



APPLICATION OF NATURAL MATERIALS AS SORBENTS FOR PERSISTENT ORGANIC POLLUTANTS

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Abstract

Persistent organic pollutants (POPs) are toxic chemicals that adversely affect human health and the environment around. This group of priority pollutants consists of pesticides, industrial chemicals and unintentional by-products of industrial processes. Natural materials, waste from industry and agriculture and bioadsorbents can be employed as inexpensive adsorbents to remove POPs from environmental components by sorption processes. The paper presents various natural sorbents and some outcome of POPs sorption on these materials. There are describes sorbent characteristics and factors affecting sorption of organic pollutants by natural sorbents. It is evident from the review that natural sorbents have demonstrated high removal capabilities for certain compounds. The interest is justified by the awareness that POPs may constitute serious risks for the health of man and other living organisms.

Key words: natural material, organic pollutant, sorption

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