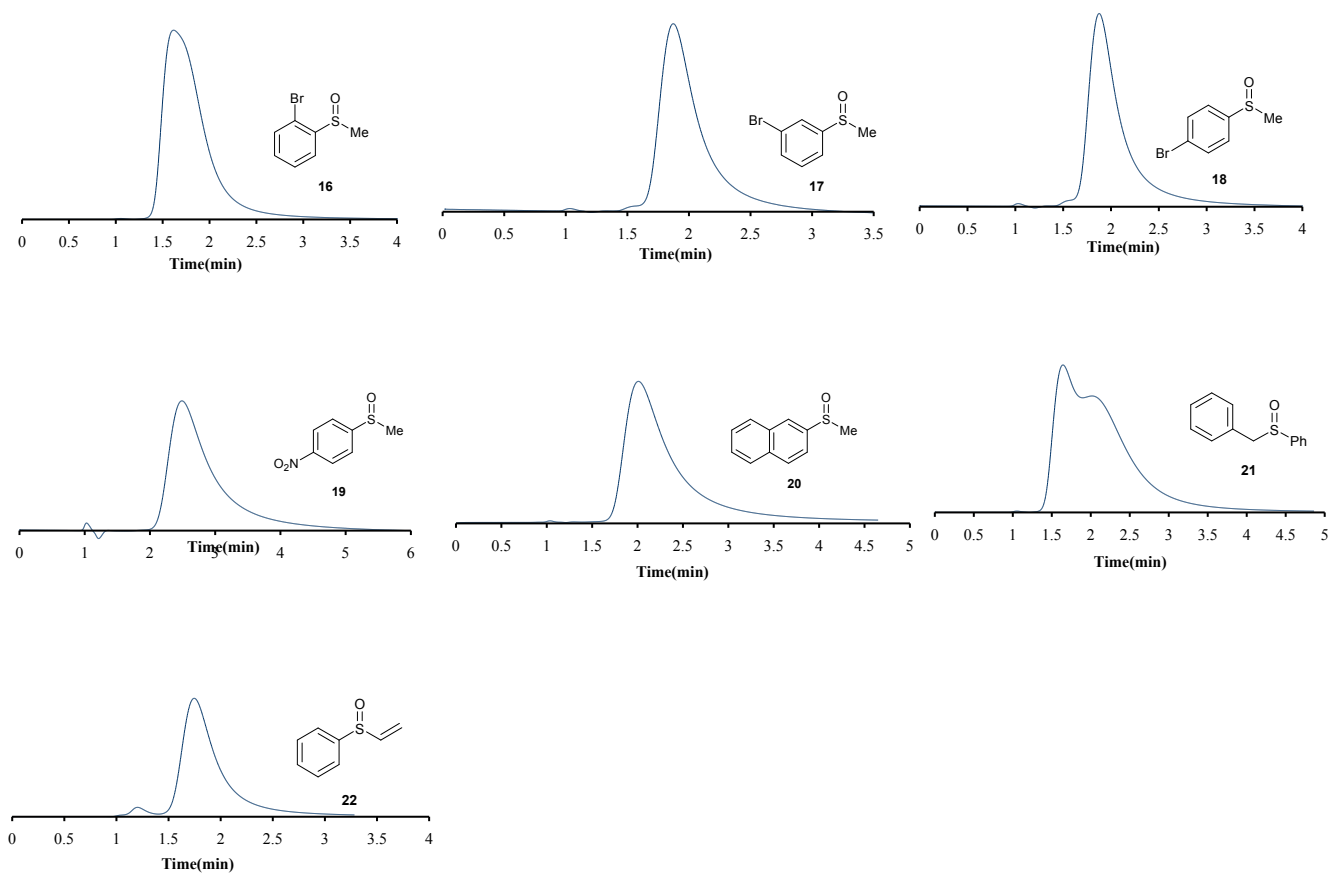
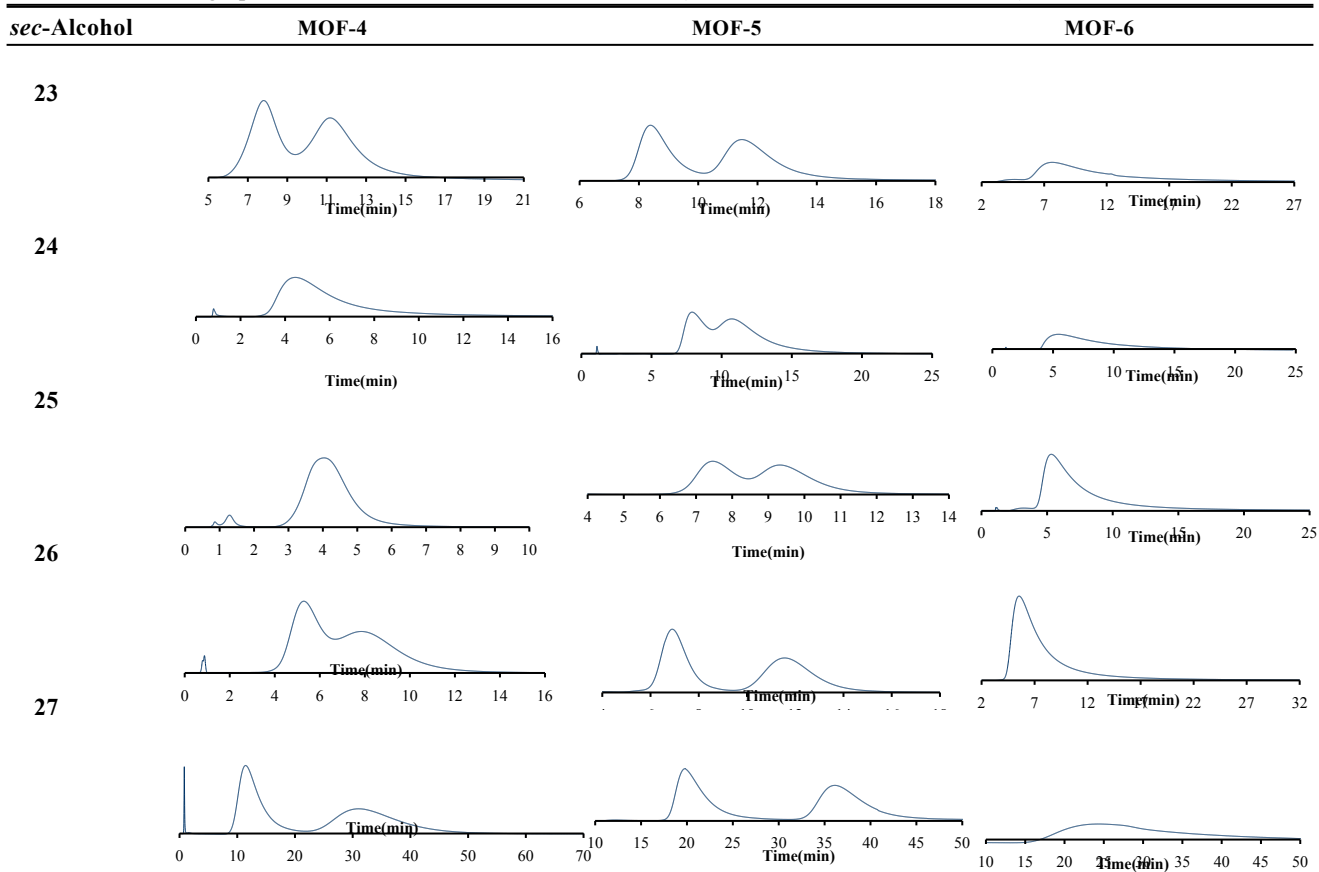
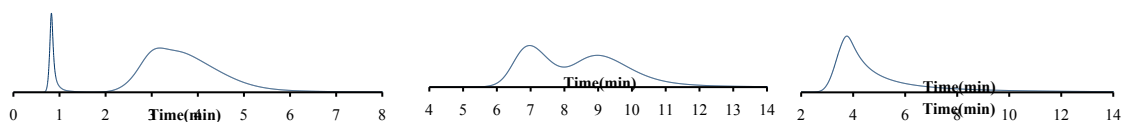


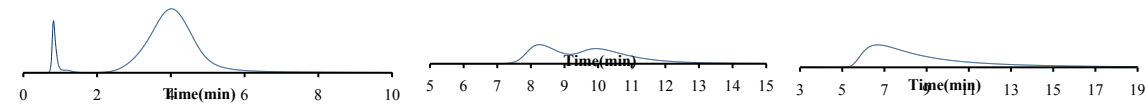
Table S3 Chromatographic data for the resolution of *sec*-alcohols (Eluent: Hexane/2-PrOH = 99/1).



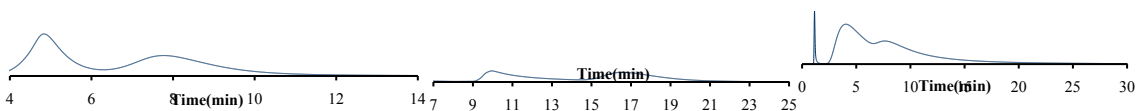
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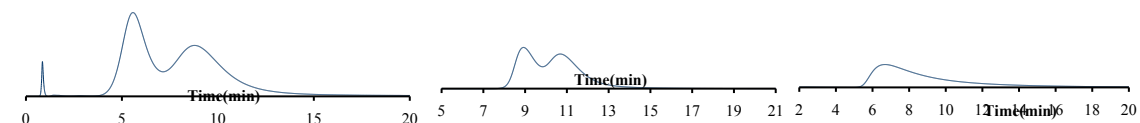
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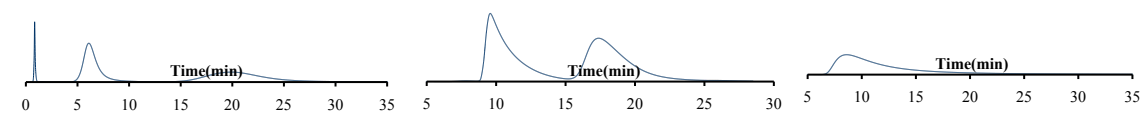
30



31



32



33

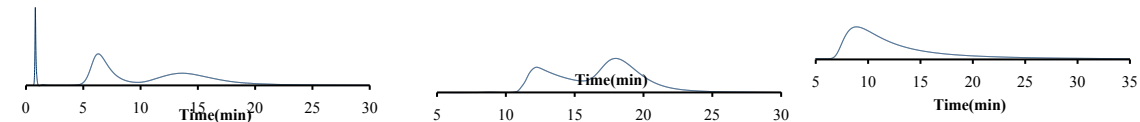


Table S4 Chromatographic data for the resolution of flavanones (Eluent: Hexane/2-PrOH = 99/1).

Flavanone	MOF-4	MOF-5	MOF-6
34			
35			
36			
37			
38			