

# Tidepool Calcite Adaptation

*How does differing water chemistry change the amount of magnesium in tidepool organisms' calcite?*

Changing concentrations of magnesium in the regional water masses has an unknown effect on how well organisms can grow their calcite shells and how they adapt to different environments.

## **My research aims to:**

- Chart seawater chemistry around the Otago Peninsula
- Analyze calcite shells of organisms in local tidepools
- Compare differences in magnesium composition of calcites to regional variability of seawater.



## **Why is this important?**

There is limited knowledge on what seawater conditions are best for local calcifying species' shell growth

Expanding information can help in the future for conservation of local species as seawater conditions change



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