

Supporting information

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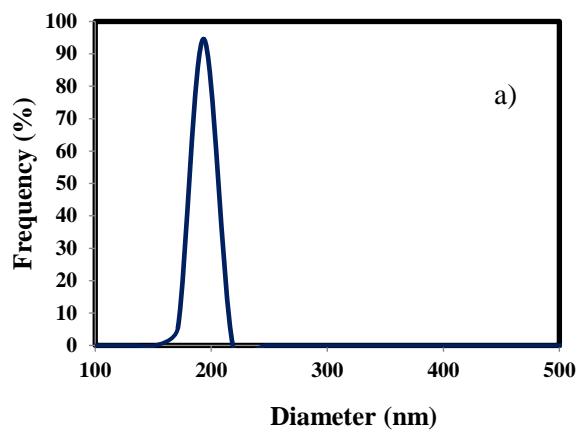


Figure S1. Particle size distribution of CFMZ-ZnO/PVP-PEG

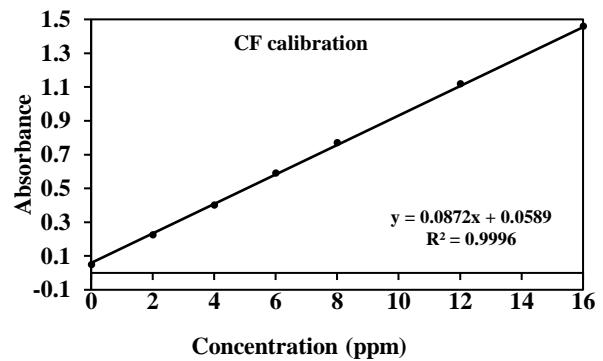
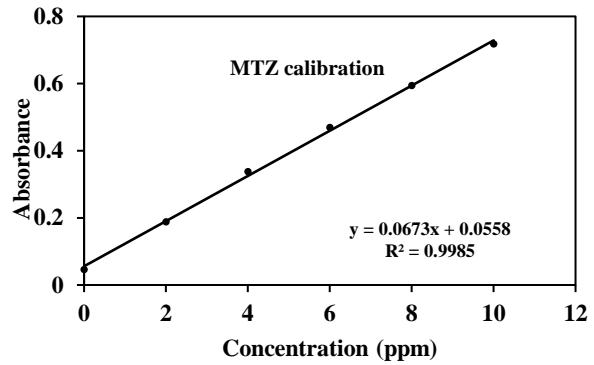


Figure S2: Calibration curves of MZ and CF in PBS buffer with pH=6.8

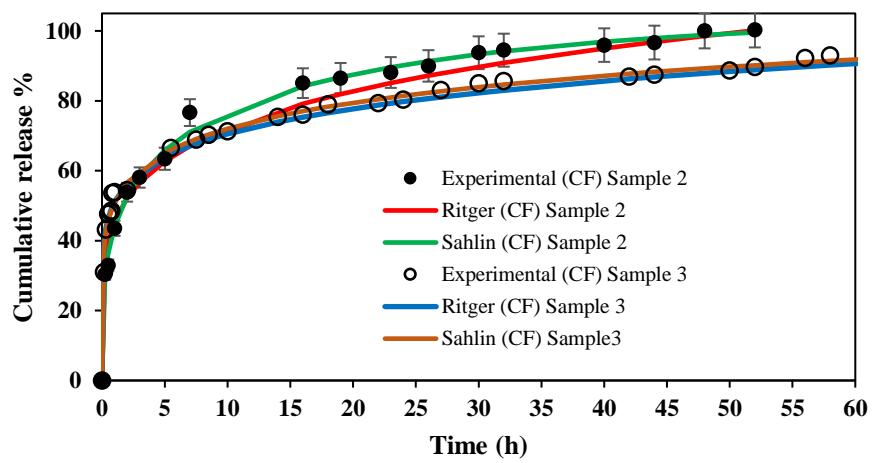
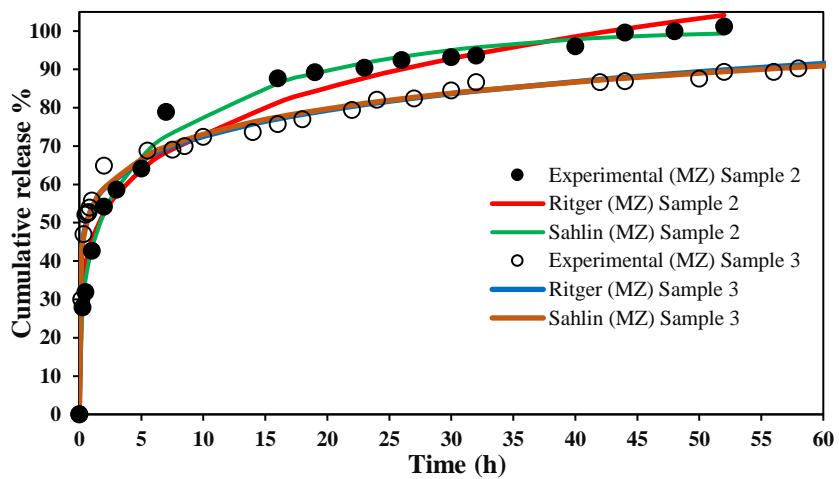


Figure S3: Graphical representation of kinetic modelling of the release of drugs from sample 2 and 3 of hybrids

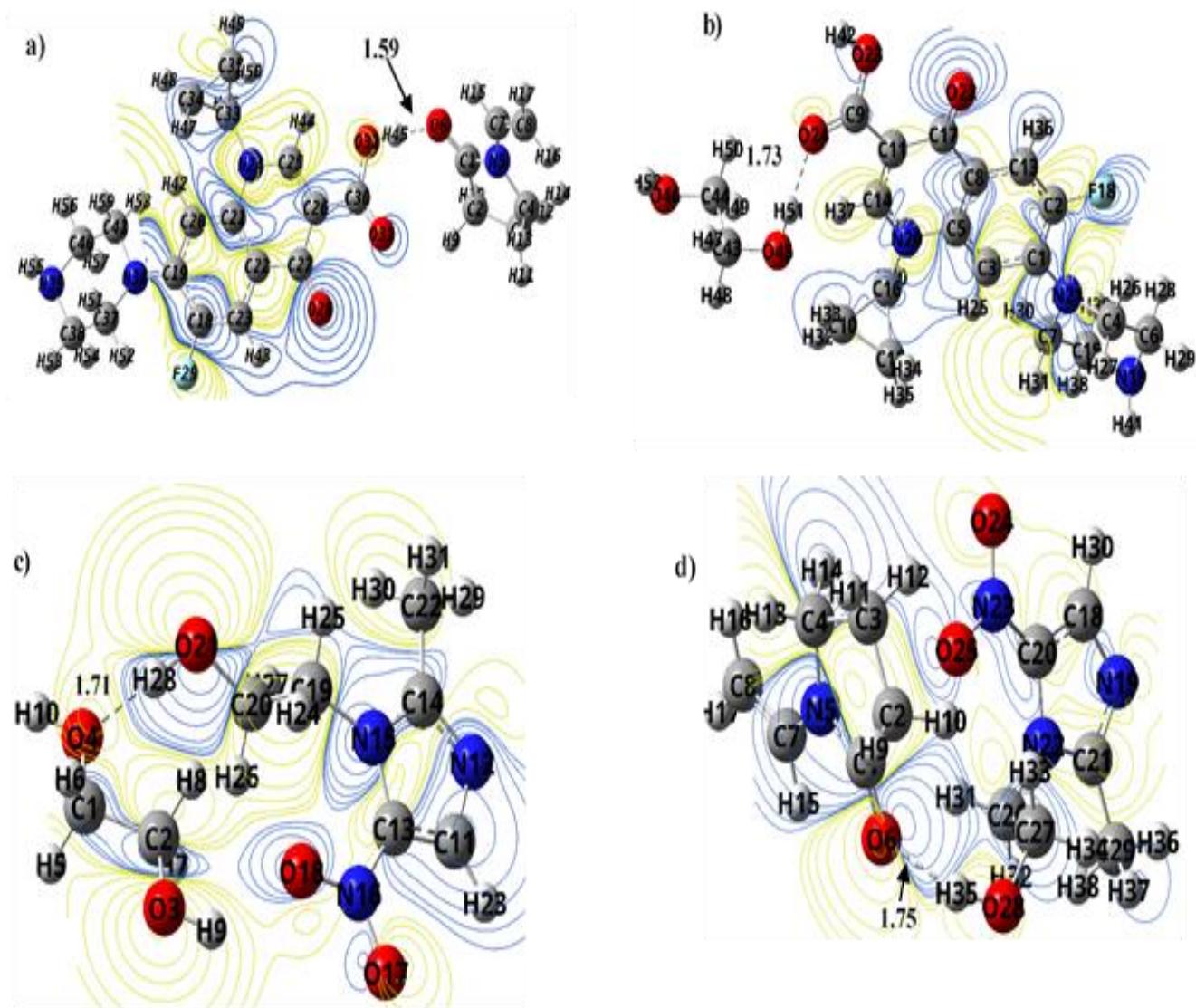


Figure S4. The optimized structures of drug-PEG and drug-PVP

Table S1. The release parameter values obtained by fitting the in vitro release data to Higuchi ($M_t/M_{\infty} = Kt^{0.5}$) model.

Release system	K ₁	n	R ²	AIC	RMSE	SAE	ARE	ARS
Drug/Polymer:0.3								
Ciprofloxacin	30.62	0.5	0.7404	63.40	12.37	80.47	0.26	31.95
Metronidazole	31.21	0.5	0.8310	60.31	10.42	67.30	0.23	28.56
Drug/Polymer:0.6								
Ciprofloxacin	34.09	0.5	0.8133	46.06	10.40	51.03	0.20	56.56
Metronidazole	34.11	0.5	0.8553	44.53	10.43	45.83	0.19	24.48
Drug/Polymer:1								
Ciprofloxacin	41.56	0.5	0.2381	80.76	19.39	141.49	0.32	36.4
Metronidazole	44.5	0.5	0.2474	82.26	20.90	146.27	0.31	36.29