## A Universal Hybrid Adsorbent Based on Chitosan for Water Treatment

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**Abstract :** A novel hybrid adsorbent, based on chitosan biopolymer, clays and activated carbon was prepared. Hybrid chitosan beads containing dispersed clays and activated carbons were prepared by precipitation in basic medium. Such a composite material is still very porous and presents a wide adsorption spectrum. The obtained composite adsorbent is able to handle all the pollution types including heavy metals, polar and hydrophobic organic molecules and nitrates. It could find a place of choice in tertiary water treatment processes or for an 'at source' treatment concerning chemical or pharmaceutical industries. **Keywords :** adsorption, chitosan, clay mineral, activated carbon

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