

# Detection of Vinyl Chloride in environmental water samples

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## Background

Humans produce waste, whether that is as an individual or on an industrial level. A lot of the waste that is being produced, end up in our water supply contaminating it. An example of a toxic waste product that can end up in the water supply is vinyl chloride (*VC*), one of the primary areas VC is found is in the production of PVC. PVC plastic is used as pipes for plumbing, bottles, and more[1]. Vinyl chloride is a highly volatile compound which makes it both hard to detect, and making it more dangerous. This has created a need for a fast and simple solution for detecting the concentration of vinyl chloride in water samples.

This has led the company Water Care Guard to develop an on-site lab kit that fits in a suitcase, which is able to test a water sample for the concentration of vinyl chloride amongst other substances.

This project is done in collaboration with Roana from SDU Nano Syd and Water Care Guard.

## Problem

## Timetable and milestones

The project is divided into 3 main parts:

- Building the database

- Analyzing the data
- User interface

## **Risk assessment**