

Competitive adsorption mechanisms in a pool of pharmaceuticals onto a raw clay mineral

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Supplementary Material

Table S1 : Analytical performance of the PhACs pool with RT, the retention time, m/z ratio, the chosen fragments for the quantification and confirmation in brackets, Recovery, the recovery rate of the experimental process, L.O.Q., the limit of quantification and r^2 the correlation coefficient of the calibration curves for the quantification of each PhAC.

Compound	RT min	m/z ratio	Recovery %	L.O.D. $\mu\text{g}\cdot\text{L}^{-1}$	r^2
Acetaminophen (ACM)	41.71	322 (248)	85.0 ± 0.49	0.01	0.980
Carbamazepine (CBZ)	53.56	193 (237)	73.3 ± 0.80	0.08	0.997
Diclofenac (DIC)	54.61	352 (214)	85.0 ± 0.82	0.03	0.999
Doxepin (DOX)	46.98	58 (313)	116 ± 2.51	0.11	0.995
Gemfibrozil (GEM)	44.41	243 (185)	70.8 ± 1.96	0.06	0.999
Ibuprofen (IBU)	33.78	263 (303)	78.7 ± 1.09	0.04	0.980
Ketoprofen (KET)	51.71	311 (295)	65.4 ± 1.02	0.04	0.999
Metoprolol (MET)	47.86	223 (324)	70.8 ± 1.98	0.08	0.994
Naproxen (NAP)	48.18	287 (185)	85.1 ± 2.09	0.06	0.998
Salicylic Acid (SCA)	37.36	309 (195)	82.5 ± 0.96	0.04	0.979
Tramadol (TRA)	38.06	58 (263)	98.7 ± 2.82	0.09	0.994

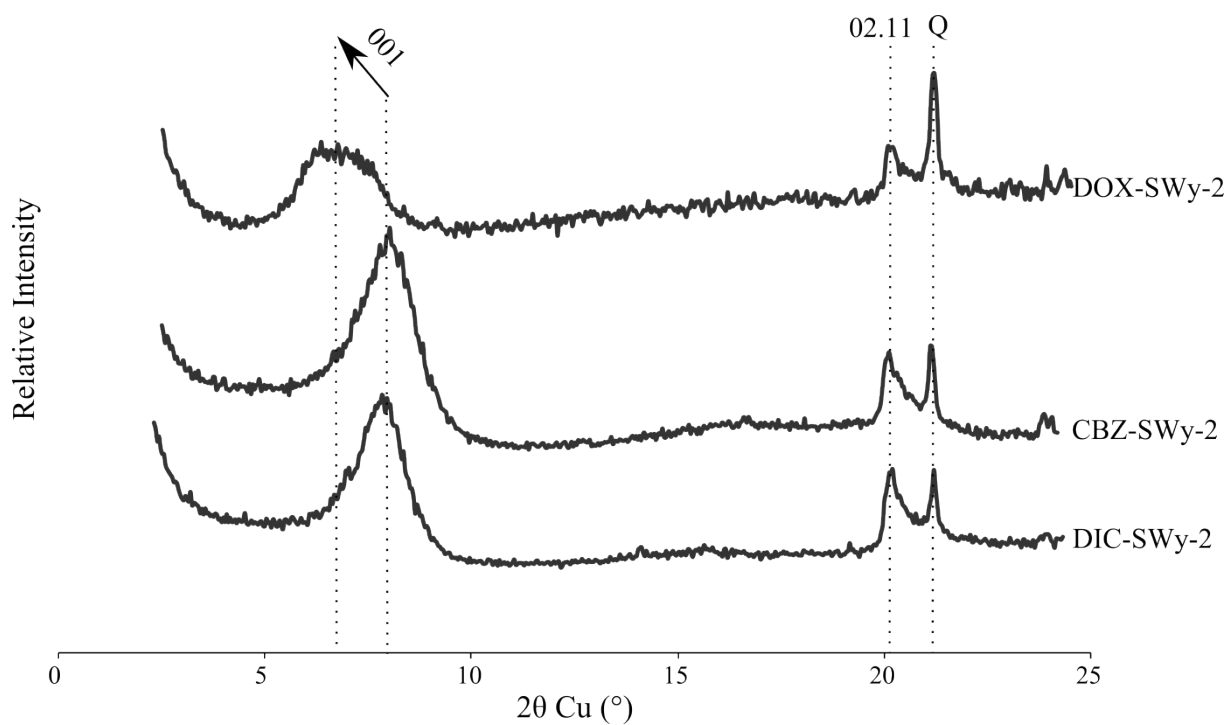


Figure S2 : X-ray diffractograms of clay mineral samples after interactions with single component solution of Doxepin (DOX-SWy-2), Diclofenac (DIC-SWy-2) and Carbamazepine (CBZ-SWy-2). The starting concentration was 1 mg L⁻¹ in a solid/liquid ratio of 50 mg of clays for 50 mL of solution. Q corresponds to quartz impurities.