

## UPPER JURASSIC BIOSTRATIGRAPHY OF CUBA BASED ON DEEP WELLS

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### ABSTRACT

Planktic microorganisms are important for a precise biostratigraphic approach in petroleum research where stratigraphic ammonite studies are not possible. The biostratigraphic scheme for the Upper Jurassic in Cuba was prepared with the help of stratigraphic calibrated well cores. The different zones have been separated and nominated mainly by Calpionellids, Saccocoma, Favreina and "Incertae sedis" groups that represent all the principal Mesozoic groups from the northern margin of the Tethys.

In this paper, we have defined four biozones since the Kimmeridgian because up to now, the Oxfordian has had no formal zonation. The oldest Jurassic faunas are referred to as Kimmeridgian, represented for the first time in Cuba by the Colomisphaera nagyii - Stomiosphaera moluccana zone. For the lower Tithonian we recognise the Committosphaera pulia zone. The middle Tithonian is characterized by the appearance and disappearance of the index genus Chitinoidella. For the upper Tithonian we recognise the standard Calpionellid zone: Crassicollaria zone.

All these zones allow a good biostratigraphic correlation with taxa represented in similar regions from Europe and Mexico. The Saccocoma and Favreina genera from different facies and moderate diversity are considered supplementary index species that also characterize the Upper Jurassic from Cuba. All these zones are recognised in the western and central provinces and have been deposited principally in anoxic carbonate environments.