



## **Why the study of organic carbon rich sediment**

A. Negri

(1) Dipartimento di Scienze del Mare, Universita' Politecnica delle Marche, Via Brecce Bianche, 60131 Ancona, Italy (a.negri@univpm.it /Fax +39 071 2204650)

Organic carbon rich sediments occur on the earth surface and in deep sea sediments in various geological intervals and various sedimentological contexts; these sediment record intervals of time varying from millions to thousands years during which a dramatic change of the paleoceanographic setting triggered intensive organic carbon burial.

Although there is a general agreement that black shales are related to Milankhovichian perturbation in the insolation parameters still many other issues remain unclear. In particular studies are focusing on either Mediterranean sapropels or Early Cretaceous Black shales but comparison of those with the Paleozoic black shales are nearly missing.

The need for a comparison among these entities cannot therefore be given up in order to clarify if organic carbon rich sediments originated after the same mechanism and if those event can repeat in the future with the same outcome. The study of these sediments can finally be useful to understand the types of changes that have happened to worldwide climates in the past and to predict possible future changes in global climate.