

SUPPLEMENTARY INFORMATION

Preparation of a single and reusable biopolymer-based film for the extraction and preconcentration of non-steroidal anti-inflammatory drugs from natural water samples

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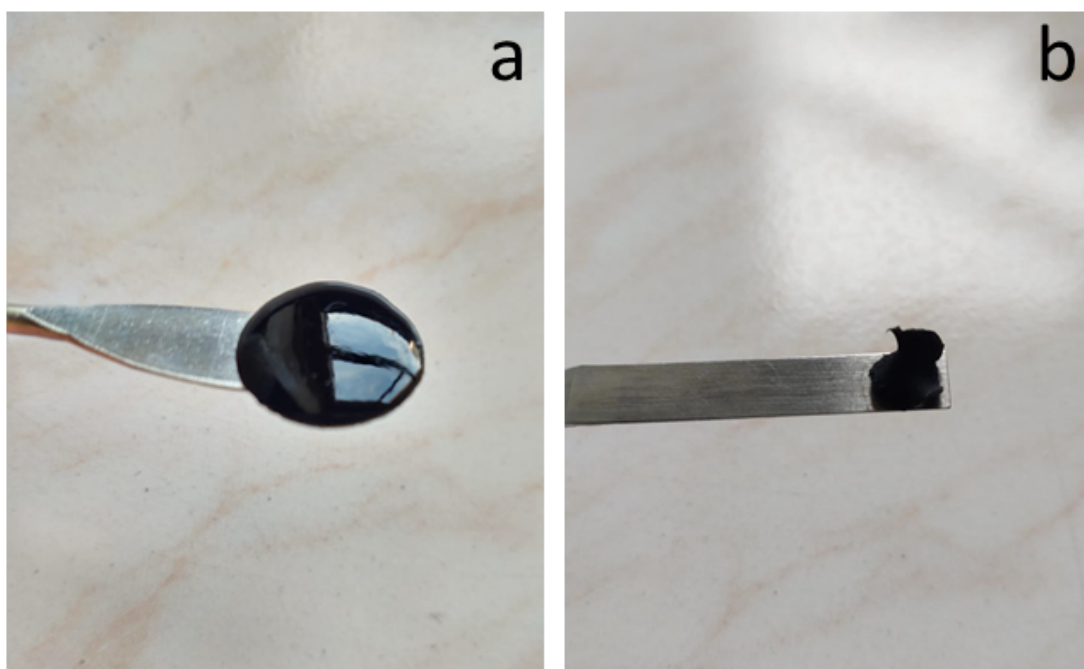


Figure S1. Images of the MWCNTs-agarose film before (a) and after its drying (b).

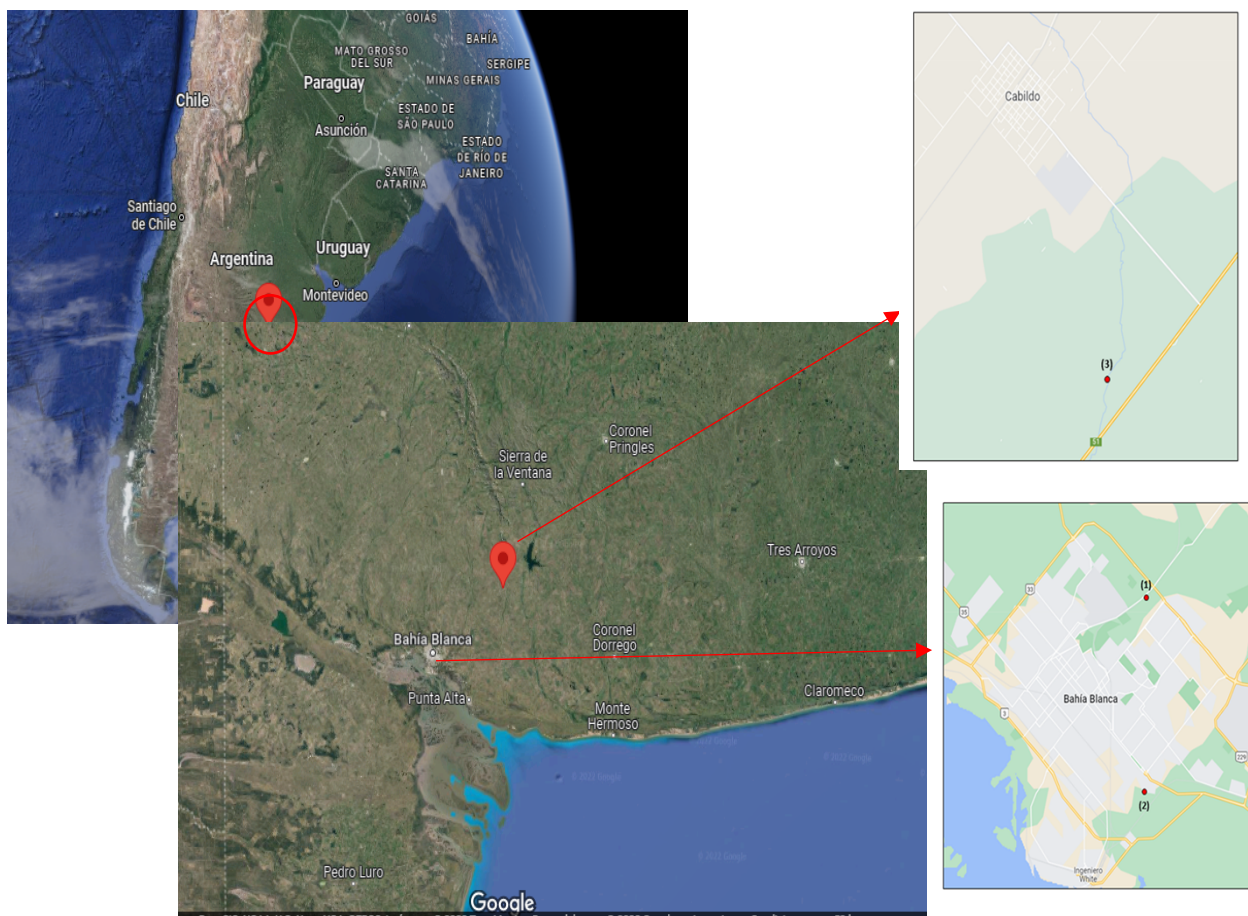


Figure S2. Sampling points: (1) Napostá stream, (2) Napostá Stream, (3) Napostá Chico stream

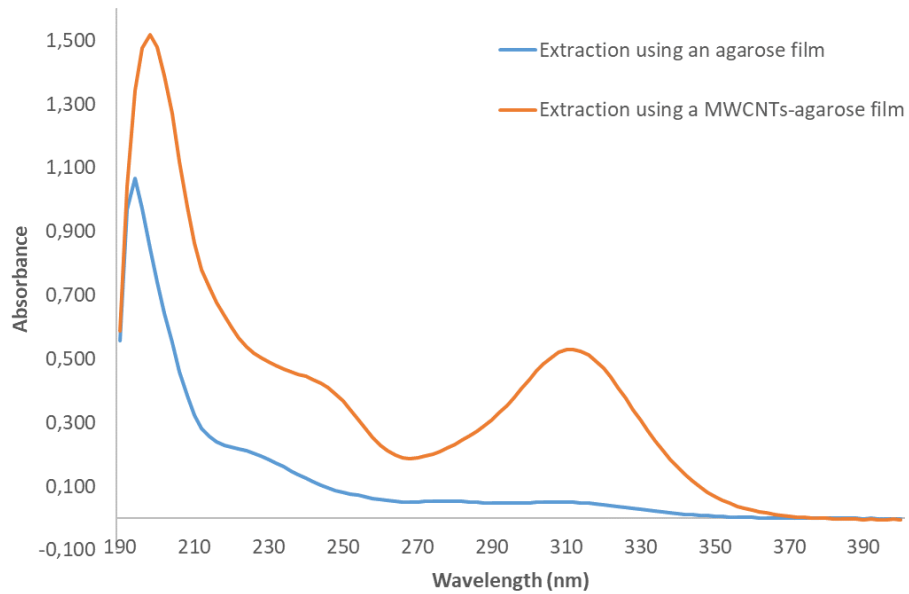


Figure S3. Comparison between the spectra of the extraction of KET using a film composed only with agarose and a film of MWCNTs-agarose

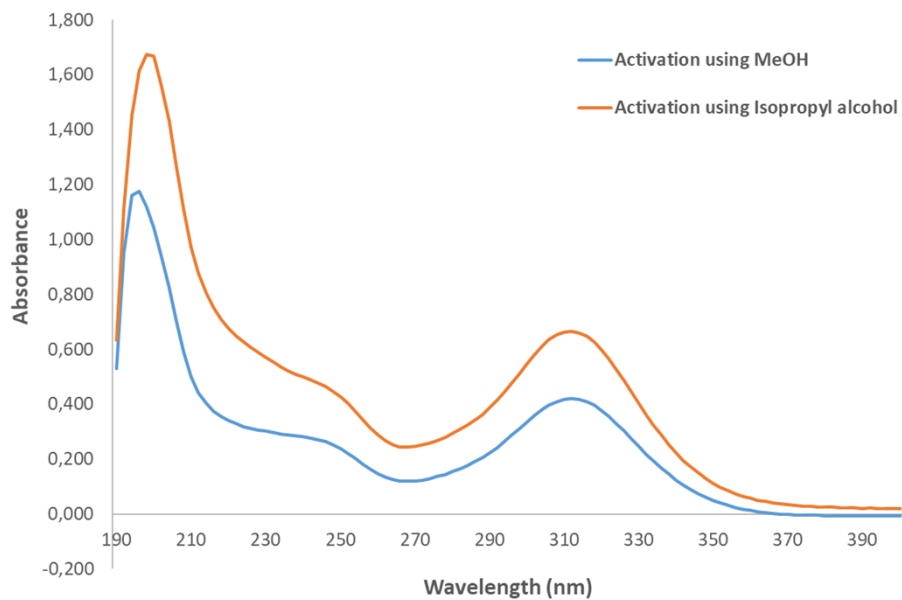


Figure S4. Comparison between the spectra of the extraction of KET using a MWCNTs-agarose film conditioned with MeOH and a film conditioned with isopropyl alcohol.

Table S1. Comparison of different procedures and formats for agarose-based sorbents found in the literature.

Agarose solution (g L ⁻¹) ¹	Sorbent	Concentration of sorbent (% w/v) ²	Temperature (°C)	Drying step	Film format	Sorbent reused	REF
10	MWCNTs	0.30	100	40°C, 24 h	Circular pieces with certain size (5 mm diameter)	No	[9]
10	C18	0.40	100	Room temperature, 48h	Small piece of square sheet (1.5 cm x 1.5 cm)	n.i.	[10]
8	MWCNTs	0.14	n.i	Without drying	Small pieces of cube (3x3x3 mm in length)	No	[11]
10	C18	0.50	90	60 °C, 48 h	Circular discs of 5 mm diameter	n.i.	[12]
10	MWCNTs	0.40	90	60°C, 48 h	Circular pieces 5 mm diameter (0.15 mg MWCNTs each)	No	[31]
10	MWCNTs	1.60	80	40°C, 24 h	Unique piece	Yes (50 times)	Our work

¹ Initial concentration; ² Calculated in the final solution used for the film