

**The Rosario section, Coahuila, northeastern Mexico  
and its potential as Global Stratotype Section and Point  
for the Turonian-Coniacian boundary (Upper Cretaceous)**

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The Rosario section in northern Coahuila, northeastern Mexico, contains a 50 m thick succession of limestone and marl across the Turonian-Coniacian boundary. The sediments formed on the open shelf of the Gulf of Mexico in an oceanic junction between the Tethys, North- and South Atlantic, and the Western Interior Seaway of North America. The faunal assemblage is thus conformed by a palaeobiogeographical mix from these faunal provinces. Inoceramid bivalves are represented by thirteen taxa (IFRIM et al., 2014) and allow for a biostratigraphic subdivision. The uppermost Turonian *Mytiloides scupini* and *C. waltersdorfensis w.* zones and the lowermost Coniacian *C. deformis erectus* and *C. deformis dobrogensis* zones are well represented in Rosario. They may be more expanded than in the sections of the US Western Interior and Europe, although some questions remain when details of this correlation are concerned. These will be addressed within this presentation. The early Coniacian *C. waltersdorfensis hannovrensis* is an unreliable index species for correlation between the Old and New World due to its scarcity in North America. The European *C. waltersdorfensis hannovrensis* Zone can be correlated with the North American *C. crassus crassus* Zone. This long-distance correlation is supported by stable isotope stratigraphy. Several isotope peaks and minima can be correlated with signals in the European sections.

IFRIM, C. et al., 2014. Newslett. Stratigr., **47**, 211–246.