

**PhD scholarship: Marine allelochemicals as novel, sustainable, environmentally safe and selective herbicides**

**Supervisors:** Professors Michèle Prinsep and Chris Battershill

**Location:** Hamilton campus

**Scholarship Value:** Up to \$35,000 per year for up to 36 months  
+ domestic tuition fees and Student Services Levy.

We are looking for an enthusiastic PhD candidate to join our team at The University of Waikato, to commence between December 2025 and February 2026. The research will involve investigating the chemistry of already identified marine lead species for compounds that target the C4 photosynthetic pathway, with the goal to develop efficacious, selective and environmentally benign herbicides as a replacement for toxic and persistent products currently used. The research will be carried out predominantly at the Hamilton campus of the University of Waikato, in collaboration with Associate Professor David Burritt (University of Otago) for plant physiology input and in partnership with Bay of Plenty iwi for field trials. The work is funded by the Ministry of Business, Innovation and Employment (MBIE) under the Endeavour Smart Ideas scheme. This exciting research aims to isolate and identify C4 photosynthetic pathway specific metabolites from marine organisms and to test them for efficacy against various weed species.

The successful candidate will predominantly be carrying out isolation and structural elucidation of natural products, so a strong background in natural products chemistry is desirable, including experience with various chromatographic, analytical (LCMS, GCMS) and structural elucidation (NMR spectroscopy, mass spectrometry) techniques.

**Closing date:** 1 November 2025

**Expressions of interest:** [michele@waikato.ac.nz](mailto:michele@waikato.ac.nz)