



## CIIMAR Internal Presentations

5th July 2007, Thursday

14:00 - 14:15

**Alfredo Damasceno-Oliveira**, Laboratory of Ecophysiology, CIIMAR

Discovering Planctomycetes

14:15 - 14:30

**Pedro Reis**, Laboratory of Chemistry

Evaluation of the ecologic quality of sediments from rivers Minho and Coura sal marsh

## ABSTRACTS

### EVALUATION OF THE ECOLOGIC QUALITY OF SEDIMENTS FROM RIVERS MINHO AND COURA SAL MARSH

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The objective of this work was to study the role of the rivers Minho and Coura salt marsh in the retention of metals, through the identification of areas with possible anthropogenic contamination, and to evaluate the ecologic quality of their sediments.

The metals distribution in the different areas of the salt marsh was not homogeneous. Three of the sampling sites showed higher metals levels. These sites showed thinner sediments and higher organic matter levels, with higher capacity for metals adsorption. The normalization of the concentration of each metal by the concentration of Fe indicated possible anthropogenic contamination in two of those sites.



Comparison of the metals levels obtained in the salt marsh sediments either with national or international (Oslo Convention) reference values indicated that these sediments can be considered “clean sediments” and had enough quality to be rejected by submersion, after dragging, without the need of more complementary studies. Finally, the metals levels observed in the sediments of this salt marsh were lower than the ERL (“Effects Range-Low”), which is the reference value above which potential toxic effects in the organisms can be observed. Therefore, apparently, the organisms that live in this ecosystem were not under ecologic stress conditions in terms of metals.