

## **South Atlantic Mesozoic biostratigraphy - a review of achievements to date within IGCP Project 381**

BENGTSON, P., Geologisch-Paläontologisches Institut, Universität Heidelberg, Heidelberg, Germany.

IGCP project 381 "South Atlantic Mesozoic Correlations" deals with all aspects of correlation, although the emphasis lies on correlation in the chronostratigraphic sense. Despite a wealth of new methods that have emerged and developed during the past decades, biostratigraphic methods continue to provide the basis of chronostratigraphy. Hence, a considerable portion of the output of IGCP Project 381 concerns the construction, revision, refinement, calibration, integration and correlation of biostratigraphic schemes. Exploration for petroleum in the South Atlantic marginal basins during the past fifty years has involved systematic biostratigraphic work on most microfossil groups, which has led to improved correlation with the international schemes. Nevertheless, biostratigraphic knowledge of the South Atlantic successions still lags far behind that of many other areas and work is more of a basic nature than directed towards refinement of long established schemes. In particular, the rich macrofossil faunas present in many marginal basins are still poorly known despite their undoubted biostratigraphic potential. Project 381 has brought these white spots on the geological map to light and initiated several projects with the aim of bringing biostratigraphic knowledge up to a level that will allow more reliable chronocorrelation on an international scale.

This contribution is a review of the biostratigraphic results emanating from work within IGCP Project 381. It covers aspects such as integration of biostratigraphic schemes, biogeographic constraints on the biostratigraphic work and, for the Cretaceous successions, correlation with the proposed global boundary stratotypes in the Northern Hemisphere.