## TRIASSIC AMMONOIDS AND THE HIMALAYAS

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The Himalayas represent the most complete tropical Triassic Ammonoid record within a single geographic region, and the importance of the Himalayas (including the Salt-Range) for Triassic Ammonoid biostratigraphy is similar to the one of Western Europe for the Jurassic. Of currently 35 discriminated standard zones, all except the youngest are known by diagnostic faunas. Due to the continuous record and an appropriate sedimentation rate the region will have growing importance in the near future as one of the primary study sites for high-resolution subdivisions (subzones p.p. horizons). Historically, it was the stratotype region for the biostratigraphic definition of the base of the Triassic epoch and by this of the Mesozoic era. Its extraordinary importance for Tethyan Lower Triassic ammonoid subdivisions is still valid (Guex 1978, Krystyn & Orchard 1996).

From palaeoecologic viewpoint the well documented sealevel changes and the general shallowing of the Upper Triassic sediment series of the Himalayas (Garzanti et al 1995) may provide plenty of information concerning live habitat of ammonites and their adaptation to changing environments whenever they will be studied in context. For example the evolutionary patterns of the Tibetitidae (Krystyn 1982) as the pioneering and very early group of pseudoceratitic ammonites could be seen as a direct or indirect response to the changing water depth of the Upper Triassic Himalayan shelf.

Another important topic is the still unsolved question of (sexual) dimorphism in Triassic Ammonoids (Davis et al. 1996). For a meaningfull distinction of antidimorphic pairs in species collections of autochthonous shells are strictly necessary. The Himalayas are one of the rare Tethys areas where autochthonous faunas are available in larger quantities. Pelagic ammonoid faunas of the Tethys are usually of Hallstatt-type and completely unsuitable because they form condensed lag deposites and/or current induced shell concentrations. Krystyn 1982 describes from the Nepalese Himalayas two morphologies of mature individuals in the Upper Triassic genera *Jovites* and *Tropijuvavites* which differ in shell shape and ripping strengh. They could form a case of sexual dimorphism different from the Jurassic one but otherwise similiar to that of recent cephalopods.