Clean Water Technology
Te Mana o te Wai

CELTS
.org.nz

Summer 2022-2023

Clean Water Technology **Summer Students**

Formed in 2021, our nationwide, cross-disciplinary research team and iwi partners are producing novel wastewater treatment media to reduce nutrient pollution in fresh waters. We are funded until 2024 by the Ministry of Business, Innovation and Employment (MBIE) through the Science for Technological Innovation (SfTI), one of the National Science Challenges and hosted by the Callaghan Innovation. The research is led by Assoc. Prof. Aisling O'Sullivan ↗ , a Kaipūhanga Rauropi at UC. The 2022-23 summer rangatahi are the second tranche of interns supported on the STEM project.

ELISE BAILEY
Chemistry and Physics, UA: **Chemical Functionalisation**

Elise has just finished her Bachelor of Science at the University of Auckland, focusing on Chemistry and Physics. She is working in Prof. David Barker's lab, focusing on functionalizing cellulose for water filtration by polymeric grafting.

ANNIKA GIBSON
Natural Resources Engineering, UC: **Heavy Metal Adsorption**

Annika is a second year natural resource engineering student. She is working on the effectiveness of heavy metal adsorption using 3d printed modified bio material with Dr Kien Tat Wai. She is interested in water quality and excited to get some experience and insight into the means we can take to care for our environment and communities.

KEELY BOWER
Chemistry, UA: **Manipulation of Natural Materials**

Keely (Ngāti Whātua, Te Roroa) is studying chemistry at the University of Auckland. Her summer project focuses on the manipulation of natural materials for the binding of water pollutants. She will continue her studies with a BSc (Hons) next year.

CAMPBELL STEVENS
Mechanical Engineering, UC: **3D Printing**

Campbell is a final year Mechanical Engineering student at UC. Under the supervision of Dr Hossein Najaf Zadeh, they are focusing on producing 3D printed structures from various material compositions and improving their effectiveness in sorption studies.

ZHAOQI WU (KAYLEE)
Civil Engineering, UC: **Nitrate & Phosphate Sorption**

Kaylee is a second-year Civil Engineering student at UC. Her summer research project focuses on the effectiveness of nutrient materials (mussel shell, grape marc white, etc.) in nitrate and phosphorus sorption studies.