RADIOLARIAN BIOSTRATIGRAPHY OF THE CONSET BAY SERIES, BARBADOS, WEST INDIES

Cuevas, E.D. and **Maurrasse, F. J-M. R.**
Department of Geology, Florida International University, Miami, Florida, 33199, USA

ABSTRACT

Radiolarian biostratigraphy of the hemipelagic series of the Scotland Formation (or Basal Complex) and the suprajacent pelagic series of the Oceanic Formation at Conset Bay, Barbados, indicates that the sequence extends from the Middle to the late Eocene. The oldest assemblages can be correlated with the middle of the **Dictyoprora mongolfieri zone**, while the upper part of the sequence lies within the Late **Eocene Thyrsocyrtis bromia zone**.

Although the sequence appears to be stratigraphically continuous, the **Podocyritis ampla zone** is absent, as the nominative index species is not observed and no specific zonal markers can clearly indicate the boundaries of the zone. Similarly, **the Podocyritis mitra zone** was not identified, although the nominative species is present in younger levels that can be correlated with assemblages of the **Podocyrtis chalara** and the **Podocyrtis geotheana zones.** Reworking is responsible for the occurrence of Podocyrtis mitra in the Late Eocene, and the absence of two zones can be related to a sampling gap where an interval of the outcrop is covered with slope wash.

The Conset Bay series is essentially characterized by extensive reworking of older taxa from several stratigraphic levels throughout the time span covered in the study area. Taxa such as Theocorys phyzella, and Lychnocanoma auxilla indicate a provenance from at least the **Buryella clinata zone,** or late Early Eocene, which is the earliest stage from which reworked radiolarians can be recorded in the Conset Bay sequence.