

Supporting Information

Electrospun polyamide/graphene oxide/polypyrrole composite nanofibers: A new and efficient sorbent for headspace solid phase microextraction of methamphetamine in urine samples followed by GC-MS analysis

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Figure S1

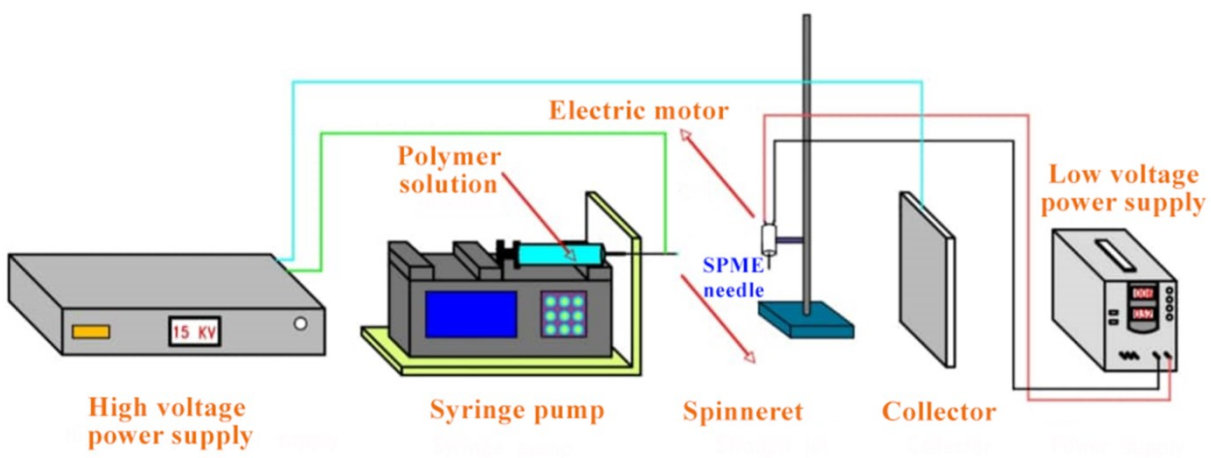


Fig. S1. The schematic presentation of the electrospinning procedure and producing of the SPME nanofiber

Figure S2

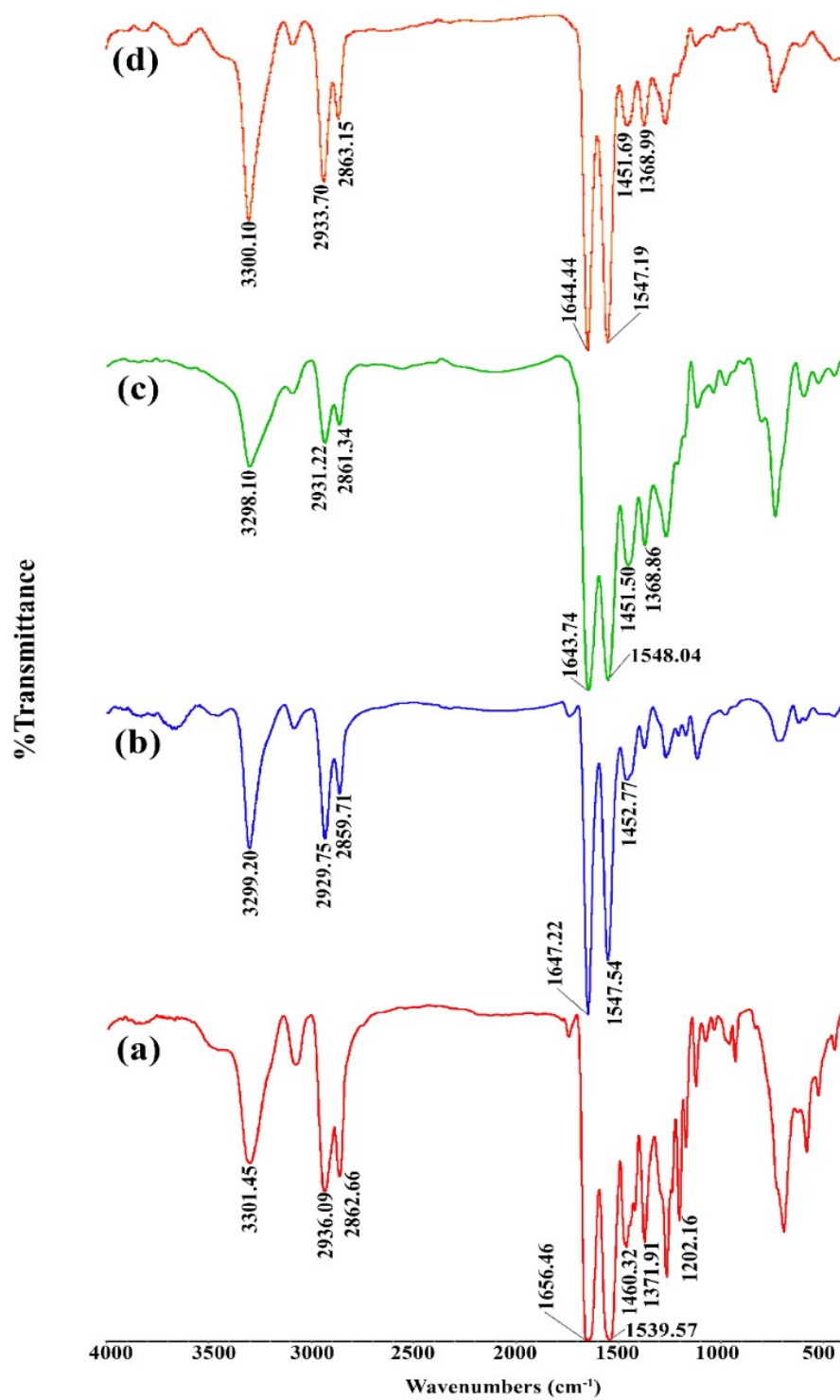


Fig. S2. The FT-IR spectra for a) PA, b) PA-GO, c) PA-PPy and d) PA-GO-PPy nanofibers ¹

Table S1

Experimental parameters and their levels in the applied rotatable central composite design (RCCD) for the adsorption step

Factors	Symbol	Levels				
		$-\alpha$	-1	0	+1	$+\alpha$
Sample pH	A	7.0	8.5	10.0	11.5	13.0
Extraction time	B	10	15	20	25	30
NaCl%	C	0	5	10	15	20
Extraction temperature	D	35	40	45	50	55

Table S2 Analysis of variance (ANOVA) table for the applied 4-factor RCCD for optimization of the adsorption step						
Source	Sum of Squares	df	Mean Square	F-Value	p-value Prob > F	
Model	4.14E+09	14	2.96E+08	89.53272	< 0.0001	significant
A-Sample pH	3.28E+08	1	3.28E+08	99.41571	< 0.0001	
B-Extraction time	4.10E+08	1	4.10E+08	124.3053	< 0.0001	
C-NaCl%	3.10E+08	1	3.10E+08	93.94184	< 0.0001	
D-Extraction temperature	4.00E+08	1	4.00E+08	121.0167	< 0.0001	
AB	5.57E+07	1	5.57E+07	16.86046	0.0009	
AC	1.02E+08	1	1.02E+08	30.84737	< 0.0001	
AD	4.62E+08	1	4.62E+08	140.0507	< 0.0001	
BC	9.47E+07	1	9.47E+07	28.68985	< 0.0001	
BD	1.96E+08	1	1.96E+08	59.49618	< 0.0001	
CD	2.04E+08	1	2.04E+08	61.72577	< 0.0001	
A^2	5.54E+08	1	5.54E+08	167.7276	< 0.0001	
B^2	7.22E+07	1	7.22E+07	21.87981	0.0003	
C^2	4.80E+08	1	4.80E+08	145.3992	< 0.0001	
D^2	9.67E+08	1	9.67E+08	293.0061	< 0.0001	
Residual	4.95E+07	15	3301465			
Lack of Fit	4518140	10	451814	0.050197	0.9999	not significant
Pure Error	4.50E+07	5	9.00E+06			
Cor Total	4.19E+09	29				
R-squared	0.9882					
Adjusted R-squared	0.9771					

References

1. Seidi, S., Karimi, E. S., Rouhollahi, A., Baharfar, M., Shanehsaz, M., Tajik, M., *J. Chromatogr. A*, 2019, **1599**, 25-34.