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## **NEW MATERIALS MEMBRANE HIGH FUNCTIONALIZED WITH APPLICABILITY IN WATER TREATMENT**

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### **ABSTRACT**

The article is focused upon research and development of highly advanced smart nanostructured composite materials for the development of cutting edge technologies intended for wastewater depollution. Our method (way) possesses the single full-grown technology in the world for the fabrication of unique smart-functionalized composite materials, which are able of removing in a single stage most of the heavy-metals, organics, inorganics, biological impurities, as well their secondary degradation byproducts, coming from various industrial, manufacturing and domestic wastewaters. The composite material we fabricate was target conceived, design and fabricated to underpin a new one-stage wastewater treatment technology. The material succeeds in the achievement of a pollutant removal efficiency that is about 10k to 100k higher than the removal efficiency of current treatment technologies. Also, the composite material can collect the minute quantities of the pollutants up to p.p.m level.



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