The contribution of ammonoids to the definition of the Triassic chronostratigraphy and GSSPs

Marco Balini
Dipartimento di Scienze della Terra "Ardito Desio", Universitàdegli studi di Milano, Italy,
email: marco.balini@unimi.it

The ammonoids have been the leading group for Triassic chronostratigraphy since the early work of the middle of the 19th century. The importance of this group is related to their highly dynamic evolution during this time interval, with sudden crises, but very fast recoveries from the earliest Triassic to the earliest Jurassic. This type of evolution resulted in the development of high diversity assemblages, developed in many different types of marine environments, from deep water to carbonate platforms, and ranging from low to high palaeolatitudes. These assemblages are mostly dominated by short-ranging groups, but at the same time with some long-ranging genera, whose occurrence is more frequent in "Ammonitico Rosso" type of limestones, such as the Hallstatt Limestone.
The ammonoids are still a key group for high-resolution chronostratigraphy and long-range correlation, as documented by the definition based on ammonoids of the GSSPs of the Ladinian and Carnian stages, both defined in the Southern Alps (Italy).
The procedure for the definition of the Ladinian and Carnian GSSPs is summarized, and the state of the art of the ongoing research on the still undefined GSSPs will be presented, with special focus on the Anisian GSSP, for which Deşli Caira section in Dobrogea is right now the only candidate section.