INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS

23rd IAS MEETING OF SEDIMENTOLOGY

COIMBRA-PORTUGAL
15-17 September 2004

MEETING THEME

SEDIMENTOLOGY AND SOCIETY

ABSTRACTS BOOK

Edited by
Rui Pena dos Reis, Pedro Callapez and Pedro Dinis

The sedimentary geology of the "Serras d'Aire e Candeeiros" natural park (Portugal): importance of the geological heritage[4]

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[4] Proj. POCTI/CTA/388659/2001, approved by the Fund. para a Ciência e a Tecn. and co-funded by FEDER

The "Serras d'Aire e Candeeiros" Natural Park is located in western central Portugal with an area of 35000 ha. The protection status (Decreto-Lei nº 118/79; Portaria nº 21/88) mainly resulted from the importance of the biological, geological, and geomorphological heritage.

In the park area, the Lower to Upper Jurassic succession outcrops extensively and is mainly constituted by marine limestones and marly-limestones; depositional facies represent sedimentary environments such as organic reefs, continental shelf, tidal flat, and alluvial. Cretaceous and Cenozoic coarse siliciclastic alluvial sediments can also be observed in some areas. The sedimentary record can be used to document the geological evolution of the Lusitanian Basin, namely the extensional regime coeval to the Atlantic Ocean opening and the later tectonic inversion related to the important compressive phases that affected Iberia during the Cenozoic.

Many outcrops constitute excellent spots for the observation of both stratigraphical and palaeontological records, allowing the interpretation of the depositional environments and palaeogeographic evolution. For scientific, didactic or scenic purposes, they are worth being conserved due to their high geological interest.

There are also rich and varied karst landforms, represented by dolines, blind valleys, poljes, lapias, canyons, karst springs, underground rivers and also a large number of caves with speleothems. Some structural geomorphological features can also be seen in the park.

In spite of some work already done (e.g. Azeredo & Crispim, 1999; Manuppella *et al.*, 2000), this geological heritage is not yet sufficiently well known and valued. Many sites are at risk considering the existence of heavy limestone exploitation in the area. The main goal of this work is to contribute to the conservation and interpretation of this heritage. The selection of the most relevant geosites took into account criteria of representation, exception, scientific importance, didactic clarity, accessibility, and exposure conditions.

According to those criteria, about 75 sites were identified and described. For each one of them several topics were defined like location, scientific contents, accesses, brief descriptions, pictures, and main specific bibliography. Some of these sites are included in interpretative trails allowing the park visitor an easy contact with the geological richness of the area.

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