

## Electronic Supplementary Information (ESI)

### Evaluation of the cooling/heating-assisted microextraction instrument using a needle trap device packed with aminosilica/graphene oxide nanocomposite, covalently attached to cotton

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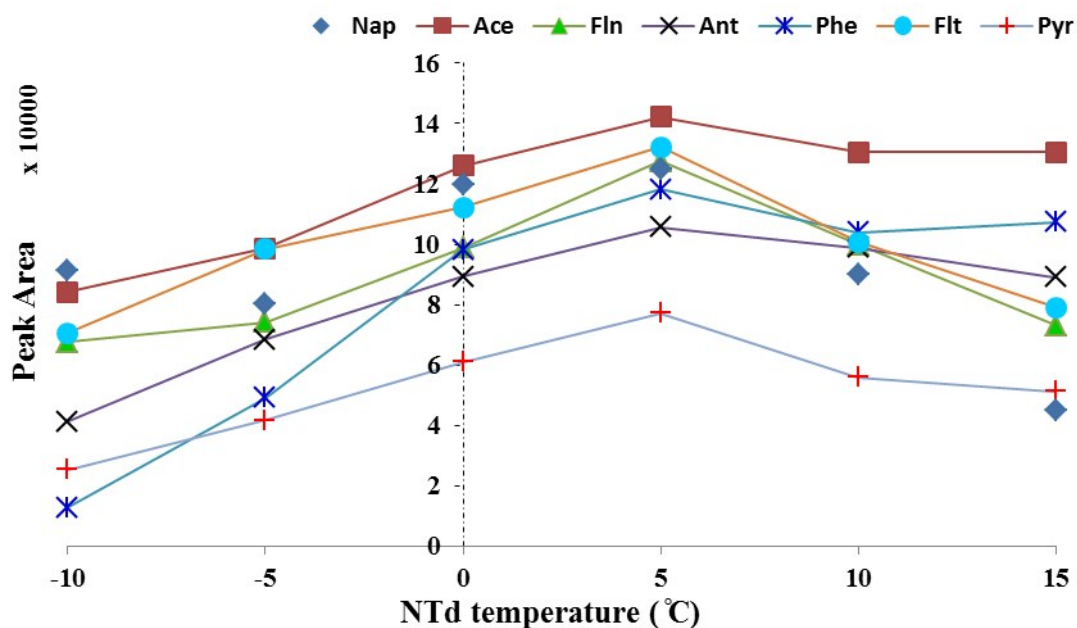
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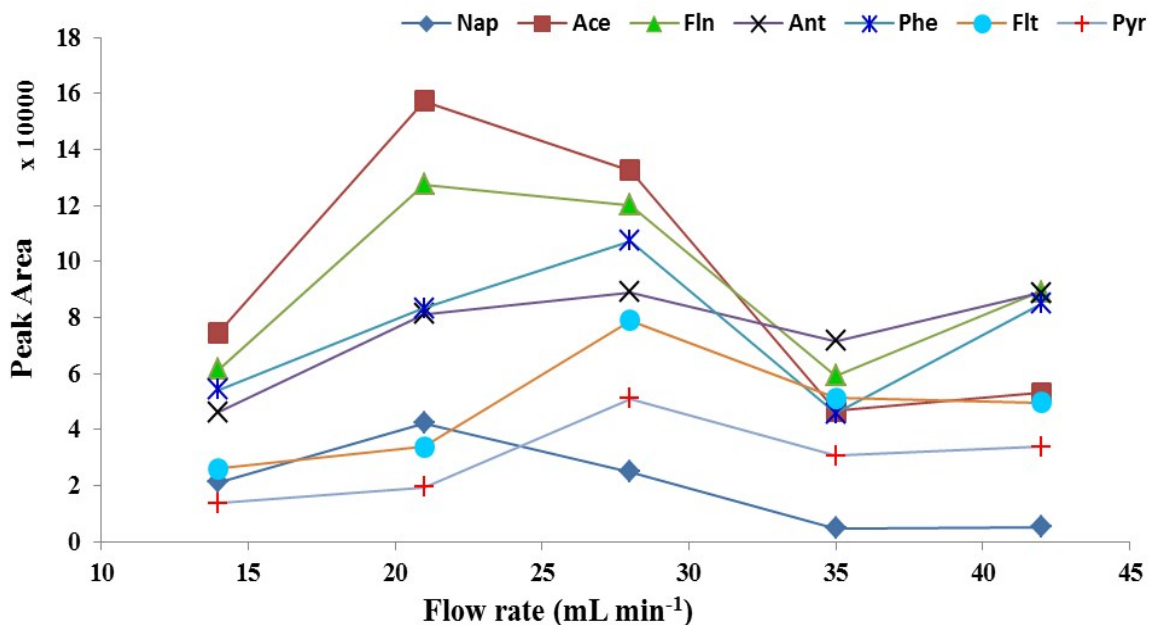
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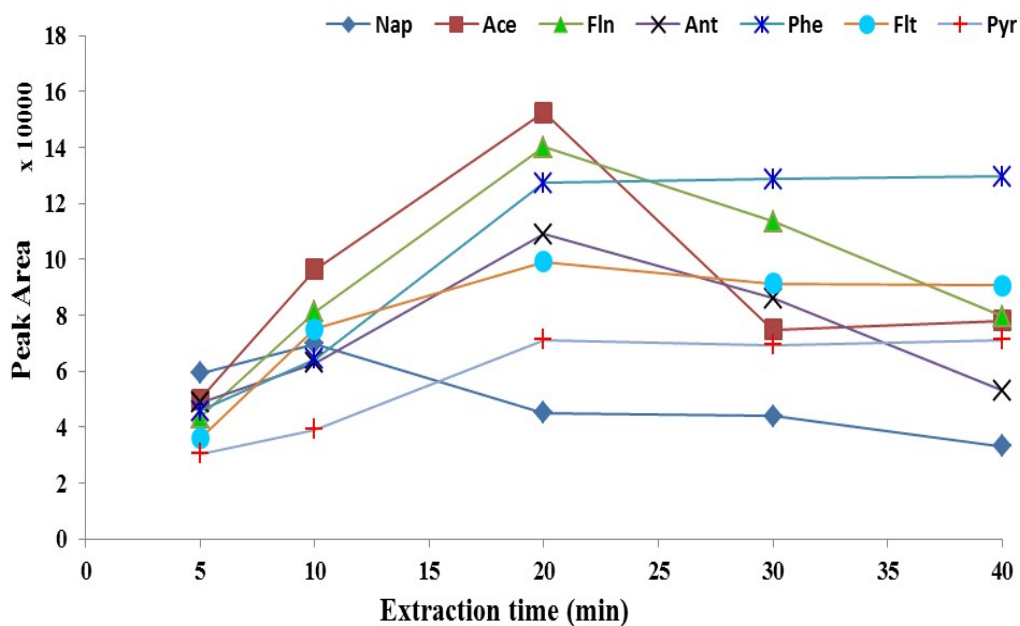
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**Table S-1** Analytical figures of merit for analysis of the PAHs in solid samples using CAaME-NTD-GC-FID method.

Analyte	LOD (ng g <sup>-1</sup> )	Equation <sup>a</sup>	R <sup>2</sup>	RSD (% n=6)	T-test value (f=4)	r
<b>Nap</b>	0.012	Y=288556.2x+1035.1	0.994	6.2	2.59	0.942
<b>Ace</b>	0.005	Y=1002056.3x+35195.0	0.997	7.2	2.82	0.998
<b>Fln</b>	0.017	Y=887590.6x+11754.6	0.996	9.8	2.82	0.998
<b>Ant</b>	0.013	Y=831773.5x+16495.3	0.996	8.9	2.79	0.993
<b>Phe</b>	0.038	Y=373130.9x+50919.5	0.992	8.1	2.81	0.995
<b>Flt</b>	0.036	Y=432474.3x+11958.9	0.995	7.4	2.81	0.997
<b>Pyr</b>	0.033	Y=255222.2x+27666.7	0.993	7.9	2.81	0.996

<sup>a</sup>Y: Peak area, x: Concentration (µg per g of solid sample)