# Geochemical tools and applications to reconstruct environmental and climate change, human impact and Earth history in New Zealand, Australia and Antarctica

This session highlights innovative research of the New Zealand and overseas geochemistry community about environmental and climate change. It discusses technological developments and applications of new indicators on topics such as reconstructing productivity, nutrient cycling and water quality in aquatic environments, and metal tracers and non-traditional isotope systems to quantify processes on land and at sea. Selected topics discuss pollution and human impact or new research into global geochemical cycles across time that link the earth, ocean and atmosphere. Multiproxy reconstructions of life evolution and bioheritage, high-resolution paleorecords and dating of environmental archives are also presented.