

**DETERMINATION OF ANTHROPOGENIC ORGANIC COMPOUNDS IN THE
SEDIMENTS OF A DELTAIC-COASTAL AREA. THE CASE OF
IGOUMENITSA GULF AND KALAMAS RIVER.**

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ABSTRACT

The distribution and origin of hydrocarbons and chlorinated compounds were investigated in surface sediments collected from Igoumenitsa gulf and the coastal area of Kalamas River. Total hydrocarbon concentrations ranged from 15.9 to 106.9 µg/g dw, while total polycyclic aromatic hydrocarbon (PAH) values varied between 169.1 and 1345.3 ng/g dw. Petroleum related pollution was detected only close to the city of Igoumenitsa, whereas Kalamas River can not be considered as a major supplier of organic pollutants in the area. The DDTs presented the higher values of all the organochlorines determined, varying between 0 and 6.2 ng/g dw. Polychlorinated biphenyl (PCBs) concentrations (the sum of 12 congeners) were lower and ranged between 0.04 and 3.2 ng/g dw.