

# BIOCHRONOLOGIE DES MICROFOSSILES PLANCTONIQUES AU COURS DU CENOZOIQUE

[DALLA PIAZZA - MALLAN Pascale](#), 1995

*PhD adviser: Prof. Jean GUEX, Institut de Géologie et Paléontologie*

The objective of the present thesis was initially to use detailed biostratigraphic informations published in the Deep Sea Drilling Project and the Ocean Drilling Program reports to study rate of faunal diversification of Radiolaria, planktic foraminifera and calcareous nannofossils during the Cenozoic.

A compilation of the micropaleontological data established in the low latitudinal zones of the Atlantic, Indian and Pacific oceans have been used to build biochronological scales for each fossil group mentioned. Results concerning large-scale rate of faunal diversification have been disappointing so we have changed the scope of this thesis to the construction of "integrated" biochronological scales (i.e. based on radiolarians, foraminifera and calcareous nannoplankton together), in order to compare correlations based on Datums frequently used in recent literature to define most of chronostratigraphic limits with those obtained by means of Unitary Associations Zones.

During this study we have seen numerous contradictions between the relative dating based on these two different approaches. We have shown that a great part of these contradictions are induced by the diachronism of datums. The majority of these diachronous datums (11 of 16) were in general considered to be reliable by biostratigraphers. The geographic distribution of the diachronism is not controlled by the latitude. The diachronism could be due to discontinuities in the vertical record of fossils.