



## **Diversity of ophiolites and obduction processes: examples from Eastern Tethyan regions and New Caledonia.**

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Ophiolites are considered as pieces of oceanic lithosphere that escaped subduction to be obducted on continental margins. After the Penrose Conference in 1972, they have all been regarded as issued from mid-ocean ridges of large oceans. Subsequently, most of ophiolites have been considered as generated in supra-subduction zone (SSZ) environment, mainly on the basis of geochemical arguments. However, this characterization encompasses very different geological situations, somewhat in contradiction with a univocal geochemical interpretation, both in terms of where ophiolite formed (i.e. ocean-continent transition zones, ocean ridges, marginal basins) and were obducted (contrasting nature of the margins). Examples from eastern Mesozoic Tethyan ophiolites (Cyprus, Turkey, Syria, Iran, Oman) and tertiary New Caledonia ophiolites all show this diversity, both in their internal structures and geological setting of obduction. Several questions will be addressed in this debate: the relationships and paradoxes between the nature of ophiolites, their geodynamic environment of formation, their geochemistry, their modality of obduction and ultimately the mountain range style where they are found.