The effect of organic matter content on PCDDs/PCDFs in bottom sediments

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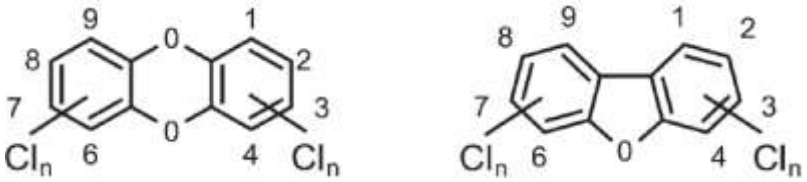
Dioxins (PCDDs/PCDFs)

combustion, metals smelting, chemical manufacturing →

Bottom sediments

Persistent Organic Pollutants, highly toxic to human health and ecosystems



Low solubility rates, strong adsorption on organic particles, determine the stability of dioxins in the aquatic environment

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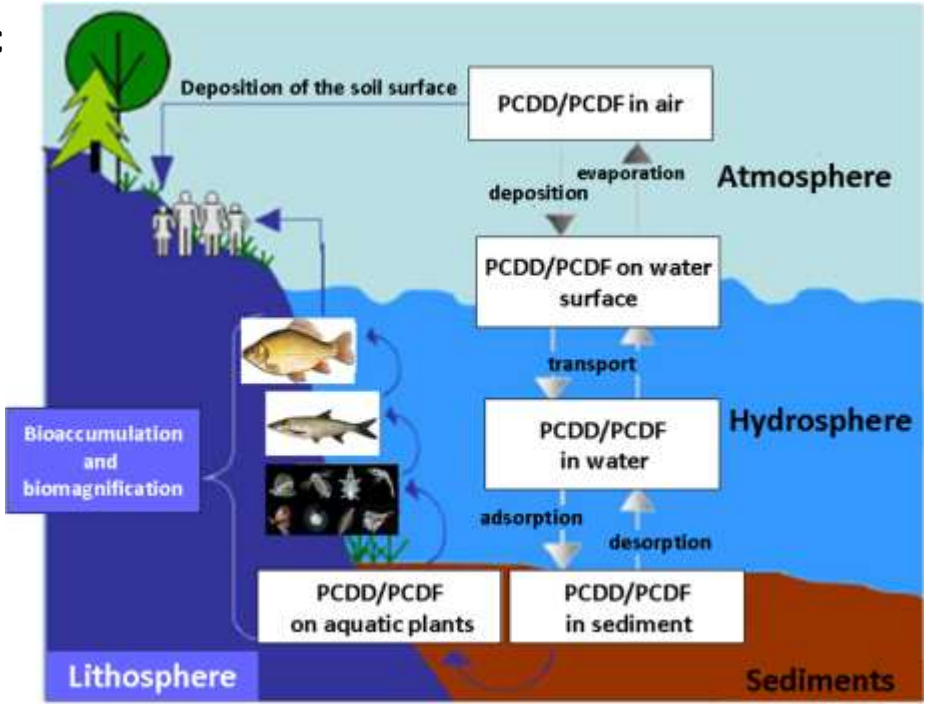
High ability to be incorporated into food chains



Transport of dioxins in the environment (Urbaniak 2013)

they are the final deposition place of various pollution

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Organic matter

the most important component of BS, and mainly responsible for the sorption properties of BS

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quantity and quality of OM determine behaviour of dioxin in the aquatic environment

The aim of study was to determine the content of OM and PCDDs/PCDFs in sediments, and to evaluate the interaction between fractions of OM and content of dioxins in sediments form Rybnik Reservoir