Supporting Information

Confinement of Brønsted Acidic Ionic Liquids into Covalent Organic Frameworks as Catalyst for Dehydrative Formation of Isosorbide from Sorbitol

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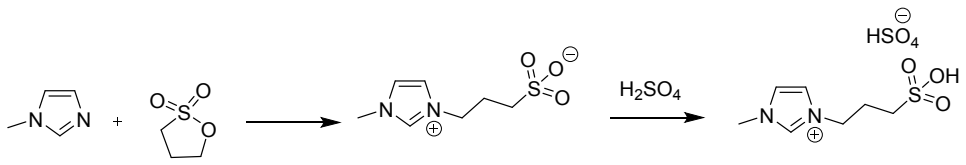
Table of Contents

Section 1. Materials and Synthetic procedures

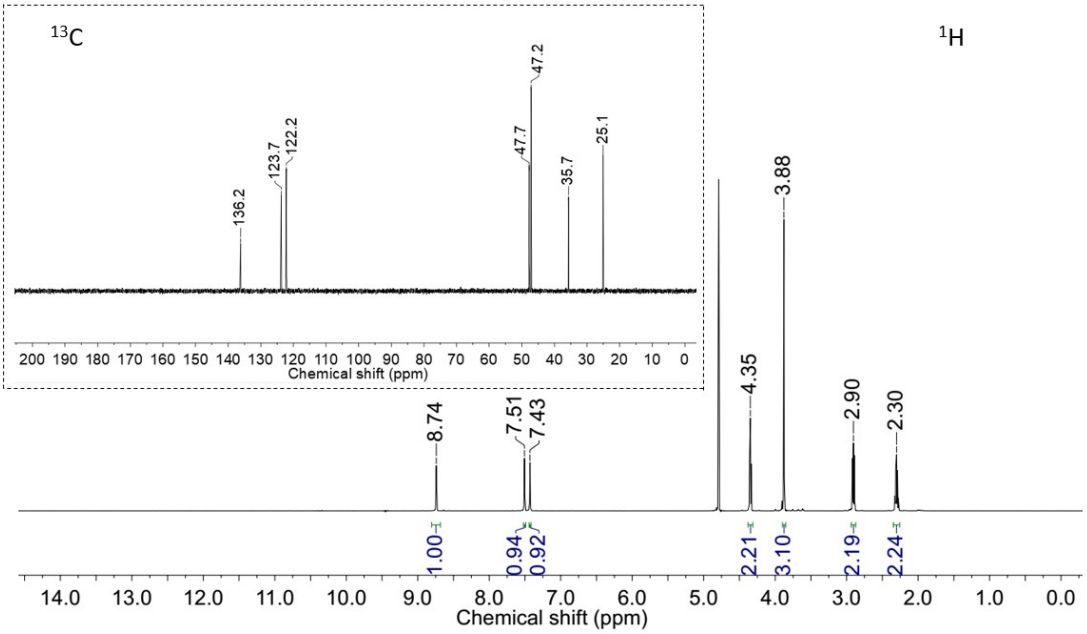
General Information. All reagents were used as received from Acros or Alfa Aesar and solvents (AR grade) were commercially available unless otherwise stated. Powder X-ray diffraction (PXRD) was conducted on the PANalytical X'Pert PRO MPD with Cu Kα radiation (λ = 0.1541 nm), from 2θ = 2.5° to 30° with 0.02° increments at room temperature. Elemental analysis (CHNS mode) were operated on a Vario EL Cube elemental analyser. The N_2 sorption isotherms were measured on an automatic volumetric adsorption equipment (Micromeritics ASAP 2020) at 77 K. Prior to the measurements, the samples were activated under vacuum at 140 °C for 15 h. The Brunauer-Emmett-Teller (BET) method was applied for the specific surface areas and pore volume. Pore size distribution was obtained through the nonlocal density functional theory (NLDFT) method. The Fourier transform infrared (FT-IR) spectra were collected on a Thermo Nicolet 380 with KBr tabletting method in range of 4000 to 400 cm^{-1} with a resolution of 4 cm^{-1}. The ^{1}H and ^{13}C NMR data were detected *via* a Bruker Avance III 600 MHz spectrometer. The ^{31}P solid-state NMR measurements were carried out with a Bruker Avance III HD 500 MHz spectrometer. The morphologies and structures were investigated by the Hitachi SU8020 Field emission scanning electron microscopy (FE-SEM) at an accelerating voltage of 5 kV and all the samples were mounted on a carbon tape and coated with gold prior to measurement. Transmission electron microscopy (TEM) images were obtained with JEM-2100 plus at 200 kV. Thermogravimetric analysis (TGA) was performed on the Shimadzu TA-60WS Thermal analyser in a range of 30-800°C with a heating rate of 10°C min^{-1} under nitrogen. X-ray photoelectron spectroscopy (XPS) was conducted using an ESCALAB250Xi spectrometer by get the sample on the aluminized sheet. The UV-vis diffuse reflection spectrum was collected on Shimadzu UV-2550 in range of 240~800 nm by coating the sample on the surface of $BaSO_4$. The HPLC analysis was detected via a Phenomenex Rezex RCM-monosaccharide column (8%; Ca^{2+}, 300 × 7.8 mm). The column and refractive index (RI) detectors were operated at 80°C. Distilled water was used as the eluent at 0.6 mL/min.

1. Preparation of 1-methyl-3-(3-sulfopropyl)-1H-imidazol-3-ium hydrosulfate [PSMIm][HSO_4]



Scheme S1. Synthesis of [PSMIm][HSO_4]

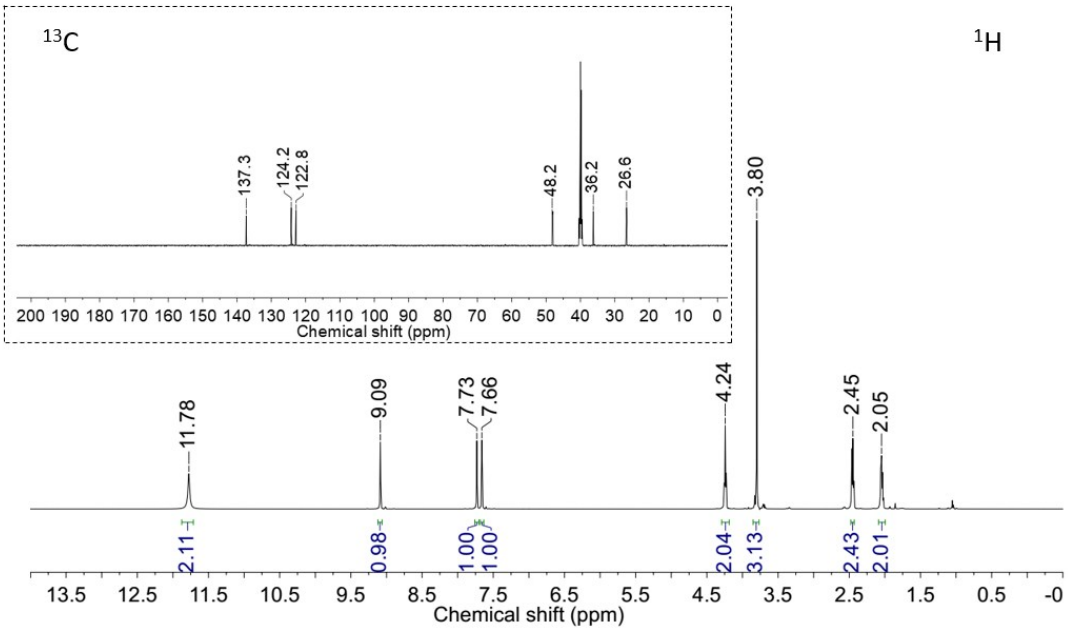
[PSMIm][HSO_4] was prepared according to the previous literature.[1] 1, 3-Propane sulfonate (7.5 g, 0.06 mol) was dropwise added to the toluene (80 mL) solution of methylimidazole (5.0 g, 0.06 mol) at 0 °C. After reaction for 30 min, the reaction vessel was then equipped with a reflux condenser and reacted at 80 °C for 24 h. The reaction was cooled to room temperature and then filtered. The residue was washed with diethyl ether (3 × 80 mL) and dried in a vacuum oven at 80 °C for 24 h to provide a white zwitterionic precursor with 80 % yield (9.8 g). ^{1}H NMR (600 MHz, D_2O-d_2, 298 K): δ = 8.74 (s, 1H), 7.51 (m, 1H), 7.43 (m, 1H), 4.35 (m, 2H), 3.88 (s, 3H), 2.90 (m, 2H), 2.30 (m, 2H). ^{13}C NMR (151 MHz, D_2O-d_2, 298 K): δ = 1376.2, 123.7, 122.2, 47.7, 47.2, 35.7, 25.1.



^{1}H NMR (600 MHz, D_2O-d_2, 298K) and ^{13}C NMR (151 MHz) of zwitterionic precursor.

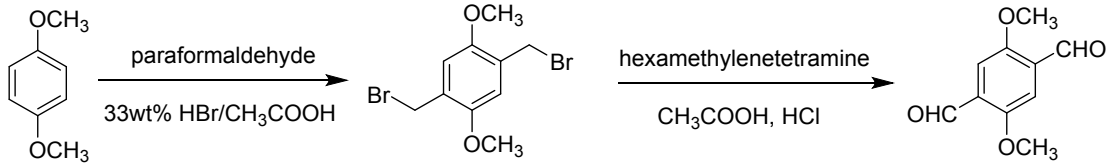
Under room temperature, a stoichiometric amount of H_2SO_4 (4.9 g, 0.048 mol, 98 wt%) was added dropwise to the zwitterion precursor (4.0 g, 48 mmol). The mixture

was stirred for 30 min, followed by heating up to 80 °C and reaction for 24 h. After washed with diethyl ether (3 × 50 mL) and ethyl acetate (3 × 50 mL), the resulted liquid was dried at 80 °C under a high vacuum for 24 h to provide [PSMIm][HSO_4] (8.2 g) with 92 % yield.^{1}H NMR (600 MHz, DMSO-d_6, 298 K): δ = 11.78 (s, 2H), 9.09 (s, 1H), 7.73 (m, 1H), 7.66 (m, 1H), 4.24 (m, 2H), 3.80 (s, 3H), 2.45 (m, 2H), 2.05 (m, 2H). ^{13}C NMR (151 MHz, DMSO-d_6, 298 K): δ = 137.3, 124.2, 122.8, 48.2, 36.2, 26.6.



^{1}H NMR (600 MHz, DMSO-d_6, 298K) and ^{13}C NMR (151 MHz) of [PSMIm][HSO_4].

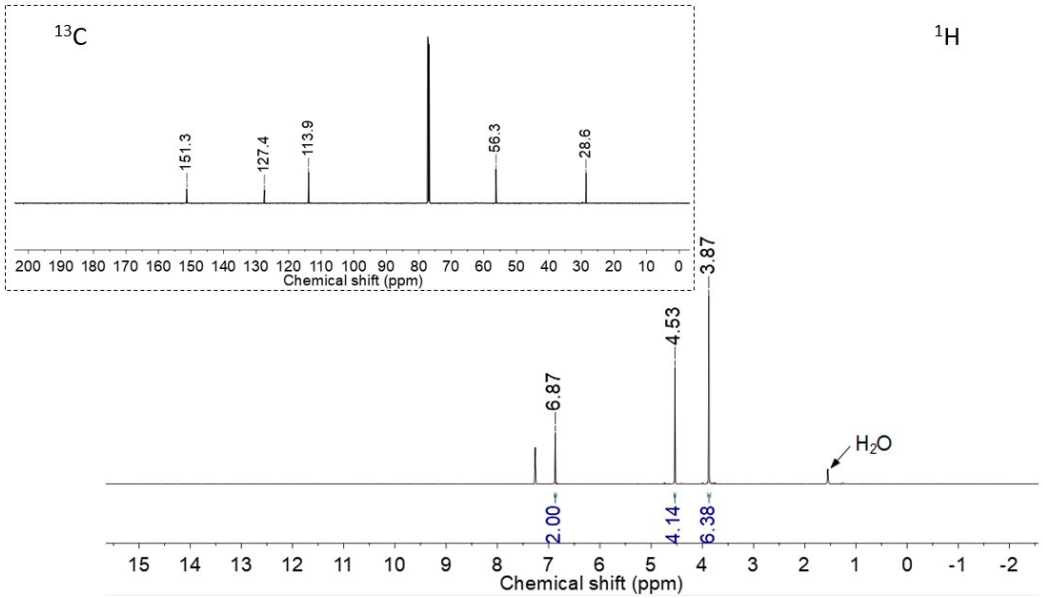
2. Preparation of monomer DMTP.



Scheme S2. Synthesis of DMTP

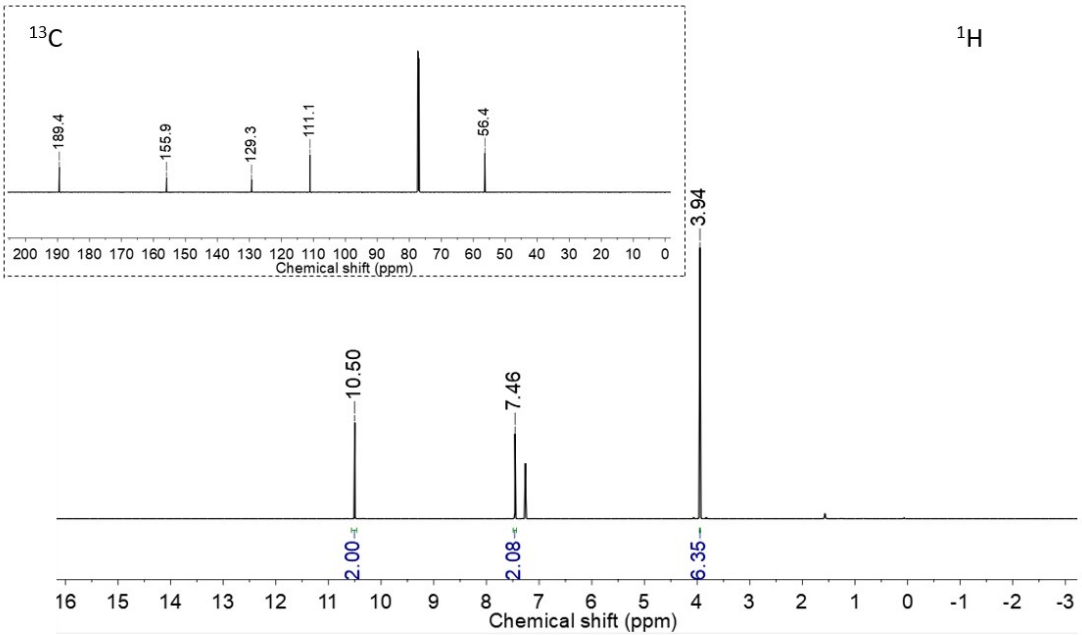
DMTP was prepared according to the previous literature.[2] 1,4-Dimenthoxybenzene (8.28 g, 0.06 mol) and paraformaldehyde (8.10 g, 0.27 mol) was dissolved in glacial acetic acid (60 mL) and then hydrobromic acid (33 wt%) in acetic acid solution (30 mL) were added dropwise. The mixture was stirred at 70 °C for 6 h. After cooled to room temperature, the mixture was poured into the ice water and the precipitate was filtered and washed several times with water to afford white powder 1, 4-bis(bromomethyl)-2,5-dimethoxybenzene with 92% yield (17.88 g). This spectrum

was consistent with that reported in the literature.^{1}H NMR (600 MHz, $CDCl_3$, 298 K): δ = 6.87 (s, 2H), 4.53 (s, 2H), 3.87 (s, 6H). ^{13}C NMR (151 MHz, $CDCl_3$, 298 K): δ = 151.3, 127.4, 113.9, 56.3, 28.6.



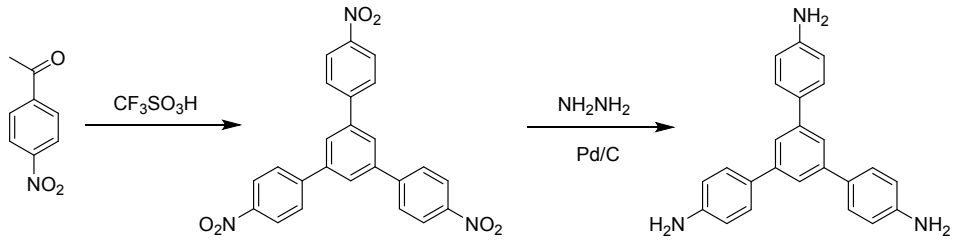
^{1}H NMR (600 MHz, $CDCl_3$, 298K) and ^{13}C NMR (151 MHz) of 1, 4-bis(bromomethyl)-2,5-dimethoxybenzene.

1,4-Bis(bromomethyl)-2,5-dimethoxybenzene (9.72 g, 0.03 mol) and hexamethylenetetramine (12.60 g, 0.09 mol) was suspended in anhydride chloroform (200 mL) and refluxed at 80 ^{o}C for 10 h. The solvent was evaporated under reduced pressure and then 50% acetic acid (100 ml) was added. The mixture was continued to be refluxed at 80 ^{o}C for 24 h, subsequently the concentrated hydrochloric acid (4 mL) was added and refluxed at 120 ^{o}C for 4h. After cooled to room temperature, the mixture was extracted by CH_2Cl_2, dried by anhydrous magnesium sulfate. The solvent was evaporated, and the precipitate was purified by column chromatography in ethyl acetate and dichloromethane (50% v/v) to give pale yellow powder 2, 5-dimethoxy-terephthalaldehyde with 26% yield (1.52 g). ^{1}H NMR (600 MHz, $CDCl_3$, 298 K): δ = 10.50 (s, 2H), 7.46 (s, 2H), 3.94(s, 6H). ^{13}C NMR (151 MHz, $CDCl_3$, 298 K): δ = 189.4, 170.9, 155.9, 129.3, 111.1, 56.4.



^{1}H NMR (600 MHz, $CDCl_3$, 298K) and ^{13}C NMR (151 MHz) of DMTP.

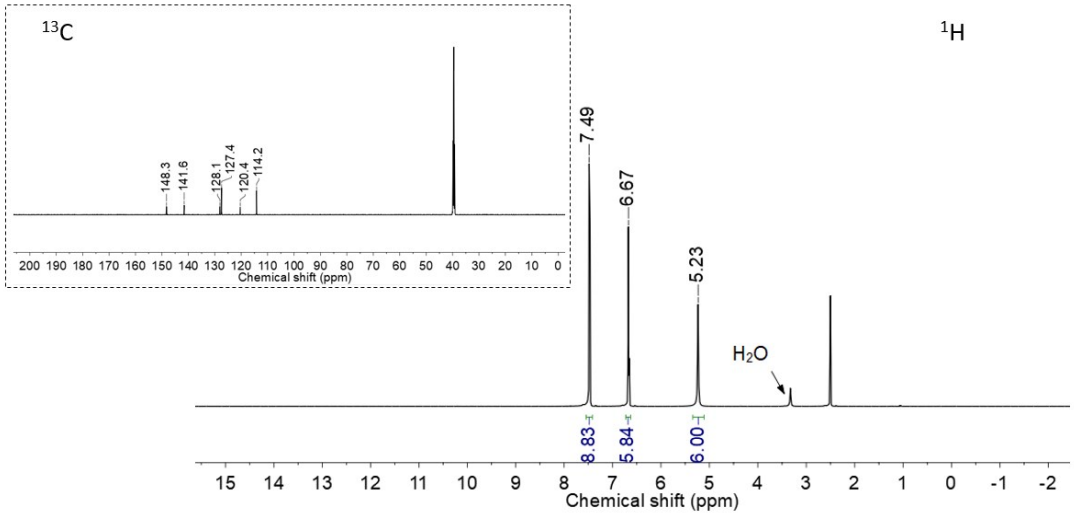
3. Preparation of monomer TAPB



Scheme S3. Synthesis of TAPB

TAPB was synthesized according to the published procedures.[3] 4-Nitroacetophenone (25 g), toluene (100 mL), and CF_3SO_3H (1 mL) were added to a flask equipped with a water separator and a cooling condenser. The mixture was refluxed for 48 h, during this time the formed water was eliminated as a toluene azeotrope. After cooling down to room temperature, the mixture was filtered to yield a black solid product. It was washed with DMF under refluxing and filtered. This procedure was carried out twice more, and a pale-yellow solid was obtained after drying. This product is insoluble in any common solvent. A suspension of 1,3,5-tris(4-nitrophenyl)benzene (10 g, 22.7 mmol) and Pd/C (10 wt%, 2.0 g) in ethanol (200 mL) was heated to reflux. Hydrazine hydrate (30 mL) was added dropwise, and the mixture was refluxed overnight. The hot solution was filtered through celite and left undisturbed

to fully crystallize the product. The solid was filtered and washed with cold ethanol. Yield: 6.36 g (80%). ^{1}H NMR (600 MHz, DMSO-d_6, 298 K): δ = 7.49 (m, 9H), 6.67 (m, 6H), 5.23 (s, 6H). ^{13}C NMR (151 MHz, DMSO-d_6, 298 K): δ = 148.3, 141.6, 128.1, 127.4, 120.4, 114.2.



^{1}H NMR (600 MHz, DMSO-d_6, 298K) and ^{13}C NMR (151 MHz) of TAPB.

4. Preparation of TPB-DMTP-COF

TPB-DMTP-COF was synthesized according to the previous literature.[4] An o-DCB/BuOH (0.5 mL/0.5 mL) mixture of TAPB (28.1 mg, 0.080 mmol) and DMTP (23.3 mg, 0.120 mmol) in the presence of acetic acid catalyst (6 M, 0.1 mL) in a Pyrex tube (15 mL) was degassed through three freeze–pump–thaw cycles. The tube was sealed by flame and heated at 120 °C for 3 days. The precipitate was collected via centrifugation, washed 6 times with THF and then subjected to Soxhlet extraction with THF as the solvent for 1 day to remove trapped guest molecules. The yellow solid was collected and dried at 80 °C under high vacuum for 12 h to produce TPB-DMTP-COF in an isolated yield of 89%.

5. Catalyst performance evaluation and procedure for recycling the catalyst

A mixture of sorbitol (50 mg, 0.27 mmol), BIL-COF hybrids (15 mg) and toluene (2 mL) was added in a stainless-steel autoclave (30 mL), followed by flushing with N_2 for four times to remove air. The reaction was performed at 160 °C with magnetically stirring at around 400 rpm under autogeneous pressure. After reaction for 24 h, BIL-

COF hybrids was separated from the mixture upon centrifugation. The residue was washed with ethanol for several times and dried under high vacuum at 80 °C for 6 h, which was employed for the sequential catalytic run. The filtrate was condensed and analysed by high performance liquid chromatography (HPLC; Thermo Fisher UltiMate3000) equipped with refractive index (RI) detectors and a Rezex RCM-Monosaccharide column (300 × 7.8 mm). The column was operated at 80°C by a column heater and the operating temperature of detectors was 40 °C. Distilled water was used as the eluent at a flow rate of 0.6 mL/min. Sorbitol conversion and isosorbide yield were calculated according to the following formula:

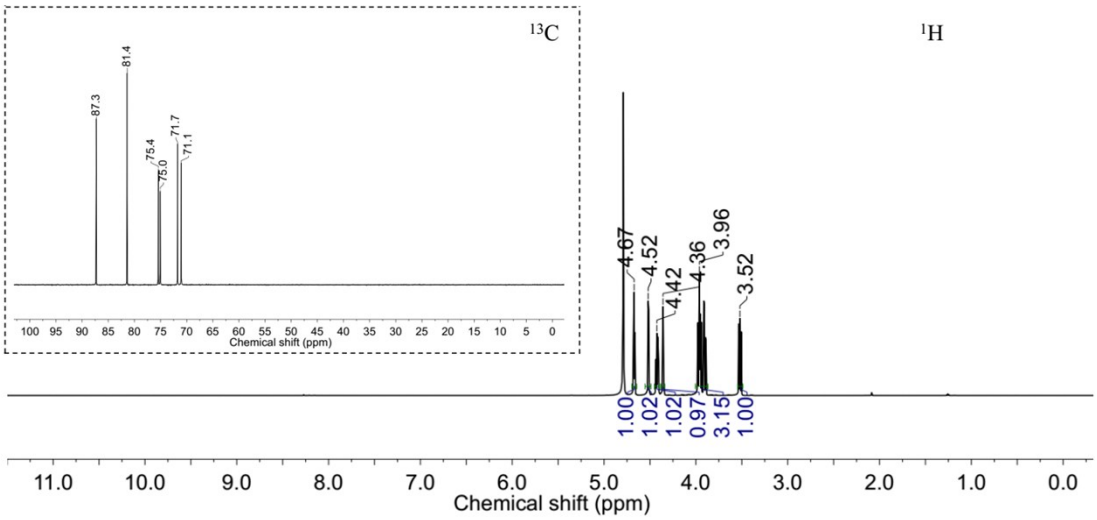
$C_{sorbitol}$ % = (moles of reacted sorbitol / moles of initial sorbitol) ×100%

$Y_{isosorbide}$ % = (moles of carbon in the produced isosorbide / moles of initial sorbitol) × 100%

6. Isolation of the final product isosorbide in g-scale reaction.

A mixture of sorbitol (1 g, 5.49 mmol), BIL-COF-30 hybrids (300 mg) and toluene (20 mL) was performed in a stainless-steel autoclave (120 mL). After reaction for 24 h, BIL-COF hybrids was separated from the mixture upon centrifugation. The filtrate was condensed, recrystallized from ethyl acetate and dried under high vacuum to obtained 90% isolated yield of isosorbide, which was confirmed by ^{1}H and ^{13}C NMR spectroscopy.

^{1}H NMR (600 MHz, D_2O-d_2, 298K): δ = 4.67 (m, 1H), 4.52 (m, 1H), 4.42 (m, 1H), 4.36 (m, 1H), 3.98-3.89 (m, 3H), 3.52 (m, 1H); ^{13}C NMR (151 MHz, D_2O-d_2, 298K): δ = 87.3, 81.4, 75.4, 75.0, 71.7, 71.1 ppm.



^{1}H NMR (600 MHz, D_2O-d_2, 298K) and ^{13}C NMR (151 MHz) of isosorbide.

7. ^{31}P MAS solid state NMR experiments.

The sample (100 mg) was activated at 120 °C under vacuum overnight, which was mixed with TMPO (1.2 equiv. mol of acid loading) in CH_2Cl_2 (5 mL) and stirred at room temperature for overnight in the glovebox. This suspension was then evacuated under vacuum at room temperature, dried at 60 °C under vacuum overnight and further dried at 160 ℃ in close system. The residue was then packed into Doty XC5 Kel-F sealing cells under argon, which was inserted into a Doty 4 mm thin-wall zirconia rotor with Kel-F turbine caps. Chemical shifts were externally referenced to aqueous H_3PO_4 (85%) at 0 ppm. Solid state NMR spectra were collected with a Bruker AVANCE III HD spectrometer for monopulse ^{31}P. Magic angle spinning (MAS) was used to collect high resolution NMR spectra at a spinning rate of 12kHz. ^{31}P MAS NMR experiments were performed with a ^{31}P 90° pulse time of 3.25us. Spectra were collected with a recycle delay time of 10s, and were processed with 100 Hz line broadening.

Section 2. Figures S1-S19

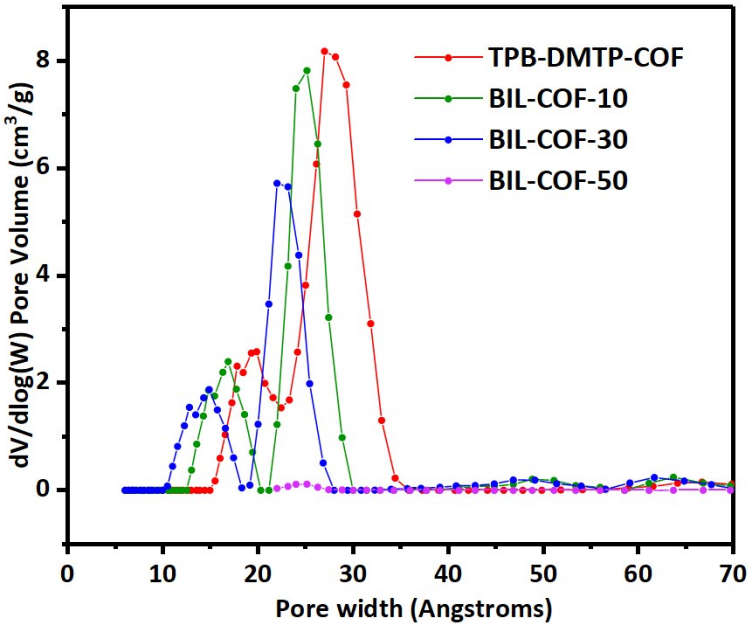
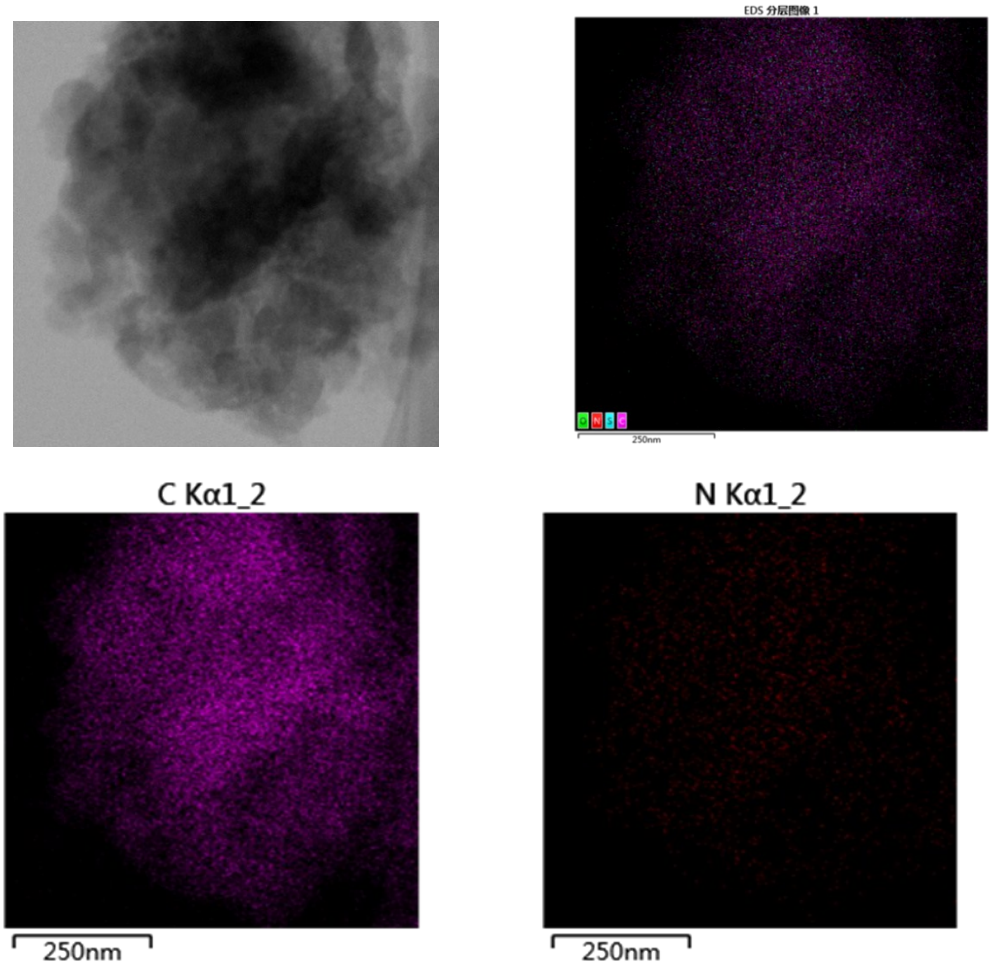


Fig. S1. Pore width distributions of TPB-DMTP-COF, BIL-COF-10, BIL-COF-30 and BIL-COF-50.



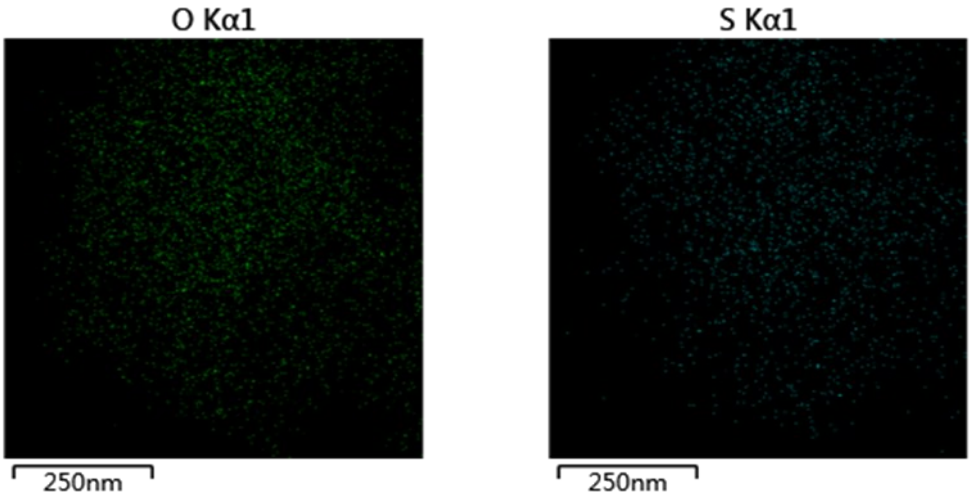


Fig. S2. The EDS elemental mapping of TEM of BIL-COF-30.

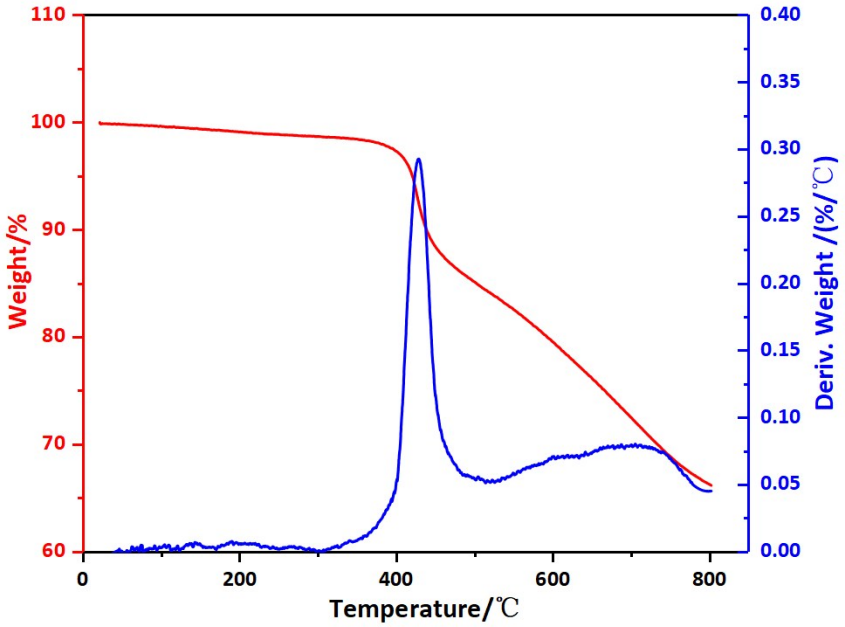


Fig. S3. TGA curve of TPB-DMTP-COF.

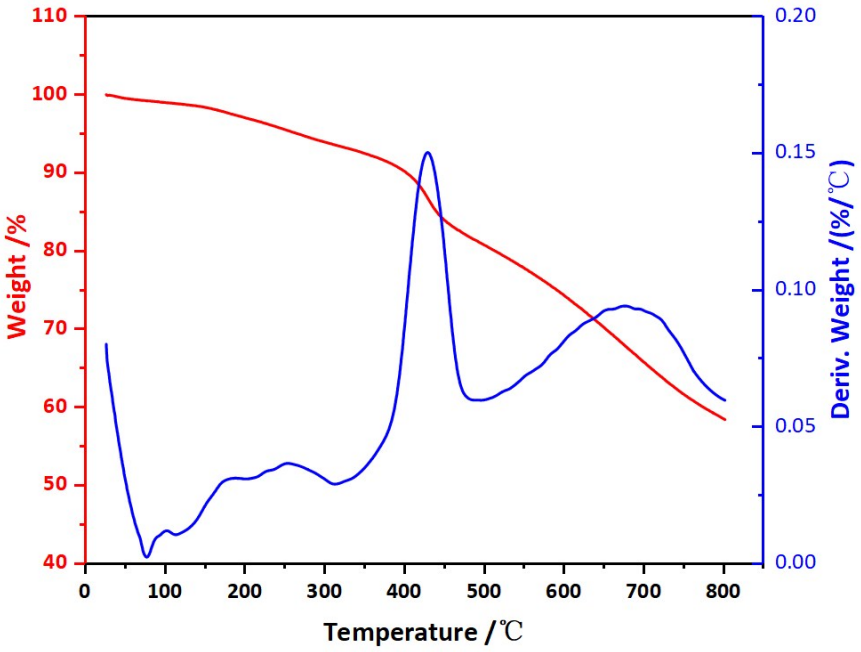


Fig. S4. TGA curve of BIL-COF-10.

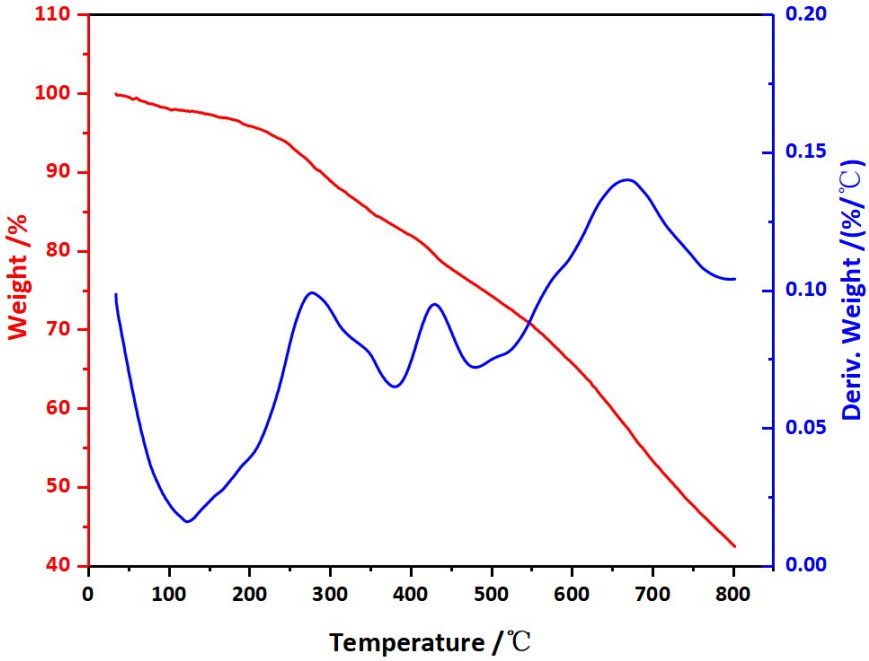


Fig. S5. TGA curve of BIL-COF-30.

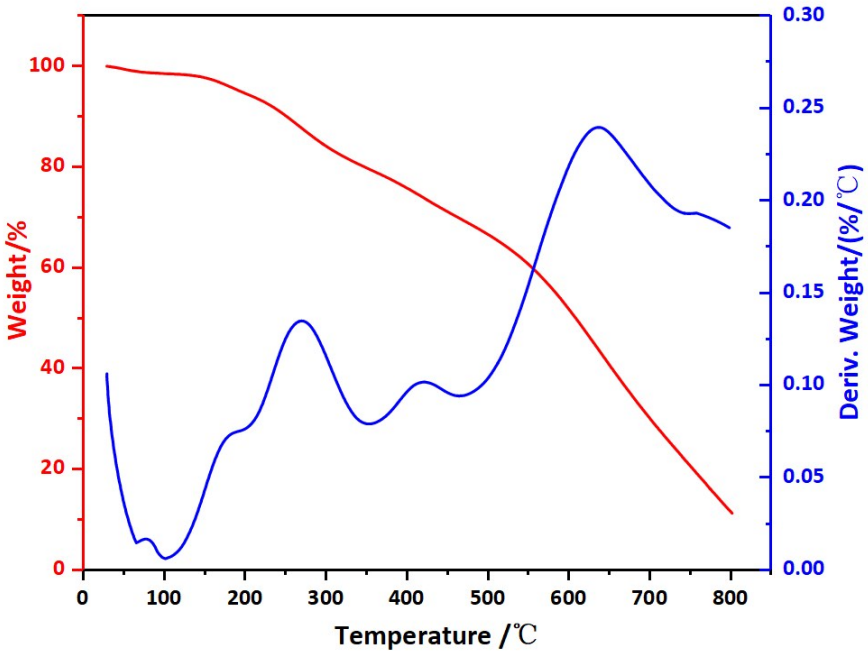


Fig. S6. TGA curve of BIL-COF-50.

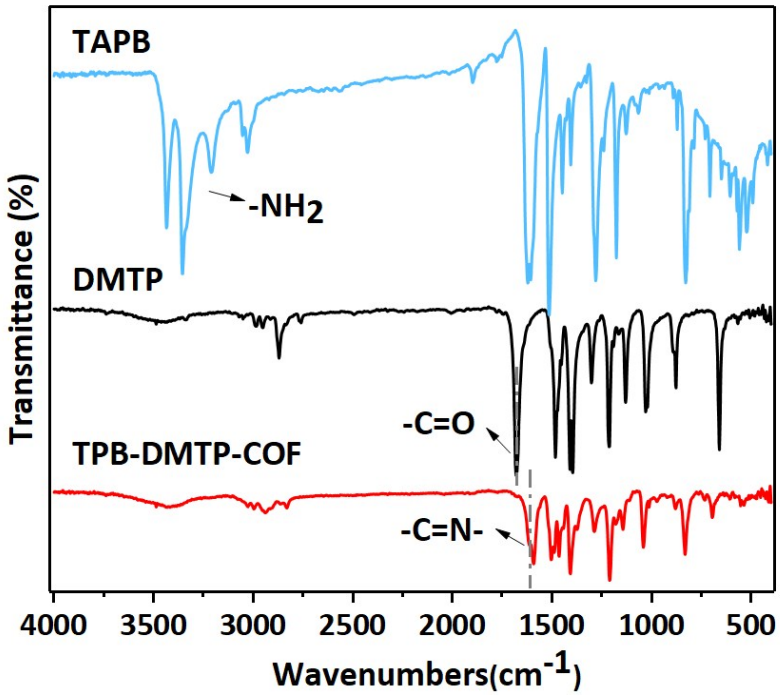


Fig. S7. FT-IR spectra of TAPB, DMTP, TPB-DMTP-COF

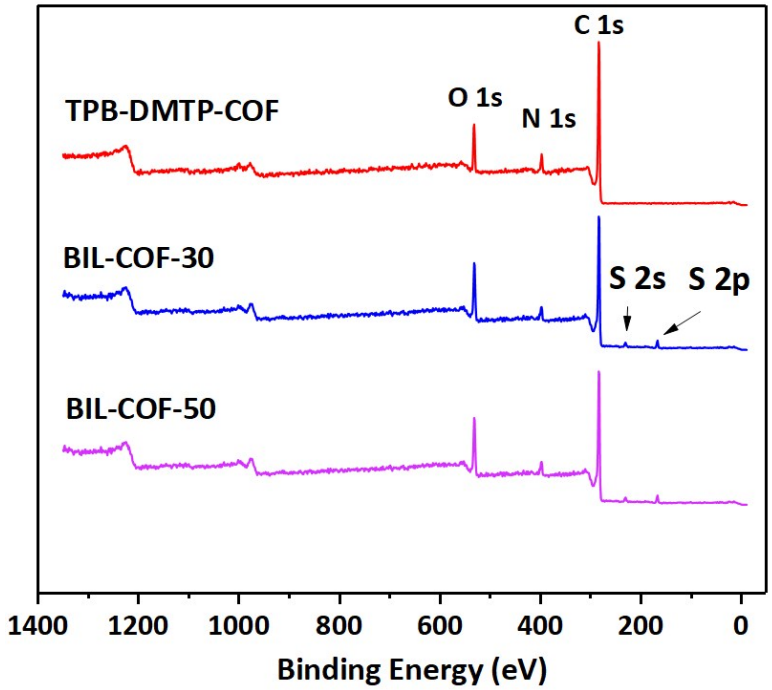


Fig. S8. The XPS survey spectra of TPB-DMTP-COF, BIL-COF-30 and BIL-COF-50

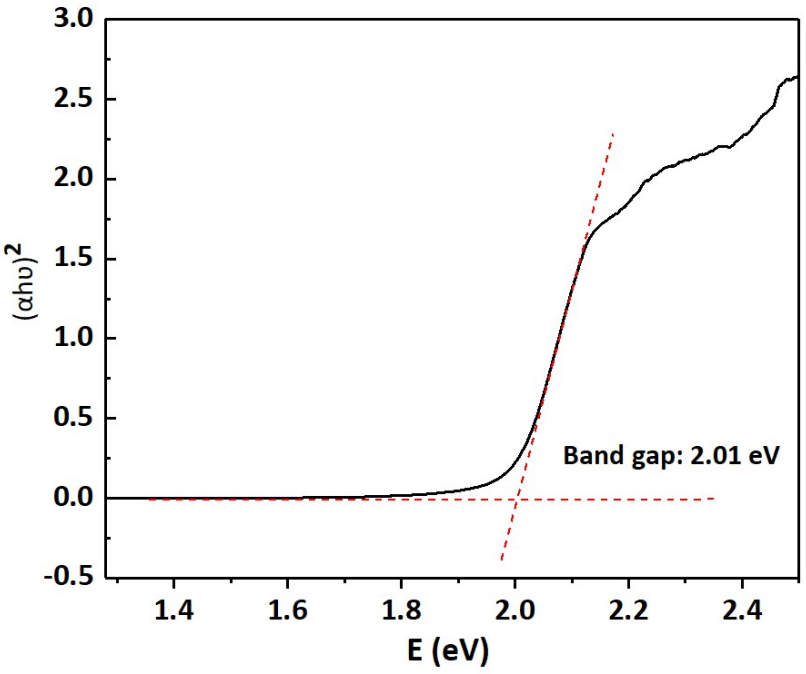


Fig. S9. Band gap of TPB-DMTP-COF obtained from the UV/Vis DR spectrum according to the Kubelka–Munk theory.

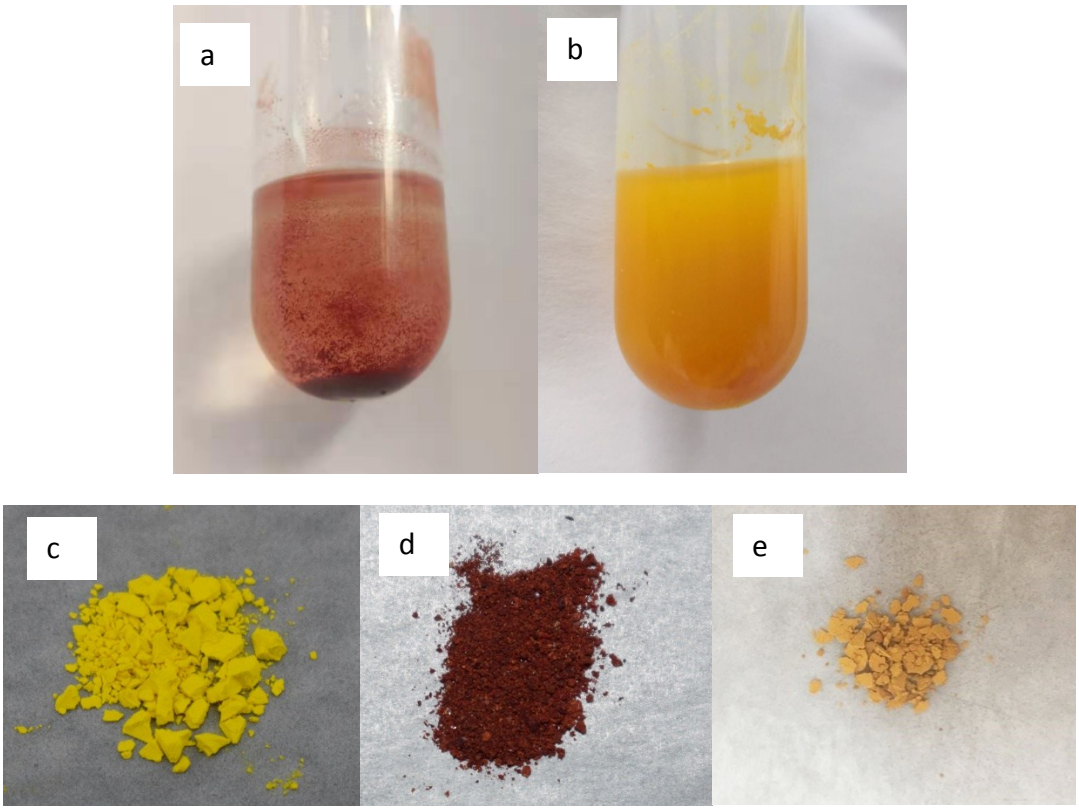


Fig. S10. The photo of (a)BIL-COF-30 in CH_2Cl_2; (b)BIL-COF-30 treated with DABCO in CH_2Cl_2 ;(c) TPB-DMTP-COF;(d) BIL-COF-30;(e) BIL-COF-30 after treated with DABCO. Operation: A CH_2Cl_2 solution (5 mL) of DABCO (10 mg) was add to the suspension of BIL-COF powders (20 mg) in CH_2Cl_2 at room temperature under stirring. The precipitate was filtered and washed several times with CH_2Cl_2 and CH_3OH to afford powders for analysis.

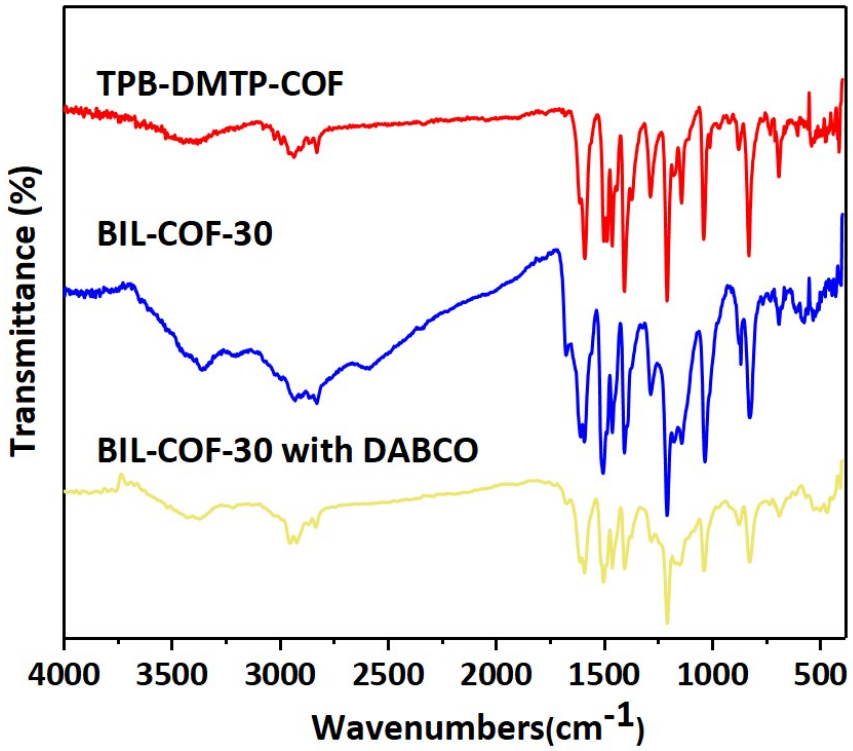


Fig. S11. The FT-IR spectra of TPB-DMTP-COF, BIL-COF-30 and BIL-COF-30 treated with DABCO.

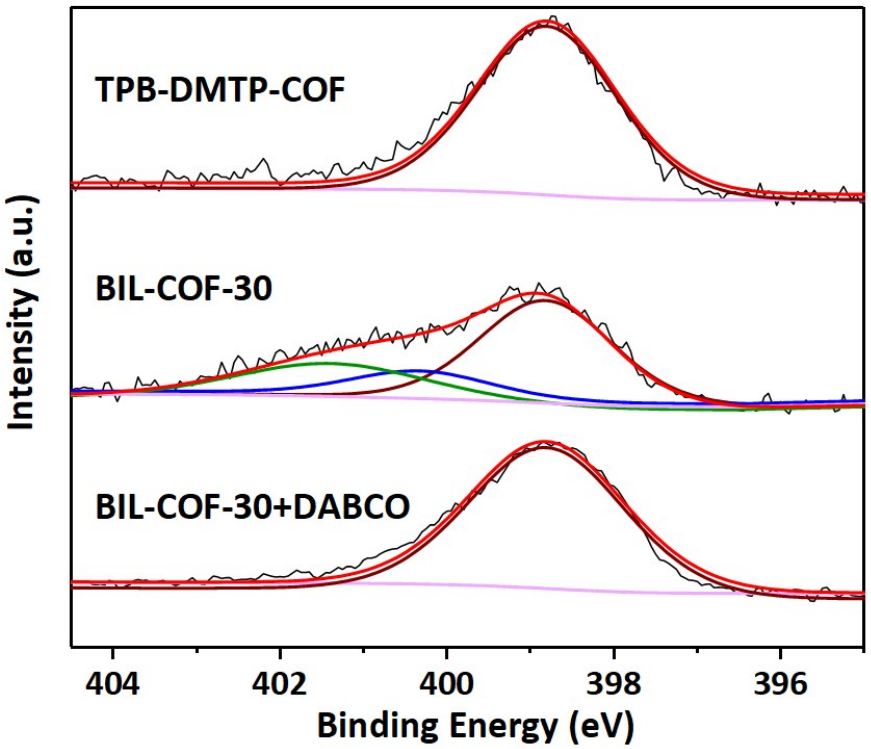


Fig. S12. The N 1s XPS spectra of TPB-DMTP-COF, BIL-COF-30 and BIL-COF-30 treated with DABCO. Black: experimental line; red: fitted line; pink: background; green: imidazolium N at 401.4 eV; blue: ammonium-like N at 400.3 eV; brown: imine N at 398.8 eV.

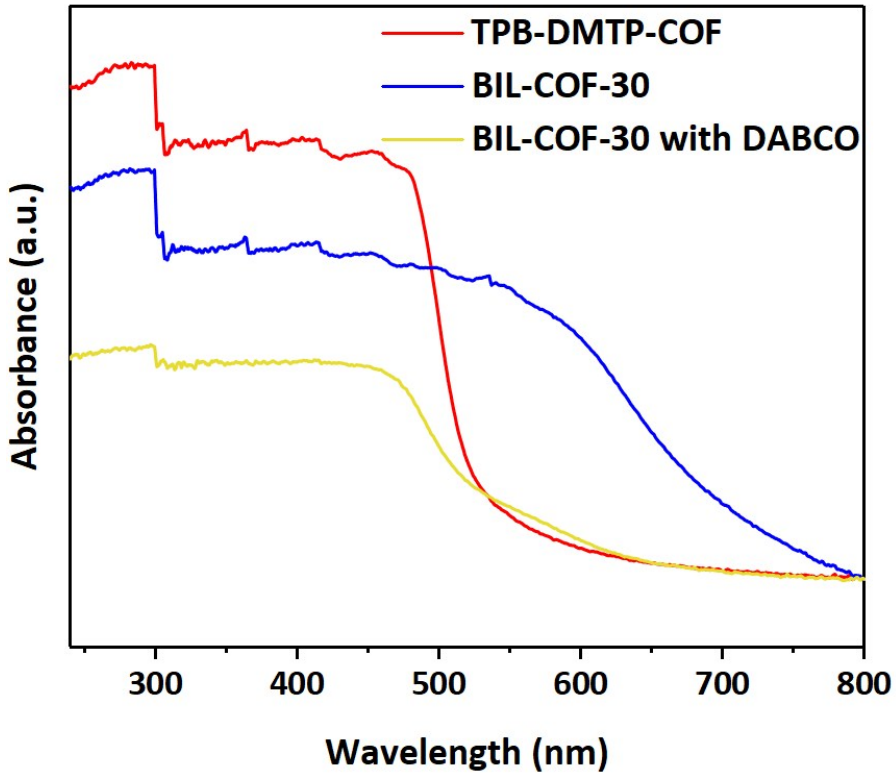


Fig. S13. The UV-vis-DRS spectra of TPB-DMTP-COF, BIL-COF-30 and BIL-COF-30 treated with DABCO.

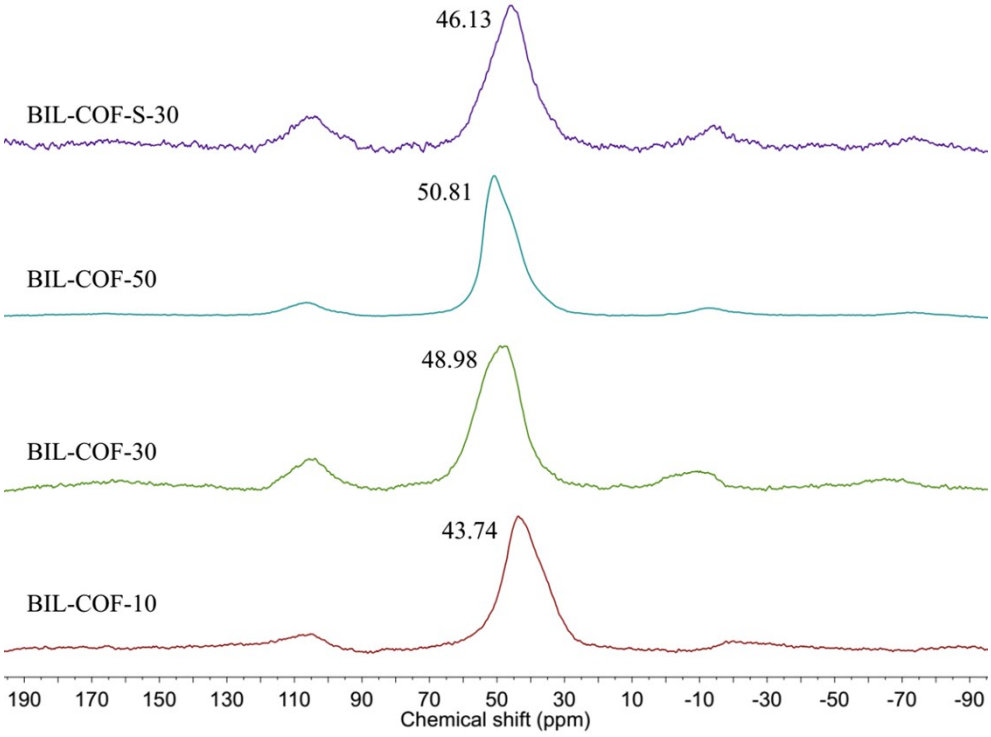


Fig. S14. The ^{31}P (202 MHz) MAS spectrum of BIL-COF hybrids.

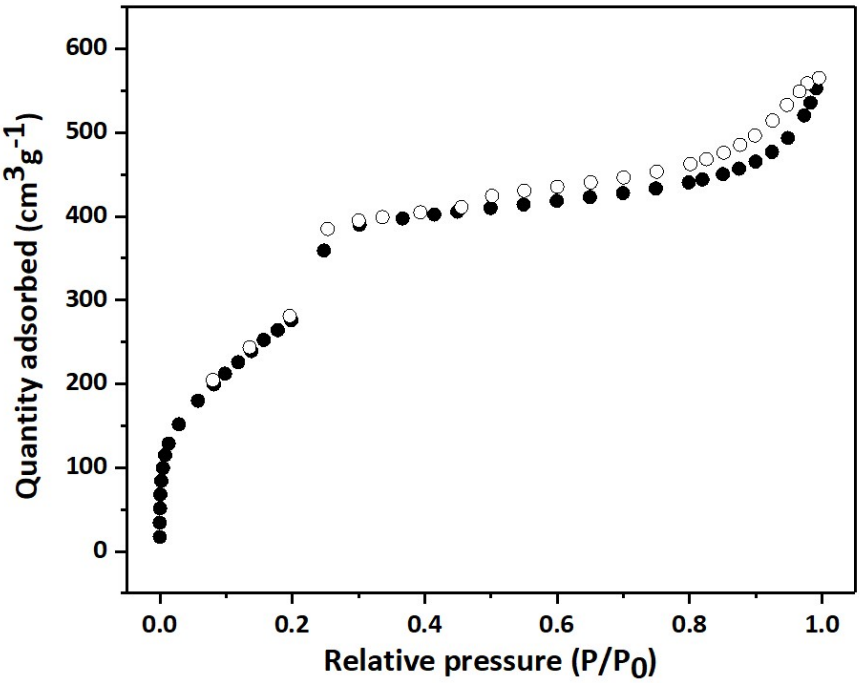


Fig. S15. Nitrogen-sorption isotherms of BIL-COF-S-30.

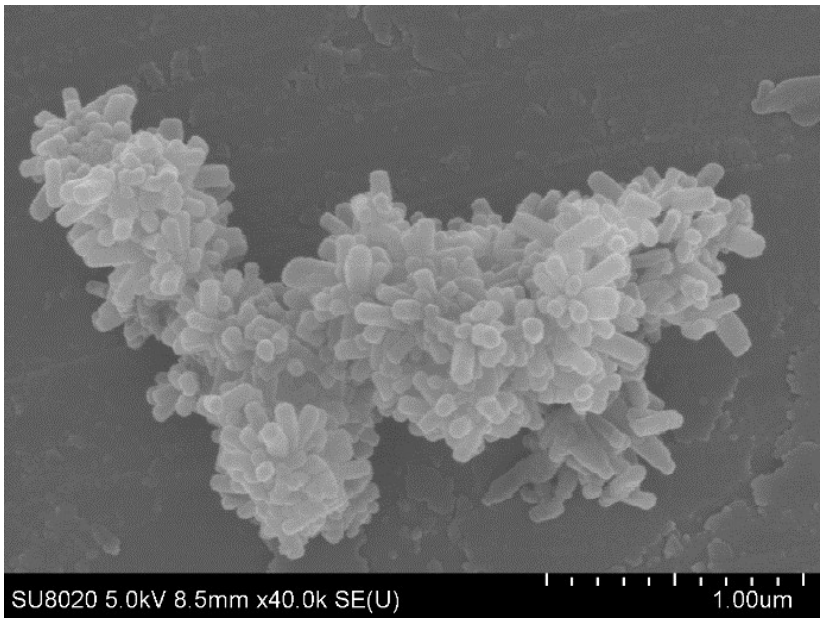


Fig. S16. SEM image of BIL-COF-S-30.

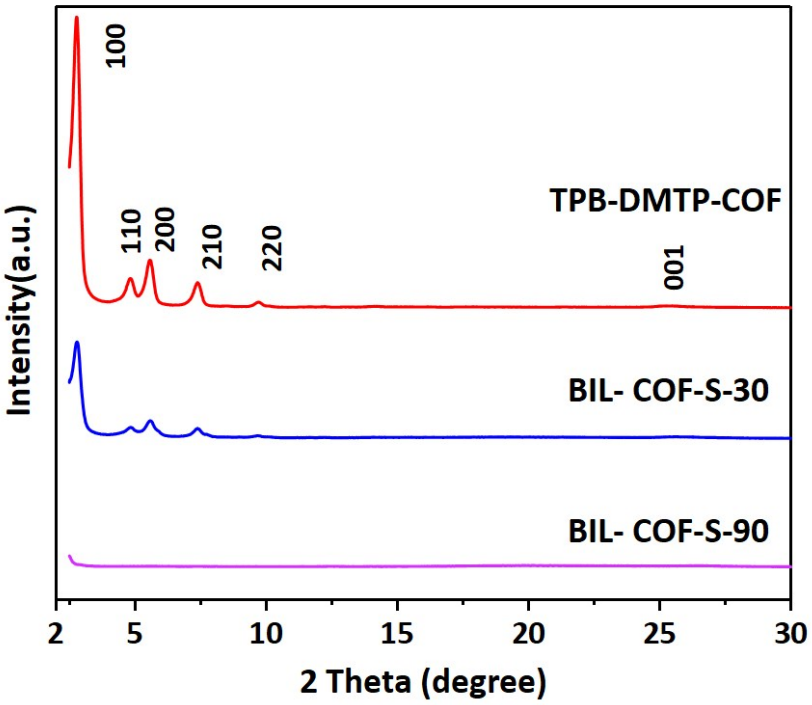


Fig. S17. The XRD spectrum of TPB-DMTP-COF, BIL-COF-S-30 and BIL-COF-S-90.

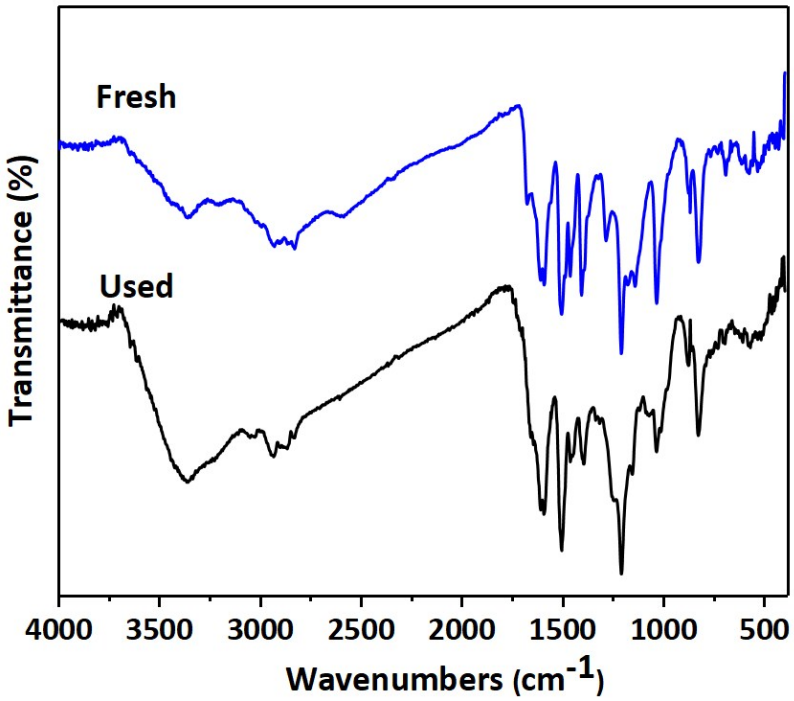


Fig. S18. FT-IR spectra of the BIL-COF-30 before use (fresh) and after use for five runs (used).

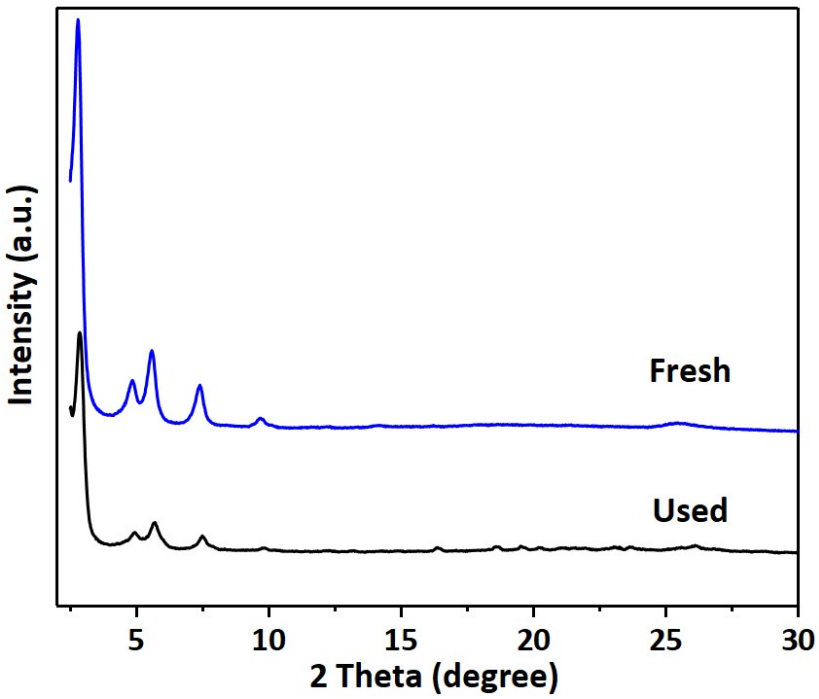


Fig. S19. XRD spectra of the BIL-COF-30 before use (fresh) and after use for five runs (used).

Section 3. Tables S1-S2

Table S1. Sulphur mass fraction of TPB-DMTP-COF and varied BIL-COF hybrids.

Entry	Catalyst	S element content (wt.%)	Loading amount (mmol/g)
1	TPB-DMTP-COF	0.01	0.002
2	BIL-COF-10	2.13	0.33
3	BIL-COF-30	6.10	0.95
4	BIL-COF-50	7.89	1.23
5	BIL-COF-S-1	0.77	0.12
6	BIL-COF-S-2	1.39	0.22
7	BIL-COF-S-4	1.52	0.24
8	BIL-COF-S-6	2.31	0.36
9	BIL-COF-S-30	4.52	0.71
10	BIL-COF-S-50	4.45	0.70
11	BIL-COF-S-90	3.52	0.55

Table S2. Comparation of different solvents for BIL-COF-30-catalysed dehydrative formation of isosorbide from sorbitol.[a]

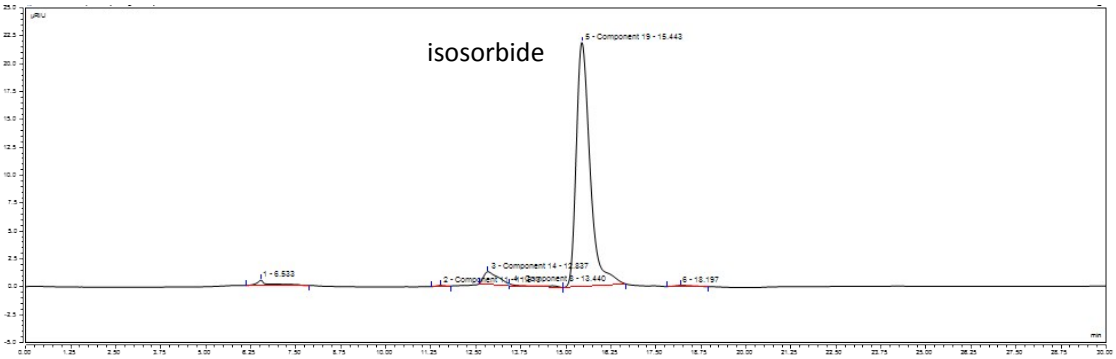
Entry	Solvent	Conv. (%) [b]	$Y_{sorbitan}$ (%) [b]	$Y_{isosorbide}$ (%) [b]	Y_{others} (%) [b]
1	Neat	71	7	28	36
2	methanol	100	69	17	14
3	1,4-dioxane	99	67	20	12
4	4-methyl-2-pentanone	63	55	5	3
5	DMSO	88	46	11	21
6	DMC	100	16	76	8
7	toluene	100	0	97	3

8	ethylbenzene	100	1	92	7
9	m-xylene	100	0	93	4
10	mesitylene	100	0	95	5

[a] Reaction conditions: sorbitol (50 mg), BIL-COF-30 (15 mg), solvent (2 mL), 160 °C, 24 h; [b] Determined by HPLC with a Phenomenex Rezex RCM-monosaccharide column (8 %; Ca^{2+}, 300 × 7.80 mm) at 80 °C, degassed demi water as eluent.

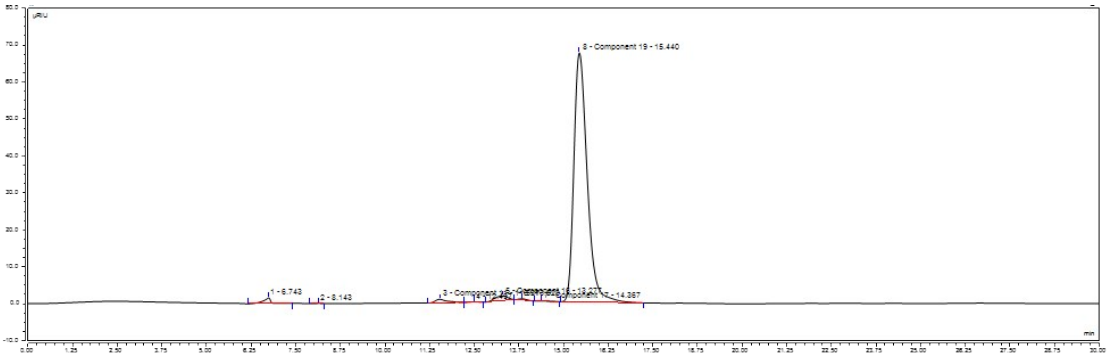
Section 4. HPLC spectrum analysis

Entry 1 in Table 1: BIL-COF-30 (20 wt%)



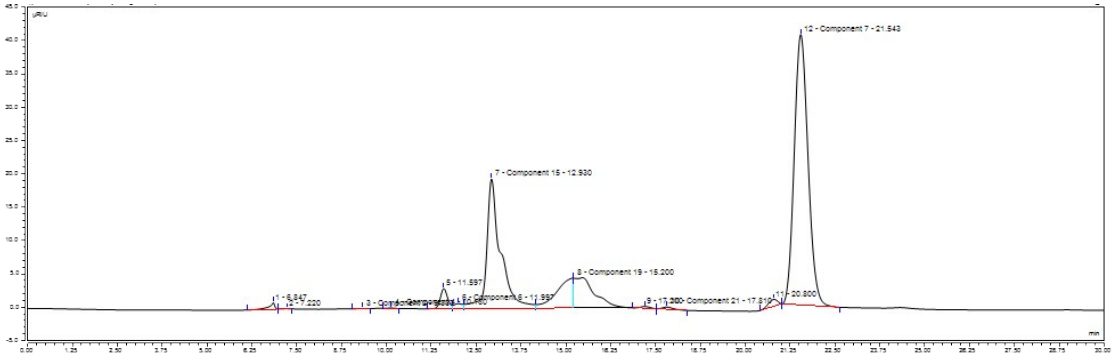
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.533	n.a.	2	0.2135	0.49	BMB	0.172	2.28	14.05	8005
2	Component 11	11.513	n.a.	0.76	0.0176	0.07	BMB	0.246	1.03	2.08	12102
3	Component 14	12.837	n.a.	5.2	0.5544	1.14	BM *	0.504	n.a.	n.a.	3597
4	Component 8	13.44	n.a.	1.01	0.1079	0.18	MB*	n.a.	n.a.	n.a.	n.a.
5	Component 19	15.443	n.a.	90.47	9.6995	21.9	BMB*	0.39	1.58	3.26	8689
6		18.197	n.a.	0.55	0.0583	0.1	BMB	0.605	1.52	n.a.	5005
Maximum			0	90.47	9.6995	21.9		0.605	2.28	14.05	12102
Minimum			0	0.76	0.0176	0.07		0.172	1.03	2.08	3597
Sum			0	100	10.6512	23.87					

Entry 2 in Table 1: BIL-COF-30 (30 wt%)



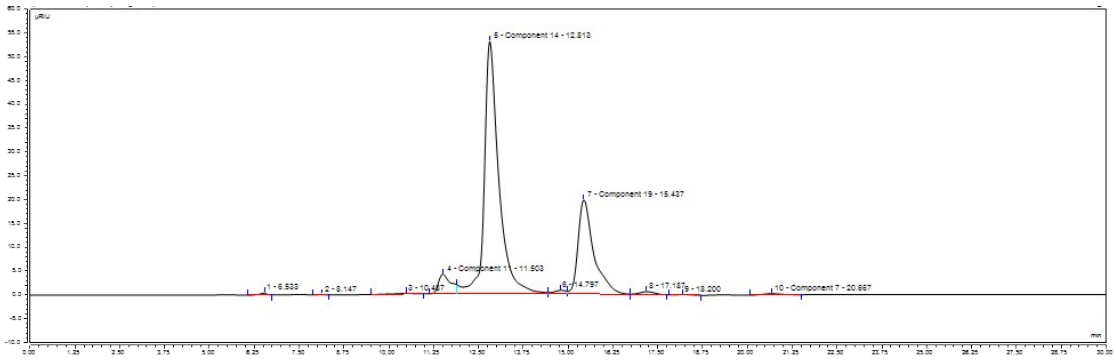
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.743	n.a.	0.9	0.3666	1.55	BMB	0.195	0.63	4.34	6619
2		8.143	n.a.	0.02	0.0059	0.03	BMB	0.185	0.75	7.83	10690
3	Component 11	11.527	n.a.	0.9	0.368	0.96	BMb	0.325	1.63	1.94	6988
4		12.497	n.a.	0.09	0.029	0.11	bMB	0.265	0.93	1.33	12358
5	Component 16	13.277	n.a.	1.1	0.5182	1.22	BMb	0.425	0.92	0.94	5406
6		13.823	n.a.	0.31	0.0944	0.36	bMB	0.259	1.32	0.84	15799
7	Component 17	14.367	n.a.	0.12	0.0369	0.08	BMB	0.505	2.09	1.42	4482
8	Component 19	15.44	n.a.	96.55	29.1275	67.45	BMB	0.389	1.37	n.a.	8740
Maximum			0	96.55	29.1275	67.45		0.505	2.09	7.83	15799
Minimum			0	0.02	0.0059	0.03		0.185	0.63	0.84	4482
Sum			0	100	30.5465	71.77					

Entry 3 in Table 1: TPB-DMTP-COF



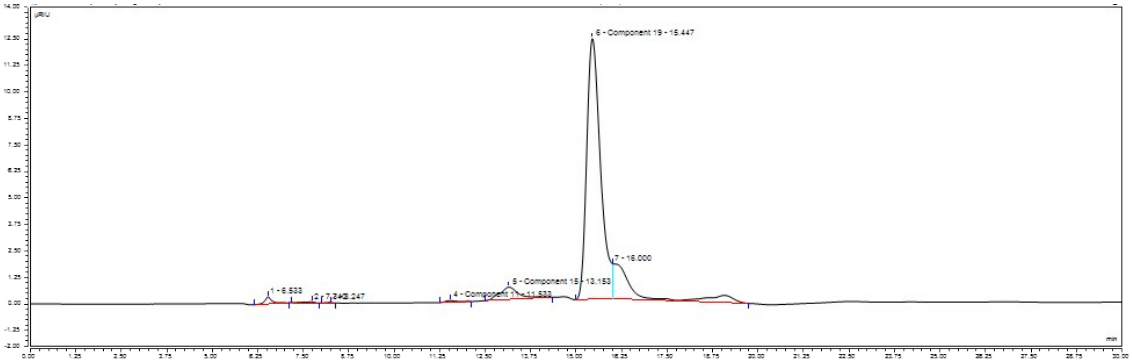
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.847	n.a.	0.59	0.199	0.99	BM	0.126	n.a.	n.a.	16261
2		7.22	n.a.	0.04	0.0152	0.06	MB	n.a.	n.a.	n.a.	n.a.
3	Component 2	9.337	n.a.	0.03	0.0092	0.04	BMB	0.23	0.9	2.22	9103
4	Component 4	10.13	n.a.	0.03	0.0113	0.06	BMB	0.192	0.98	4.24	15440
5		11.597	n.a.	2.09	0.7092	3.01	BM	0.217	n.a.	n.a.	15857
6	Component 6	11.997	n.a.	0.61	0.205	0.75	M	n.a.	n.a.	n.a.	n.a.
7	Component 15	12.93	n.a.	25.71	8.7107	19.43	M	0.295	1.39	n.a.	10636
8	Component 19	15.2	n.a.	16.07	2.3889	4.48	M *	n.a.	n.a.	n.a.	n.a.
10		17.2	n.a.	0.24	0.0816	0.27	bMb	0.289	1.02	1.21	19579
11	Component 21	17.81	n.a.	0.32	0.1095	0.33	bMB	0.306	1.39	5.83	18773
12		20.8	n.a.	0.92	0.3106	1.02	BMb	0.3	0.81	1.23	26698
13	Component 7	21.543	n.a.	53.34	18.068	40.57	bMB	0.415	1.14	n.a.	14952
Maximum			0	53.34	18.068	40.57		0.415	1.39	5.83	26698
Minimum			0	0.03	0.0092	0.04		0.126	0.81	1.21	9103
Sum			0	100	33.8752	75.56					

Entry 4 in Table 1: BIL-COF-10



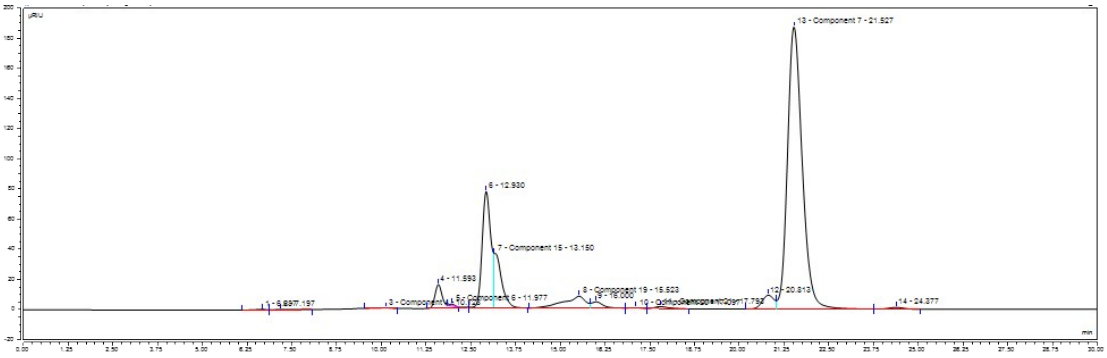
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.533	n.a.	0.23	0.0849	0.42	BMB	0.173	0.67	4.92	7938
2		8.147	n.a.	0.02	0.0072	0.03	BMB	0.214	0.79	3.71	8030
3		10.487	n.a.	0.14	0.0916	0.14	BMB	0.531	0.73	1.18	2164
4	Component 11	11.503	n.a.	1.89	1.6484	4.1	BM *	0.486	n.a.	1.8	3106
5	Component 14	12.813	n.a.	72.64	24.9355	53.03	M *	0.373	1.31	n.a.	6547
6		14.797	n.a.	0.83	0.3121	0.78	M	n.a.	n.a.	n.a.	n.a.
7	Component 19	15.437	n.a.	23.64	10.0001	19.74	MB	0.411	1.68	2.39	7809
8		17.187	n.a.	0.4	0.2617	0.56	BMB	0.454	1.11	1.32	7935
9		18.2	n.a.	0.1	0.0358	0.08	BMB	0.453	1.14	2.91	8936
10	Component 7	20.667	n.a.	0.11	0.1542	0.27	BMB	0.548	1.15	n.a.	7870
Maximum			0	72.64	24.9355	53.03		0.548	1.68	4.92	8936
Minimum			0	0.02	0.0072	0.03		0.173	0.67	1.18	2164
Sum			0	100	37.5316	79.16					

Entry 5 in Table 1: BIL-COF-50



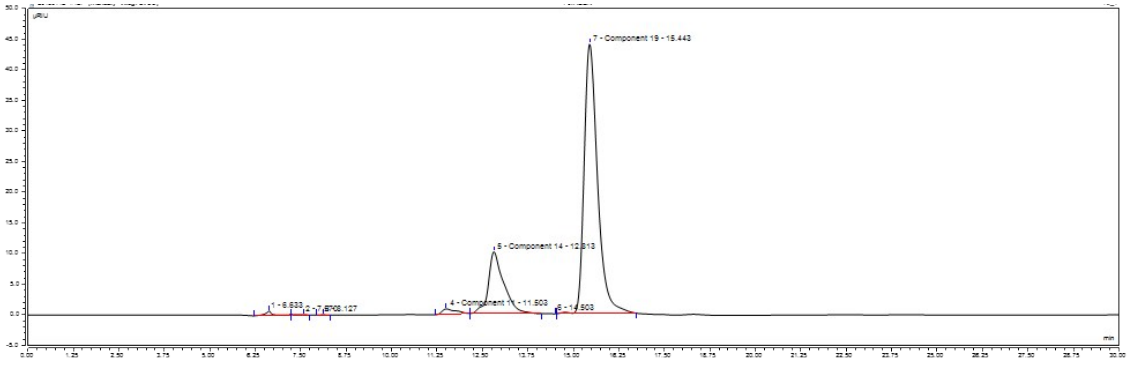
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.533	n.a.	1.14	0.0795	0.34	BMB	0.175	1.22	2.57	7728
2		7.74	n.a.	0.28	0.0193	0.05	BMB	0.38	0.65	1.06	2302
3		8.247	n.a.	0.09	0.0065	0.03	BMB	0.183	0.76	8.04	11294
4	Component 11	11.533	n.a.	0.39	0.027	0.08	BMB	0.3	1.56	2.32	8214
5	Component 15	13.153	n.a.	4.99	0.3489	0.58	BMB	0.524	1.35	2.93	3489
6	Component 19	15.447	n.a.	77.08	5.3919	12.3	BM *	0.399	n.a.	n.a.	8322
7		16	n.a.	16.04	1.122	1.65	MB*	n.a.	n.a.	n.a.	n.a.
Maximum			0	77.08	5.3919	12.3		0.524	1.56	8.04	11294
Minimum			0	0.09	0.0065	0.03		0.175	0.65	1.06	2302
Sum			0	100	6.9952	15.03					

Entry 6 in Table 1: No catalyst



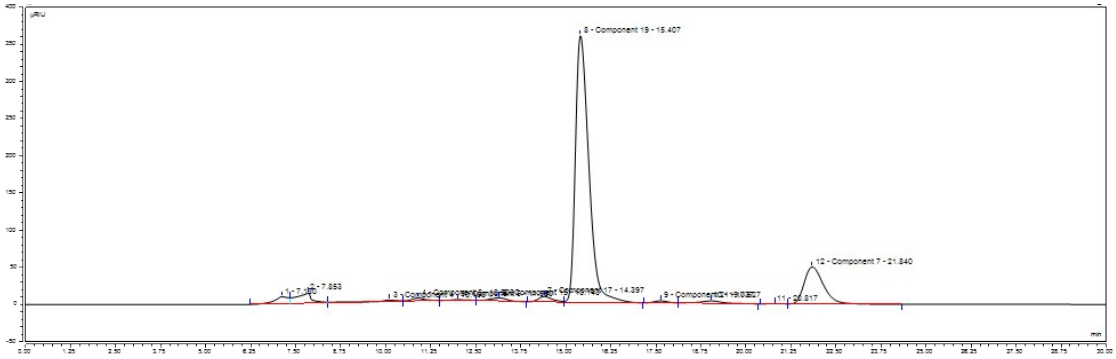
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.687	n.a.	0.09	0.127	0.5	BM	0.189	n.a.	0.75	6905
2		7.197	n.a.	0.09	0.119	0.21	MB	0.615	n.a.	3.13	758
3	Component 4	10.123	n.a.	0.13	0.1776	0.41	BMB	0.487	0.72	2.48	2389
4		11.593	n.a.	2.92	3.9895	15.69	BMb	0.213	1.67	3.09	16377
5	Component 6	11.977	n.a.	0.15	0.2036	1.24	Rd	n.a.	n.a.	n.a.	n.a.
6		12.93	n.a.	16.09	21.9412	77.08	bM *	0.297	n.a.	n.a.	10527
7	Component 15	13.15	n.a.	6.34	8.6499	36.05	MB*	n.a.	n.a.	n.a.	n.a.
8	Component 19	15.523	n.a.	4.1	5.5952	7.94	BM	0.692	n.a.	n.a.	2792
9		16	n.a.	1.24	1.6888	4.25	M	n.a.	n.a.	n.a.	n.a.
10	Component 20	17.097	n.a.	0.11	0.1445	0.4	Mb	0.432	n.a.	1	8670
11	Component 21	17.793	n.a.	0.42	0.5664	1.3	bMB	0.392	1.46	n.a.	11429
12		20.813	n.a.	2.59	3.5379	9.21	BM	n.a.	n.a.	n.a.	n.a.
13	Component 7	21.527	n.a.	65.32	89.0946	187.2	Mb	0.431	1.22	3.79	13807
14		24.377	n.a.	0.41	0.5597	1.16	bMB	0.457	1.07	n.a.	15794
Maximum			0	65.32	89.0946	187.2		0.692	1.67	3.79	16377
Minimum			0	0.09	0.119	0.21		0.189	0.72	0.75	758
Sum			0	100	136.3949	342.63					

Entry 7 in Table 1: BIL-COF-S-30



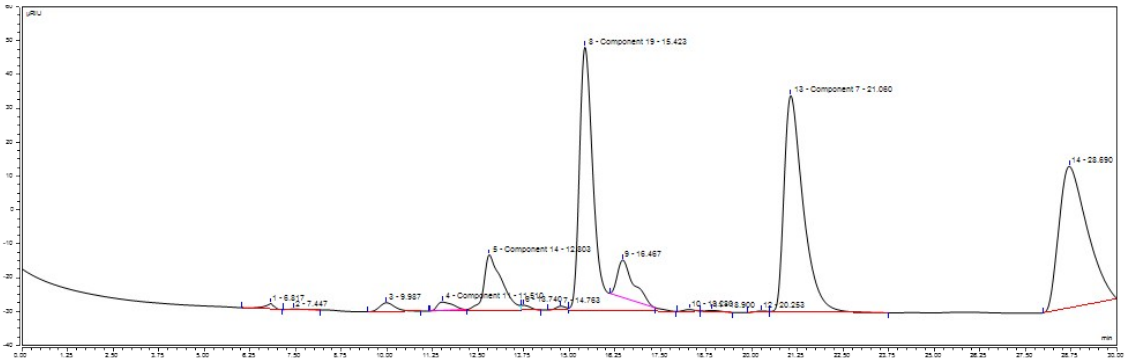
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.633	n.a.	1.59	0.1421	0.72	BMb	0.139	0.98	2.76	12685
2		7.57	n.a.	0.63	0.0071	0.03	bMB	0.262	0.74	1.51	4620
3		8.127	n.a.	0.71	0.0033	0.02	BMB	0.173	0.95	6.18	12198
4	Component 11	11.503	n.a.	1.31	0.39	0.89	BMb	0.472	1.75	1.74	3291
5	Component 14	12.813	n.a.	17.46	4.9533	10.07	bMB	0.416	1.26	n.a.	5265
6		14.503	n.a.	0.71	0.0013	0	BM *	n.a.	n.a.	n.a.	n.a.
7	Component 19	15.443	n.a.	77.59	18.7094	43.93	MB*	0.379	1.43	n.a.	9214
Maximum			0	77.59	18.7094	43.93		0.472	1.75	6.18	12685
Minimum			0	0.71	0.0013	0		0.139	0.74	1.51	3291
Sum			0	100	24.2065	55.67					

Entry 8 in Table 1: [PSMIm][HSO_4]



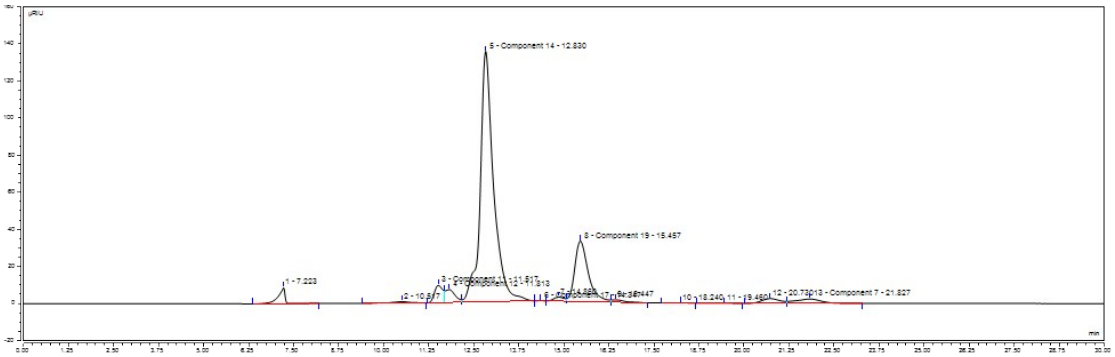
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		7.13	n.a.	1.52	4.2494	9.55	BM	n.a.	n.a.	n.a.	n.a.
2		7.853	n.a.	2.29	6.916	13.78	M	n.a.	n.a.	n.a.	n.a.
3	Component 4	10.103	n.a.	0.67	1.4004	1.88	M	0.411	n.a.	1.22	3346
4	Component 5	10.903	n.a.	0.8	1.6818	4.11	Mb	0.36	n.a.	1.45	5089
5	Component 6	11.99	n.a.	0.24	0.5076	1.01	bMb	0.526	1.08	1.34	2875
6	Component 15	13.143	n.a.	1.04	2.1937	4.32	bMB	0.49	1.01	1.63	3994
7	Component 17	14.397	n.a.	1.11	3.3829	7.35	BM	0.419	n.a.	1.47	6554
8	Component 19	15.407	n.a.	76.81	155.2867	358.99	MB	0.392	1.48	3.22	8576
9	Component 21	17.627	n.a.	0.57	1.1977	2.77	BMb	0.423	1.04	1.64	9625
10		19.037	n.a.	1.12	2.3503	3.28	bMB	0.593	1.11	1.99	5716
11		20.817	n.a.	0.09	0.1908	0.42	BM	0.463	n.a.	1.17	11191
12	Component 7	21.84	n.a.	13.75	31.0345	49.91	MB	0.568	1.36	n.a.	8181
Maximum			0	76.81	155.2867	358.99		0.593	1.48	3.22	11191
Minimum			0	0.09	0.1908	0.42		0.36	1.01	1.17	2875
Sum			0	100	210.3918	457.36					

Entry 1 in Table S2: neat



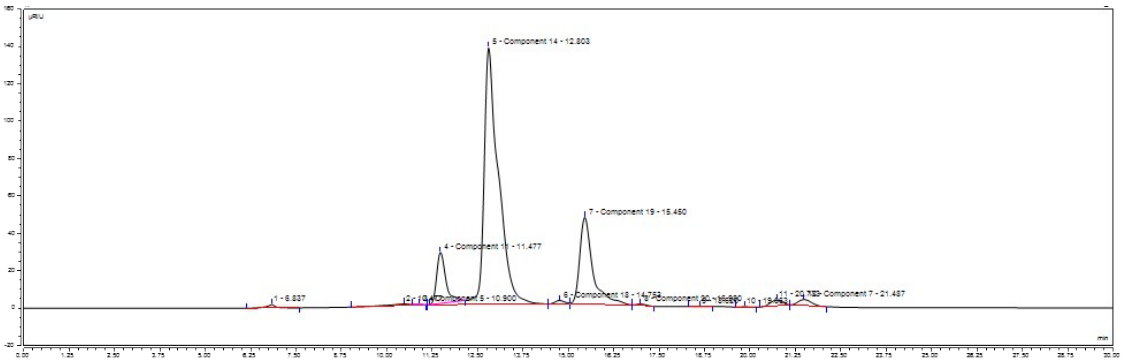
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.817	n.a.	0.36	0.485	1.61	BMB	0.255	0.68	0.87	3971
2		7.447	n.a.	0.07	0.0882	0.15	BMB	0.605	1.77	2.86	840
3		9.987	n.a.	0.94	1.2477	2.58	BMB	0.444	1.28	3.46	2808
4	Component 11	11.51	n.a.	0.92	1.2207	2.46	Ru	n.a.	n.a.	n.a.	n.a.
5	Component 14	12.803	n.a.	7.14	9.4924	16.44	BM	0.517	n.a.	n.a.	3404
6		13.74	n.a.	0.3	0.4013	1.42	MB	n.a.	n.a.	n.a.	n.a.
7		14.763	n.a.	0.27	0.3569	1.13	BM	n.a.	n.a.	n.a.	n.a.
8	Component 19	15.423	n.a.	28.33	37.6674	77.77	MB	0.389	2.14	4.7	8691
9		16.467	n.a.	4.28	5.6856	11.08	Rd	n.a.	n.a.	n.a.	n.a.
10		18.28	n.a.	0.13	0.1667	0.51	BMb	0.328	0.99	0.94	17223
11		18.9	n.a.	0.12	0.1539	0.34	bMB	0.45	1.41	2.07	9787
12		20.253	n.a.	0.06	0.0746	0.23	BMb	0.322	0.85	1.1	21858
13	Component 7	21.06	n.a.	29.02	38.5875	63.84	bMB	0.539	1.77	6.49	8452
14		28.69	n.a.	28.09	37.3506	41.8	BMB	0.847	1.55	n.a.	6352
Maximum			0	29.02	38.5875	77.77		0.847	2.14	6.49	21858
Minimum			0	0.06	0.0746	0.15		0.255	0.68	0.87	840
Sum			0	100	132.9785	221.35					

Entry 2 in Table S2: methanol



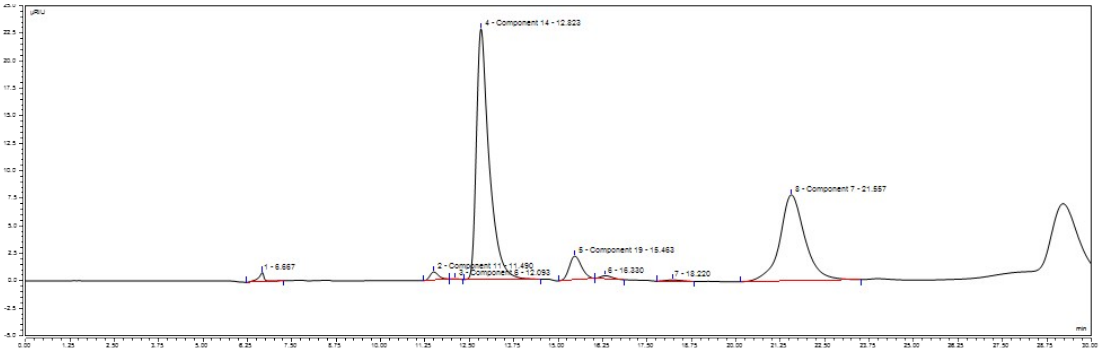
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		7.223	n.a.	2.3	1.9478	8.67	BMB	0.174	0.59	5.8	9514
2		10.517	n.a.	0.65	0.5507	0.85	BMB	0.496	0.83	n.a.	2489
3	Component 11	11.517	n.a.	3.05	2.5894	9.33	BM	n.a.	n.a.	n.a.	n.a.
4	Component 12	11.813	n.a.	2.55	2.1617	6.97	M	n.a.	n.a.	n.a.	n.a.
5	Component 14	12.83	n.a.	68.61	58.198	135.08	Mb	0.338	1.13	3.44	7977
6	Component 17	14.347	n.a.	0.02	0.021	0.12	bMb	0.182	1.05	n.a.	34495
7		14.86	n.a.	0.83	0.6999	2.16	bM	n.a.	n.a.	n.a.	n.a.
8	Component 19	15.457	n.a.	16.81	14.2617	32.64	M	0.38	1.46	n.a.	9160
9		16.447	n.a.	0.7	0.593	1.33	MB	n.a.	n.a.	n.a.	n.a.
10		18.24	n.a.	0.08	0.0699	0.17	BMB	0.398	0.96	1.57	11650
11		19.46	n.a.	0.13	0.1076	0.18	BMB	0.517	0.8	1.34	7864
12		20.73	n.a.	1.85	1.5696	2.64	BM	0.601	n.a.	0.86	6591
13	Component 7	21.827	n.a.	2.43	2.0592	2.42	MB	0.908	n.a.	n.a.	3201
Maximum			0	68.61	58.198	135.08		0.908	1.46	5.8	34495
Minimum			0	0.02	0.021	0.12		0.174	0.59	0.86	2489
Sum			0	100	84.8294	202.55					

Entry 3 in Table S2: 1,4-dioxane



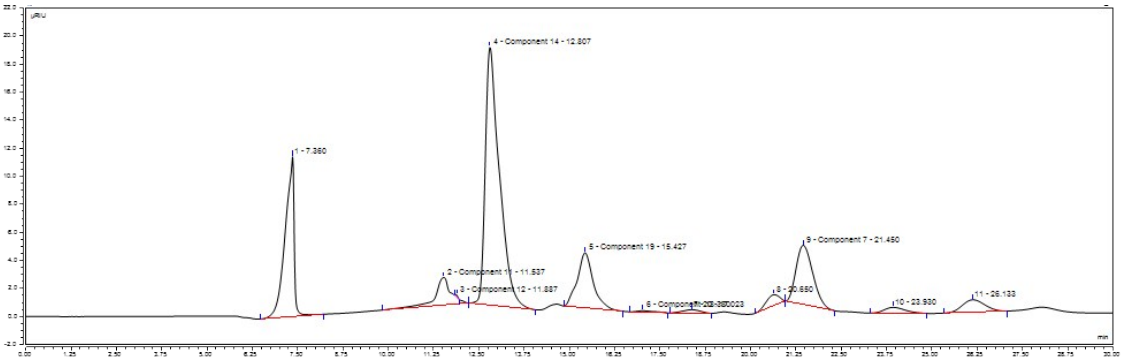
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.837	n.a.	0.55	0.535	1.92	BMB	0.204	0.89	4.45	6195
2		10.477	n.a.	0.73	0.7018	0.84	BMb	0.76	0.75	2.35	1052
3	Component 5	10.9	n.a.	0.03	0.0278	0.12	Rd	n.a.	n.a.	n.a.	n.a.
4	Component 11	11.477	n.a.	8.23	7.9361	27.28	Ru	n.a.	n.a.	n.a.	n.a.
5	Component 14	12.803	n.a.	66.52	64.1483	137.4	bMb	0.41	1.76	3.16	5401
6	Component 18	14.753	n.a.	0.65	0.6288	1.94	bM	0.318	n.a.	1.26	11887
7	Component 19	15.45	n.a.	20.29	19.5639	46.55	Mb	0.331	1.97	2.89	12037
8	Component 20	16.98	n.a.	0.24	0.231	0.77	bMB	0.293	1.3	3.18	18595
9		18.62	n.a.	0.04	0.0348	0.11	BMB	0.316	1.06	2.36	19192
10		19.863	n.a.	0.03	0.0247	0.08	BMB	0.304	1.16	1.49	23584
11		20.733	n.a.	1.25	1.2101	3.08	BMb	0.386	0.95	1.11	15945
12	Component 7	21.487	n.a.	1.45	1.3944	3.24	bMB	0.418	1.21	n.a.	14663
Maximum			0	66.52	64.1483	137.4		0.76	1.97	4.45	23584
Minimum			0	0.03	0.0247	0.08		0.204	0.75	1.11	1052
Sum			0	100	96.4368	223.33					

Entry 4 in Table S2: 4-methyl-2-pentanone



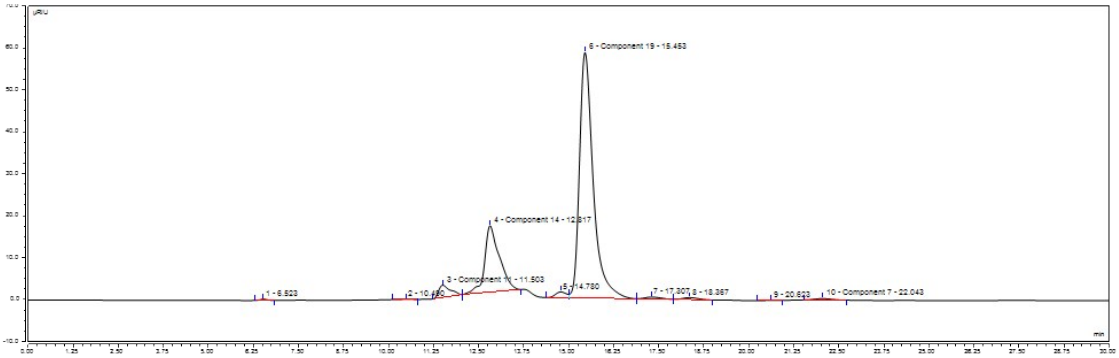
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.667	n.a.	0.93	0.1611	0.84	BMB	0.136	0.81	14.44	13332
2	Component 11	11.49	n.a.	1.19	0.2052	0.73	BMb	0.258	1.36	1.56	10958
3	Component 6	12.093	n.a.	0.04	0.0074	0.04	bMB	0.197	1.21	1.56	20864
4	Component 14	12.823	n.a.	54.9	9.4845	22.8	BMB	0.354	1.74	4.29	7266
5	Component 19	15.463	n.a.	4.95	0.856	2.15	BMb	0.372	1.18	1.39	9573
6		16.33	n.a.	0.61	0.1048	0.28	bMB	0.364	1.28	2.42	11168
7		18.22	n.a.	0.36	0.0629	0.11	BMB	0.556	1.2	3.15	5939
8	Component 7	21.557	n.a.	37.01	6.3938	7.83	BMB	0.692	1.06	n.a.	5370
Maximum			0	54.9	9.4845	22.8		0.692	1.74	14.44	20864
Minimum			0	0.04	0.0074	0.04		0.136	0.81	1.39	5370
Sum			0	100	17.2759	34.78					

Entry 5 in Table S2: DMSO



Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		7.36	n.a.	17.89	3.2791	11.4	BMB	0.263	0.62	8.47	4352
2	Component 11	11.537	n.a.	5.29	0.9695	1.96	BMb	0.319	0.81	2.05	7228
3	Component 12	11.887	n.a.	0.05	0.0099	0.15	Rd	n.a.	n.a.	n.a.	n.a.
4	Component 14	12.807	n.a.	45.52	8.3432	18.41	bMB	0.41	1.77	3.7	5399
5	Component 19	15.427	n.a.	10.98	2.0122	3.93	BMB	0.426	1.17	1.76	7252
6	Component 20	17.023	n.a.	0.32	0.0586	0.1	BMB	0.641	1.6	1.34	3906
7		18.38	n.a.	0.75	0.1378	0.25	BMB	0.55	0.94	2.75	6179
8		20.65	n.a.	1.79	0.3283	0.77	BMb	0.425	0.82	1.01	13082
9	Component 7	21.45	n.a.	12.38	2.2689	4.22	bMB	0.512	1.27	2.55	9715
10		23.93	n.a.	1.53	0.2798	0.42	BMB	0.633	1.27	1.96	7914
11		26.133	n.a.	3.49	0.6402	0.89	BMB	0.691	1.1	n.a.	7928
Maximum			0	45.52	8.3432	18.41		0.691	1.77	8.47	13082
Minimum			0	0.05	0.0099	0.1		0.263	0.62	1.01	3906
Sum			0	100	18.3274	42.49					

Entry 6 in Table S2: DMC

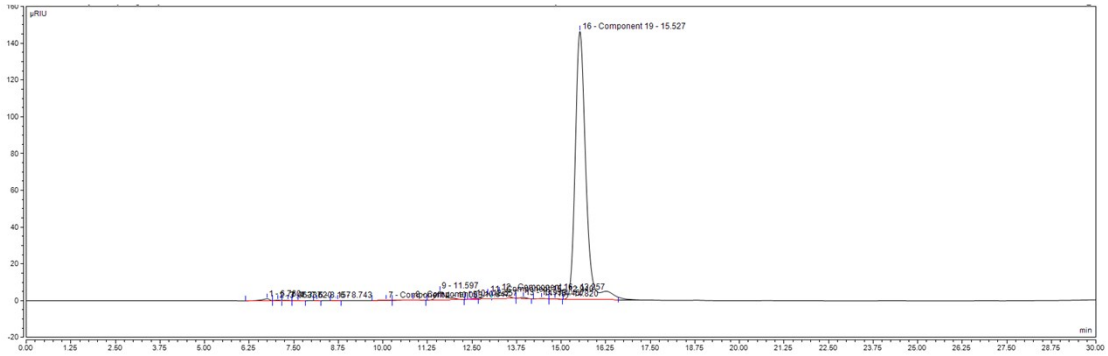


Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.523	n.a.	0.17	0.0622	0.3	BMB	0.192	1.1	8.23	6417
2		10.49	n.a.	0.05	0.0186	0.05	BMB	0.377	0.91	1.67	4289
3	Component 11	11.503	n.a.	4.06	1.0913	2.94	BMb	0.337	1.56	2.04	6447
4	Component 14	12.817	n.a.	16.13	7.5359	15.84	bMB	0.421	1.15	n.a.	5130
5		14.78	n.a.	1.34	0.4762	1.39	BM	n.a.	n.a.	n.a.	n.a.
6	Component 19	15.453	n.a.	76.42	25.8271	58.55	M	0.38	1.55	2.53	9159
7		17.307	n.a.	0.64	0.2268	0.46	Mb	0.485	1.14	1.33	7043
8		18.367	n.a.	0.63	0.2247	0.47	bMB	0.456	1.18	3.22	8974
9		20.623	n.a.	0.04	0.0149	0.04	BMB	0.371	0.93	1.87	17163
10	Component 7	22.043	n.a.	0.52	0.1839	0.34	BMB	0.524	1.13	n.a.	9819
Maximum			0	76.42	25.8271	58.55		0.524	1.56	8.23	17163
Minimum			0	0.04	0.0149	0.04		0.192	0.91	1.33	4289
Sum			0	100	35.6616	80.39					

Entry 7 in Table S2: toluene

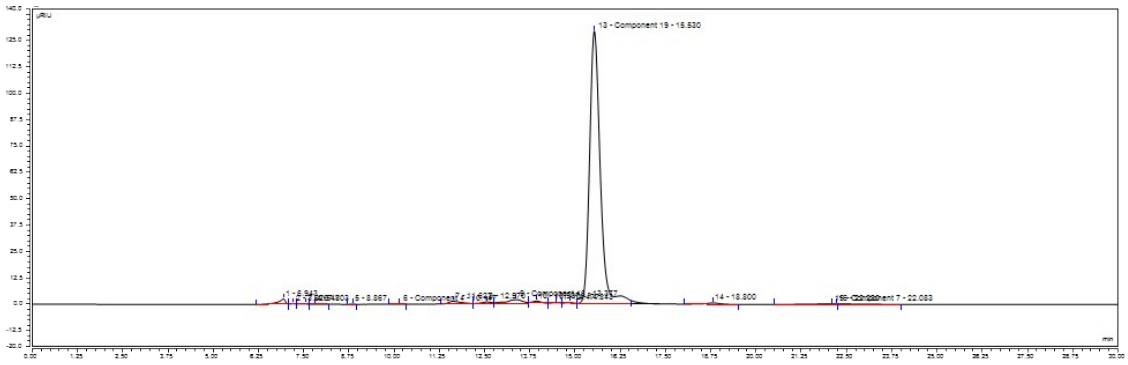
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.743	n.a.	0.9	0.3666	1.55	BMB	0.195	0.63	4.34	6619
2		8.143	n.a.	0.02	0.0059	0.03	BMB	0.185	0.75	7.83	10690
3	Component 11	11.527	n.a.	0.9	0.368	0.96	BMb	0.325	1.63	1.94	6988
4		12.497	n.a.	0.09	0.029	0.11	bMB	0.265	0.93	1.33	12358
5	Component 16	13.277	n.a.	1.1	0.5182	1.22	BMb	0.425	0.92	0.94	5406
6		13.823	n.a.	0.31	0.0944	0.36	bMB	0.259	1.32	0.84	15799
7	Component 17	14.367	n.a.	0.12	0.0369	0.08	BMB	0.505	2.09	1.42	4482
8	Component 19	15.44	n.a.	96.55	29.1275	67.45	BMB	0.389	1.37	n.a.	8740
Maximum			0	96.55	29.1275	67.45		0.505	2.09	7.83	15799
Minimum			0	0.02	0.0059	0.03		0.185	0.63	0.84	4482
Sum			0	100	30.5465	71.77					

Entry 8 in Table S2: ethylbenzene



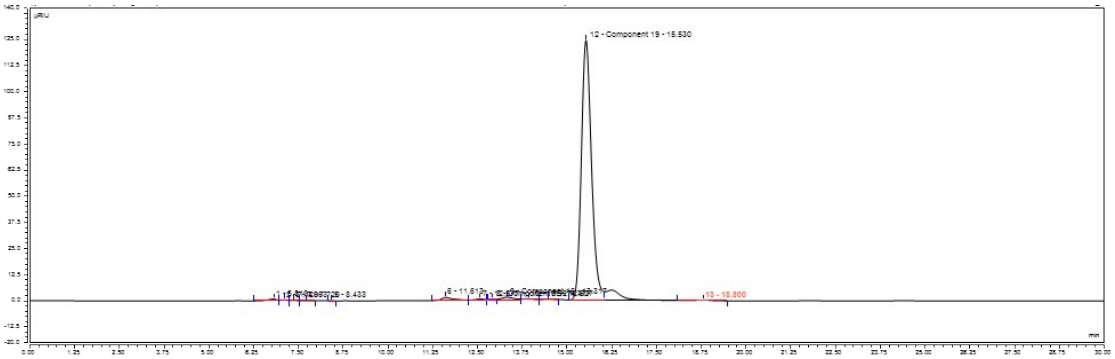
Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.76	n.a.	0.55	0.2949	1.1	BM	0.229	n.a.	0.8	4819
2		7.063	n.a.	0.12	0.063	0.35	M	0.217	n.a.	n.a.	5851
3		7.337	n.a.	0.09	0.0486	0.22	M	n.a.	n.a.	n.a.	n.a.
4		7.62	n.a.	0.03	0.016	0.08	MB	n.a.	n.a.	n.a.	n.a.
5		8.157	n.a.	0	0.0021	0.02	BMB	0.1	1	2.69	37132
6		8.743	n.a.	0.01	0.0032	0.02	BMB	0.157	0.7	3.52	17091
7	Component 4	10.083	n.a.	0.03	0.0168	0.05	BMb	0.291	0.75	1.09	6631
8	Component 5	10.847	n.a.	0.14	0.0779	0.15	bMB	0.534	0.81	1.14	2285
9		11.597	n.a.	2.65	1.4326	4.71	BMB	0.24	1.68	n.a.	12980
10		12.557	n.a.	0.07	0.0365	0.23	Ru	n.a.	n.a.	n.a.	n.a.
11	Component 15	12.94	n.a.	1.28	0.6931	2.46	BM	n.a.	n.a.	n.a.	n.a.
12	Component 16	13.257	n.a.	2.35	1.2719	3.27	Mb	n.a.	n.a.	n.a.	n.a.
13		13.933	n.a.	0.22	0.1213	0.57	bMB	0.208	1.1	1.38	24955
14		14.457	n.a.	0.09	0.0504	0.21	BMb	0.239	0.95	0.98	20279
15		14.82	n.a.	0.05	0.0267	0.13	bMB	0.2	1.22	1.67	30443
16	Component 19	15.527	n.a.	92.31	49.887	145.8	BM *	0.3	1.21	n.a.	14803
Maximum			0	92.31	49.887	145.8		0.534	1.68	3.52	37132
Minimum			0	0	0.0021	0.02		0.1	0.7	0.8	2285
Sum			0	100	54.0421	159.37					

Entry 9 in Table S2: m-xylene



Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.943	n.a.	1.23	0.5821	2.46	BM	0.181	0.61	1.06	8158
2		7.22	n.a.	0.05	0.024	0.19	Mb	0.128	n.a.	1.38	17493
3		7.547	n.a.	0.05	0.0258	0.16	bMB	0.151	0.69	1.04	13895
4		7.803	n.a.	0.03	0.0158	0.08	BMB	0.141	1.83	4.74	16897
5		8.867	n.a.	0.01	0.0025	0.02	BMB	0.124	0.8	4.72	28543
6	Component 4	10.147	n.a.	0.01	0.0062	0.03	BMB	0.196	0.83	3.14	14813
7		11.627	n.a.	0.96	0.4513	1.19	BMb*	0.36	1.47	1.72	5786
8		12.57	n.a.	0.45	0.2102	0.72	bM *	0.288	n.a.	1.34	10550
9	Component 16	13.377	n.a.	1.83	0.8653	1.7	M *	0.423	n.a.	0.95	5533
10		13.937	n.a.	0.58	0.2748	0.98	MB*	0.274	n.a.	1.33	14370
11		14.477	n.a.	0.07	0.0349	0.17	BMb	0.205	0.91	1.06	27541
12		14.843	n.a.	0.1	0.0491	0.24	bMB	0.203	1.06	1.61	29526
13	Component 19	15.53	n.a.	92.93	43.865	129.16	BM *	0.3	1.21	5.33	14874
14		18.8	n.a.	0.71	0.3367	0.65	BMB	0.425	0.9	1.89	10854
15	Component 7	22.083	n.a.	0.97	0.4564	0.28	BMB	1.621	1.08	n.a.	1028
16		22.23	n.a.	0	0	0	Rd	n.a.	n.a.	n.a.	n.a.
Maximum			0	92.93	43.865	129.16		1.621	1.83	5.33	29526
Minimum			0	0	0	0		0.124	0.61	0.95	1028
Sum			0	100	47.2001	138.03					

Entry 10 in Table S2: mesitylene



Peak	Peak Name	Ret.Time	Amount	Rel.Area	Area	Height	Type	Width (50%)	Asym.	Resol.	Plates
No.		min		%	µRIU*min	µRIU		min	EP	EP	EP
RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1	RI_1
1		6.81	n.a.	0.58	0.2479	0.94	BM	0.237	n.a.	n.a.	4565
2		7.12	n.a.	0.17	0.072	0.39	M	n.a.	n.a.	n.a.	n.a.
3		7.363	n.a.	0.09	0.0368	0.2	Mb	n.a.	n.a.	n.a.	n.a.
4		7.72	n.a.	0.03	0.0145	0.08	bMB	0.143	1.12	3.41	16143
5		8.433	n.a.	0	0.0021	0.02	BMB	0.104	0.97	9.31	36682
6		11.613	n.a.	1.19	0.5105	1.43	BMB	0.299	1.53	1.96	8337
7		12.577	n.a.	0.32	0.1357	0.51	BM	0.28	n.a.	1.32	11154
8	Component 15	12.927	n.a.	0.04	0.0182	0.13	Ru	n.a.	n.a.	n.a.	n.a.
9	Component 16	13.317	n.a.	1.39	0.5938	1.24	M	0.38	n.a.	n.a.	6807
10		13.927	n.a.	0.33	0.1406	0.45	Mb	n.a.	n.a.	n.a.	n.a.
11		14.477	n.a.	0.12	0.0502	0.19	bMB	0.257	0.99	2.23	17528
12	Component 19	15.53	n.a.	95.39	40.863	124.28	BM	0.3	1.21	5.32	14879
13		18.8	n.a.	0.36	0.1524	0.3	BMB	0.426	0.91	n.a.	10797
Maximum			0	95.39	40.863	124.28		0.426	1.53	9.31	36682
Minimum			0	0	0.0021	0.02		0.104	0.91	1.32	4565
Sum			0	100	42.8377	130.18					

Section 5. References

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