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SUPPORTING INFORMATION

Preconcentration of bisphenols by using calix[4]arene derivatives modified porous polymer monolith coupled with HPLC

Huiqi Wang [a], Shigang Wei [a], Huihui Zhang [b], Qiong Jia [a,*]

[a] *College of Chemistry, Jilin University, Changchun 130012, P. R. China*

[b] *Technology Research & Development Center, Heilongjiang Tobacco Industrial Company, Harbin 150000, China*

Corresponding author. E-mail addresses: jiaqiong@jlu.edu.cn (Q. Jia).

Preparation poly(BMA-EDMA) monolithic columns

The polymerization mixture consisting monomer, cross-linker, porogenic solvent and initiator was completely mixed by ultrasonication to obtain a homogeneous solution, and then purged with nitrogen for 10 min to remove oxygen and then filled into the capillaries. By sealing both ends of the capillary with silicon rubber, the reaction was initiated. Finally, the prepared capillary was washed with methanol to remove the unreacted components. We varied the weight percents of BMA, EDMA, *n*-propanol and 1, 4-butanediol, but fixed that of AIBN (1% of w/w with respect to the total monomer content) in polymerization mixture solution to prepare four monolithic columns with different porosities (see Table S1). The monolith with the monomer/porogen weight ratio of 30/70 exhibited satisfactory permeability, and was selected and used for subsequent experiments.

Table S1

Column	Monomers, % *w*/*w*		Porogen, % *w*/*w*		Perviousness [a]
	BMA	EDMA	*n*-propanol	1, 4- butanediol	
C-1	24	16	34	26	Poor
C-2	21	14	36.8	28.2	General
C-3	18	12	39.6	30.4	Good

[a] The perviousness of monoliths were determined with flow rates, i.e., the volume was determined when the solution passed through the monolith at certain times.

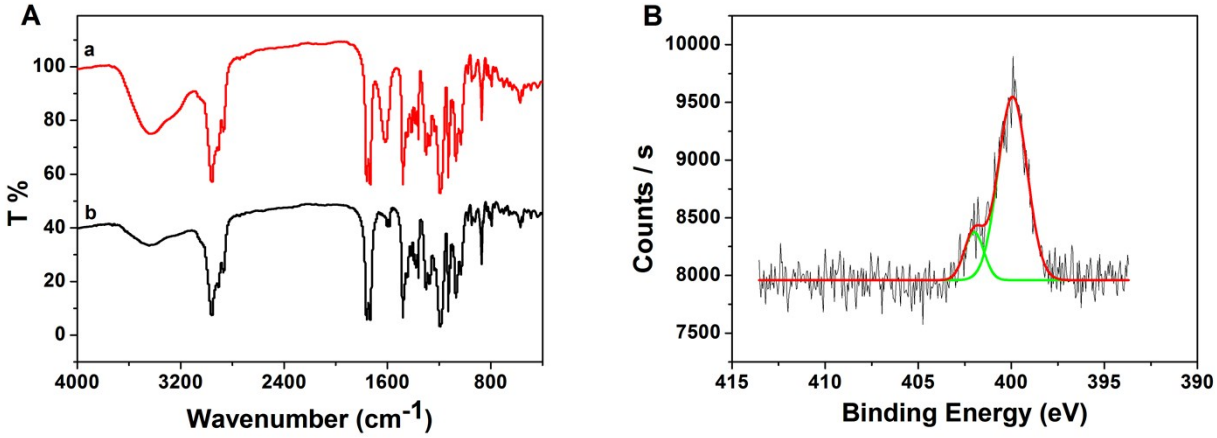

Fig. S1 (A) FT-IR spectra of (a) alkenyl@C[4]A and (b) carboxylatocalix[4]arenes. (B) XPS spectra of N element of modified alkenyl@C[4]A.

Table S2 Effects of amount of alkenyl@C[4]A on polymer properties and perviousness.

Amount of alkenyl@C[4]A (mg)	Polymer liquid	Perviousness of the monolith [a]
10	Clear	Good
20	Clear	Good
30	Clear	General
40	Little clear	General
50	Muddy	Poor
60	Muddy and sediment	Poor

[a] The perviousness of monoliths were determined with flow rates, *i.e.*, the volume was determined when the solution passed through the monolith within certain time.

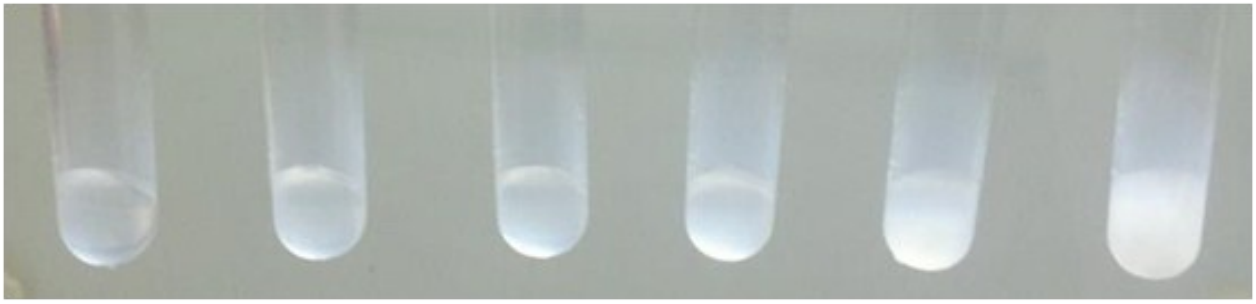

Fig. S2 The properties of polymer reaction liquid. The amount of alkenyl@C[4]A from left to right in order, 10, 20, 30, 40, 50 and 60 mg.