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HYBRID MATERIALS FOR THE REMOVAL OF ORGANIC COMPOUNDS FROM WATER

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Abstract

Water quality is an important concern for the ecosystem state from a particular region. Since the continuous urban and economic development induces a negative impact on entire hydrological cycle, this study investigates the water quality of a Romanian lake, located in the Surduc area - Timis County. This perimeter has undergone significant economic development in the past two decades due to increased tourism potential and the number of holiday residences.

We proposed hybrid materials for the degradation of organic pollutants from the lake water. Particle size, morphology and properties of the hybrid materials are investigated by X-ray diffraction (XRD), scanning electron microscopy (SEM), energy-dispersive X-ray spectroscopy (EDX), DRUV-VIS spectroscopy and TOC determinations.

Key words: catalytic material, hypertrophication, photocatalytic activity, Z-Na

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