

211. DISTRIBUTION OF THE UPPER BATHYAL BIOCOENOSES IN THE NW MEDITERRANEAN. Emig C.C., C.N.R.S.-G.D.R. *ECOPROPHYCE*, Centre d'Océanologie de Marseille, France.

The belt-like Upper Bathyal, extending from the continental shelf-edge (between 100 to 110 m) to about 160-300 m depth according to the physiography of the slope, is characterized by three main biocoenoses. The Bathyal Sand Detritic biocoenosis (BSD), characterized by the brachiopod *Gryphus vitreus*, occurs on coarse detritic sand with a high content of small hard substrates and can be divided into 3 to 5 horizontal zones in relation to the bottom-current velocity (up to 2 knots) and direction. The Shelf-edge Detritic biocoenosis (SD), characterized by the crinoid *Leptometra phalangium*, occurs on a sandy mud along the submarine canyon-sides under the influence of strong near-bottom currents (up to 2 knots). The Upper Bathyal Mud biocoenosis (UBM) occurs on a rather compact mud with local facies ; this biocoenosis needs further investigations to be clearly defined. The species and individual richness decrease BSD > SD > UBM.

The Upper Bathyal, shelf-to-slope sector of high energy, forms a true barrier separating the coastal-shelf environment from the deep realms. The shelf edge, limit between the Circalittoral and the Bathyal, appears as a boundary of comparable importance to the coastline, the point where the first major change of the deep-sea environment occurs in the physical and biological gradient. Below the Upper Bathyal, there is a rapid decrease of suspension-feeders with an increase of deposit-feeders, as well as a strong decrease in the faunal diversity.