General Theme 2
2.1

The sedimentological characterization of fluvial sedimentary systems and their accumulated deposits, together with investigation of how genetically related packages of such deposits are arranged in the rock record, is encompassed in the discipline of facies analysis. Significant advances in our understanding of controls on the evolution of fluvial sedimentary systems and mechanisms of long-term preservation have been made over the past decade. Development of new techniques of investigation enables further enhancement and refinement of widely applied fluvial facies models, based on reconstruction of morphodynamics in both modern systems and ancient successions.

This session seeks contributions that reflect some of the many recent and on-going advances in this field. Such developments are resulting in the establishment of a new generation of fluvial facies models. We invite presentations covering research themes related to innovative and novel approaches to the development of fluvial facies models. Contributions are invited on topics that include, but are not limited to, the following: relating modern fluvial systems to their ancient preserved counterparts; rates of change in modern fluvial systems and the sedimentary record; building generic facies models using quantitative datasets; novel data collection methods and types for fluvial facies modelling; static versus dynamic fluvial facies models to account for spatial and temporal response to allogenic and autogenic controls; facies models for fluvial floodplain and overbank areas; numerical modelling of fluvial stratigraphy; facies models derived from remote sensing and shallow geophysical methods, e.g. ground-penetrating radar; facies models describing fluvial system interactions with other environments, including, for example, lakes, desert dune fields, deltas, estuaries, shorelines and glaciers; backwater effects on fluvial dynamics; use and misuse of facies models in subsurface studies, including reservoir modelling; facies models as teaching resources.