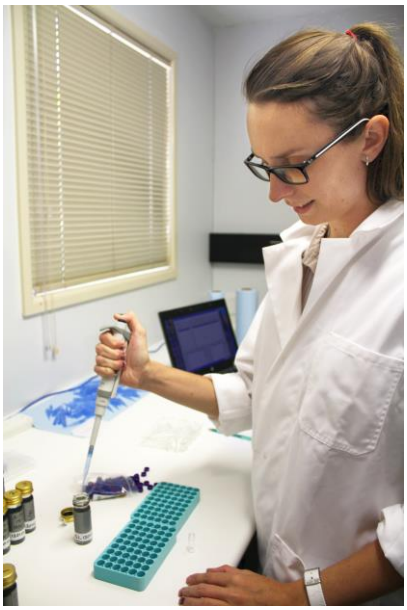
Water Research Laboratory

Chemistry Laboratory

Never Stand Still | Faculty of Engineering | School of Civil and Environmental Engineering



The Water Research Laboratory operates a fully equipped chemical laboratory which enables it to undertake sample preparation, separation and preservation of water, effluent, soil and sediment samples. The chemistry laboratory enables WRL to process aqueous and solid phase samples to the highest QA and QC protocols. The chemistry laboratory is equipped with a fume hood, centrifuge, furnace, drying ovens, vacuum pumps, and water filtration/reverse osmosis unit for producing high purity water. A liquid-water isotope analyser using laser absorption spectroscopy allows measurement of the stable isotopes oxygen-18 and deuterium on site.

The chemistry laboratory also has a walk in cool room for long term storage of chilled and frozen samples, as well as a wide range of commonly used chemical reagents which enables the laboratory to sterilise and acidify samples for preservation; and prepare samples for subsequent laboratory analysis. Analytical standards and blanks are able to be prepared in accordance to the highest QA and QC procedures to ensure accurate and reliable analytical results. Specialised methods of analysis are developed by WRL using various techniques including spectrophotometry and titration. A chain-of-custody with third party laboratories is maintained for routine tests that are subject to NATA accreditation.

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