

Fig. S1: XRD patterns for dehydrated BDTA-Mt after being in contact with diclofenac solution of 0.1, 0.6, 0.8., 1, and 2 g L⁻¹.

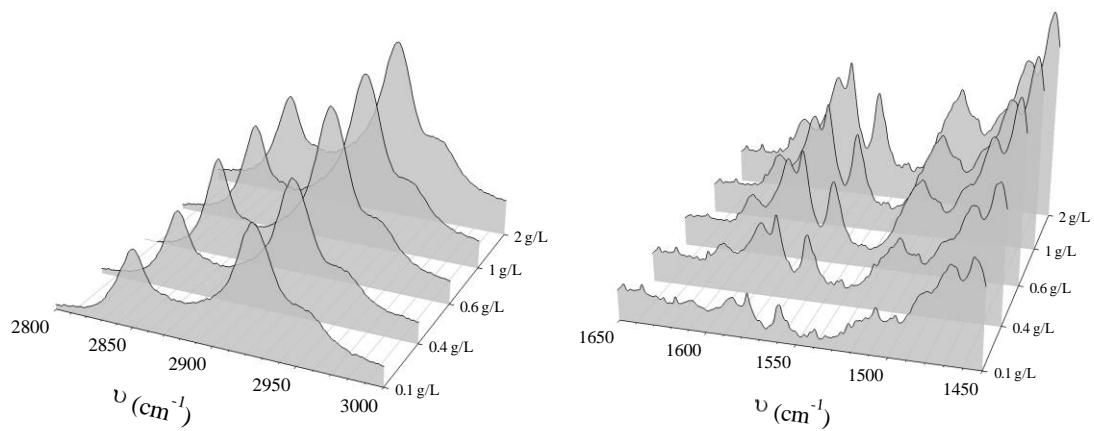


Fig. S2: 3D evolution of the FTIR spectra in the wavenumbers window of CH₂ stretching bands for (a) BDTA-Mt organoclay in the range 2800–3000 cm⁻¹ and the (b) CO₂⁻ stretching bands of diclofenac in the range 1450–1650 cm⁻¹ for different starting diclofenac concentrations (0.1, 0.4, 0.6, [1](#) and [2](#) g L⁻¹).

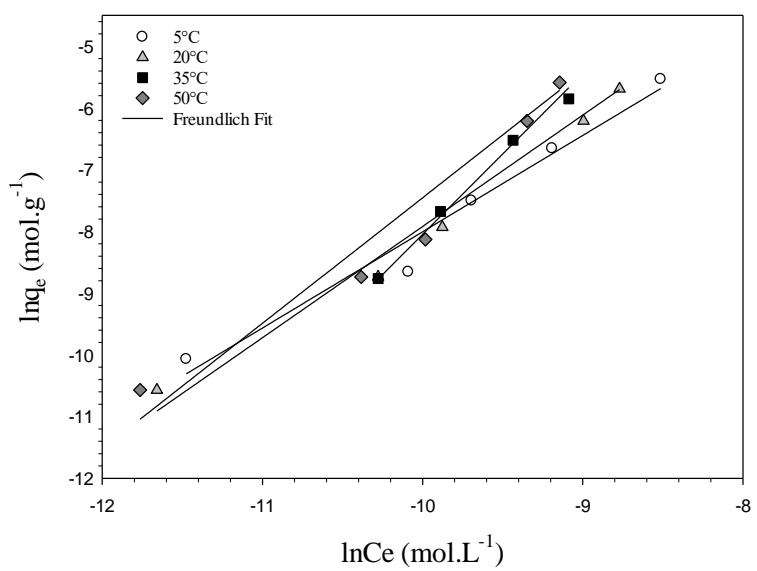


Fig. S3: Adsorption isotherms of Diclofenac onto a HDTMA-Mt organoclay for the temperatures of 5, 20, 35 and 50°C. The solid line represents Freundlich model fit.

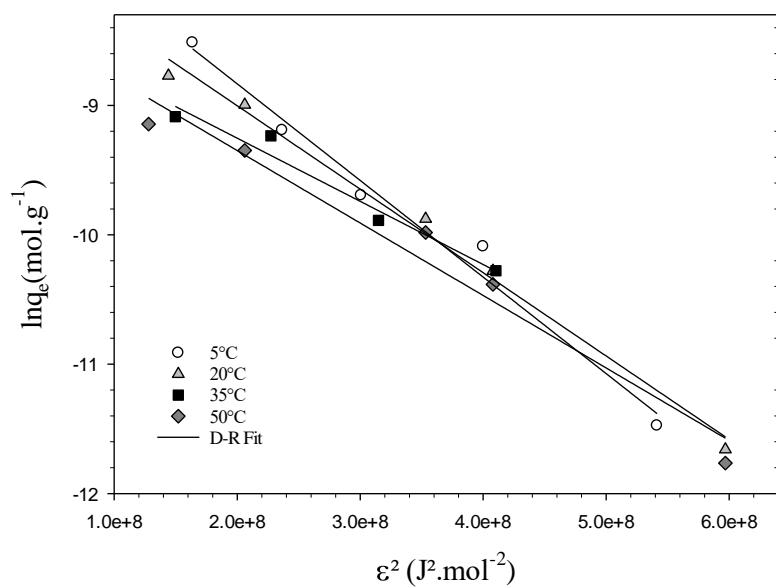


Fig. S4: Adsorption isotherms of Diclofenac onto a HDTMA-MT organoclay for the temperatures of 5, 20, 35 and 50°C. The solid line represents D-R model fit.