



1. Who?

Subterranean Research and Groundwater Ecology (SuRGE) Group (@surge_group)
<https://research.curtin.edu.au/scieng/trend-lab/research-themes/>

at Curtin University in Perth (Western Australia - @Curtin_TrEnD)
<https://research.curtin.edu.au/scieng/trend-lab/>

2. What?



Unveiling the ecosystem dynamics of three Western Australian groundwaters through functional ecology

This project focuses on designing **novel functionally-based biomonitoring protocols** of microbial and stygofaunal communities. Energy flows and carbon loads regulating the targeted groundwater ecosystems will be investigated under different scenarios involving e.g., aquifer drawdown, contamination, and climate change-related effects such as increased temperature or salinity. By targeting different environmental conditions of the aquifer and groundwater (space) over time (seasonality), the baseline information generated will provide guidelines on how to maintain and rehabilitate healthy groundwater habitats. Investigations of the microbial and stygofaunal communities will be carried out with a **multidisciplinary design** including hydrogeochemical assessment tools (isotopes, nutrients, fluorescence analysis) combined with molecular tests (DNA metabarcoding, genomics).

3. When?

The PhD project will start in 2024 and will last until 2028.
Deadline for application: 12th of April 2024.

4. Want to know more/apply?

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