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V E R A - S E M I N A R

von

Paula ÁLVAREZ IGLESIAS

Department of Marine Geosciences and Territorial Planning
University of Vigo (Pontevedra), Spain

**Recent sedimentary record of
San Simón Bay (Ría de Vigo, Northwest Spain):
Coupling natural processes with anthropogenic activities**

Marine sediments constitute an archive of environmental changes that have occurred in a specific coastal area, recording natural and anthropogenic inputs of several sources. Multidisciplinary approaches are very useful to study the story of coastal areas, in particular, to determine their evolution and anthropogenic influences. The Bay of San Simón (inner Ría de Vigo, NW Spain) has been studied in the last years, with emphasis on its geochemical and sedimentological characteristics, both in its intertidal and subtidal areas aiming to describe its sedimentary evolution and to determine the geochemistry of metals in its sediments.

In this talk a description of the sediment architecture of the bay for the last 6000 years will be given. There, it will be shown that the isotopic dating techniques (Pb-210 and Cs-137) are useful to establish sedimentation rates and the chronology of metal pollutant inputs. The different metal sources (lithogenic, biogenic, anthropogenic) will be discussed, as well as the degree of pollution of the studied sediments, and the application of metal speciation procedures to establish the diagenetic zonation in these sediments. This will be used to evaluate metal behaviour and bioavailability and to study pyrite generation. In addition, stable isotope techniques will be described which are useful to study organic matter provenance and to identify Pb sources.

Donnerstag, 26. März 2009, 16:30 Uhr

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess-Hörsaal**