

## **General Theme 1**

### **1.7**

Carbonate slopes can be areas of net deposition recording variations in timing and magnitude of sediment flux, or, otherwise, can be excavated by submarine canyons that can act as preferential conduits for transporting large volumes of sediments to the deep ocean, as well as their associated pollutants, nutrients and organic carbon. Resedimentation of carbonate slope sediments by mass-transport processes are important in remoulding the seafloor topography and may influence the characteristics of post-failure sedimentation, particularly turbidite deposition or enhanced along-slope currents.

The goals of this session is to provide a better understanding of the carbonate gravity slope depositional systems, especially focusing on: 1) the characterisation of architectural elements in carbonate slopes and basin through detailed documentation of the geometry and stacking patterns; 2) novel depositional models that integrate the sedimentation patterns linked to down-slope and along-slope sedimentary processes; 3) the assessment of the magnitude and periodicity of the redeposition processes, and 4) the interplay of fundamental controls in determining facies and architecture in deep-water carbonate systems. We seek contributions from different disciplines to share their up-to-date advances on deep-water resedimented carbonates, especially based on high-resolution seafloor mapping, seismic and oceanographic data, and sedimentological sampling from modern slopes, as well as detailed and comprehensive outcrop studies. Contributions related with sedimentation patterns deduced from laboratory studies are also welcome as well as studies on numerical modelling.