DNA-shaped silver(I) coordination polymer based micro-solid phase extraction for determination of Amaranth and Brilliant Blue FCF in food and water samples Hamid Reza. Normohamadi ^a, Mohammad Reza. Fat'hi^{a*}, Mehrorang. Ghaedi ^{b1}, Valiollah. Nobakht

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Fig. S1. pH_{PZC} plot of silver(I)-CP sorbent.



Fig. S2. The experimental values (%) plotted against the predicted values (%) derived from the model of AM and BB recovery (%). The long dash line is the regression line with regression coefficient $R^2 = 0.99822$ (AM) and 0.99878 (BB). Each point refers to the experiment number listed in Table 1.



Fig. S3. Response surface plots for AM and BB recovery efficiency as a function of two independent variables.



Fig. S4. Graphs for experimental, predicated and desirability function values for the extraction of AM and BB.

Analyte	Method	Detection	Precision	LOD	Linear range	Contact time	References
			(% RSD)	$(ng mL^{-1})$	$(ng mL^{-1})$	(min)	
AM	SPE	DPV	<3.0%	5.0	50-5000	40	[41]
	СРЕ	UV-Vis	<4.5%	13.0	20-1600	30	[42]
	UA-D-µ-SPE	UV-Vis	<5.0%	3.83	20-5000	5.0	This work
BB	CPE	UV-Vis	<5%	1.7	2-350	30	[43]
	ILLLME	HPLC	<6.5%	0.051-0.074	0.81-2000	8	[44]
	IL-IDLLME	UV-Vis	<1%	0.34	1.5-150	10	[45]
	UA-D-µ-SPE	UV-Vis	<4.5%	2.28	15-6000	5.0	This work

Table S1. The overall comparison of the new method and reported methods.

DPV: Differential Pulse Voltammetry

CPE: Cloud Point Extraction

CPE: Cloud Point Extraction IL-IDLLME: Ionic liquid independent disperse liquid–liquid microextraction ILLLME: ionic liquid liquid–liquid microextraction HPLC: High-performance liquid chromatography SPE: Solid-Phase Extraction MSPE: Magnetic solid-phase extraction CE: Capillary electrophoresis

CSPE:

Column

solid-phase