Catherine's research focus is the interdisciplinary analysis of Māori textiles based on a background in archaeology and conservation of cultural materials, with more than twenty years experience in the cultural sector. Conservation of cultural materials takes into account aesthetic, historic, physical and spiritual aspects of artefacts and combines traditional art historical approaches with scientific methods (materials characterisation, analysis and interactions, deterioration mechanisms). As a conservator specialising in objects from indigenous and world cultures, her research relates specifically to artefacts created by indigenous peoples from the Pacific, focusing on Māori textiles. This area of research involves materials characterisation and artefact analysis (structural identification, classification, degradation) and developing parameters of professional conservation practice.

Catherine is currently supervising staff and students engaged in projects relating to:

- analysis of archaeological and historic textiles
- deterioration mechanisms specific to New Zealand cultural materials
- material culture analysis of textiles
- exhibition and interpretation of textiles, particularly in museums

Catherine is currently the co-PI (with Ms Donna Campbell and Mrs Ranui Ngarimu) of a Royal Society of New Zealand Marsden Fund project 'Whakaarahia anō te rā kaihau! Raise up again the billowing sail! Revitalising cultural knowledge through analysis of Te Rā, the Māori sail'. You can read more about this research project here:

https://www.otago.ac.nz/otagomagazine/issue47/features/otago696382.html

 $\frac{https://royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/awarded-grants/marsden-fund-highlights/2017-marsden-highlights/revitalising-cultural-knowledge-through-analysis-of-te-ra-the-maori-sail/$