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Article

A novel nanoporous adsorbent for pesticides obtained from biogenic calcium carbonate, derived from waste crab shells

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Supplementary material

Contents:

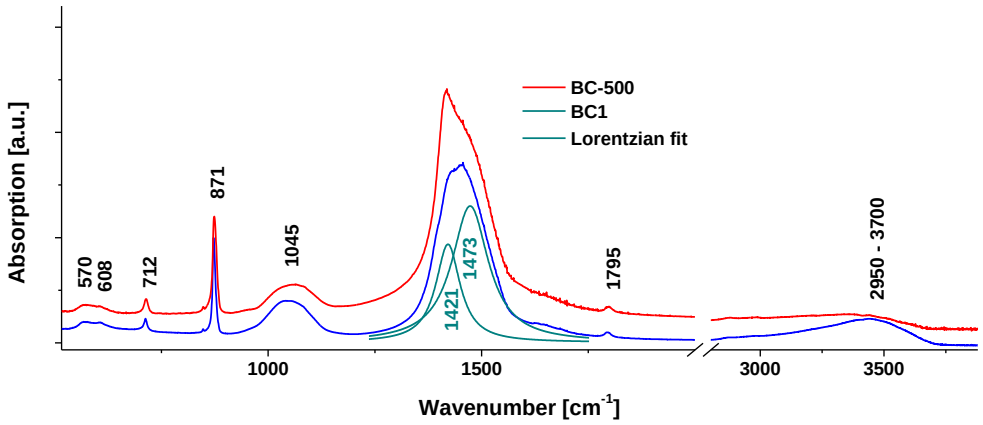

Figure S1. Comparative display of the FTIR spectra of adsorbent BC1 (heated in argon flow at 700 °C) and a batch of the same powder stock treated in air at 800 °C. The purpose of this figure is to highlight the signal of CaO and CaOH phases in air treated material, via the additional band at 3640 cm^{-1} arising from calcium hydroxide O-H stretching mode, and the red shift of the ν_3 to a 1423 cm^{-1} band relative to calcite-amorphous $CaCO_3$ mixture of BC1 which exhibits band envelope maximum at 1451 cm^{-1} characteristic to calcium oxide.

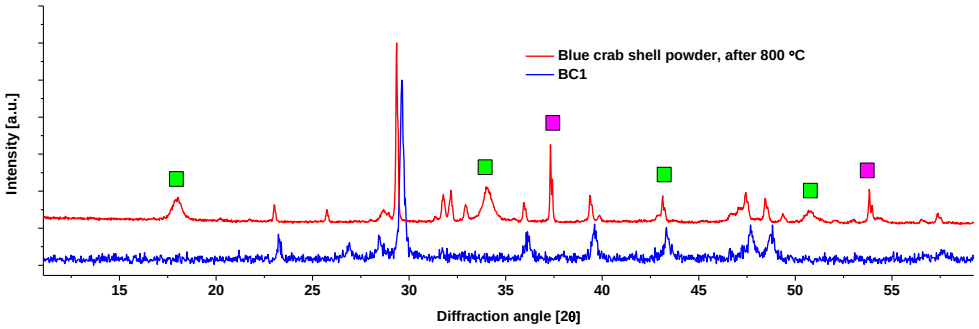

Figure S2. Comparative display of the XRD patterns of adsorbent BC1 (heated in argon flow at 700 °C) and a batch of the same powder stock treated in air at 800 °C. The purpose of this figure is to highlight the reflection peaks of CaO and CaOH phases in air treated material: CaO peaks are labelled with magenta squares, CaOH peaks are labelled with green squares.