

The world's mountain ranges are the clearest manifestations of long-term deformation of the continental crust. As such they have attracted geological investigations for centuries. Throughout this long history of research a few keynote publications stand out. One of the most important is the Geological Survey's 1907 Memoir on *The Geological Structure of the North-West Highlands of Scotland*. The Memoir summarized some of the Geological Survey's finest work, and outlined many of the principles of field-based structural and tectonic analysis that have subsequently guided generations of geologists working in other mountain belts, both ancient and modern. The thematic set of 32 papers in this Special Publication celebrate the 100th anniversary of the 1907 Memoir by placing the original findings in both historical and modern contexts, and juxtaposing them against present-day studies of deformation processes operating not only in the NW Highlands, but also in other mountain belts.