# CIESM Congress Session : Bioaccumulation - monitoring assessment

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***Moderator's Synthesis***

This session focused on the monitoring of environmental pollution by using biota. In relation to natural and anthropogenic sources metals, radionuclides and organic xenobiotics occur ubiquitously in the environment. Such compounds tend to accumulate in organisms living in polluted environments.

Important data and results were presented for the occurrence of Pb, Cd, Cu, Zn, As, Fe, Mn, Al, Hg, Ni, PCB, DDT and 210PO in marine sediments and a variety of marine species. In the case of metals it is useful to consider the dependence of compounds´ bioavailability according to different speciation. Compounds that are key elements in the metabolism of organisms (e.g. Cu) appear less appropriate for biota monitoring since their concentrations are mainly controlled by the organisms themselves.

The need of a continuous biota monitoring in the marine environment of Mediterranean countries like Greece, Turkey, Tunisia and Algeria was highlighted during the session several times. In this context, the added value of linking biota monitoring and chemical surveys was mentioned. It was remarked that background contamination of soils and sediments should be determined at regional scales by taking into account the geological situation. Finally, the combination of monitoring and fate modeling was seen as a powerful tool to an integrated assessment of the quality status of the marine environment, without losing track of the damaging aspects of bioaccumulation.

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