



Introduction

UV-Vis spectrometry can be used to monitor changes in water quality. The aim of WP3.2.7 is the redesign of the commercially available monitoring station, as used in WP3.2, and introduce new features valuable for source water monitoring identified during the field installations at a water source of Vienna Waterworks as well as additional inputs from inside and outside of the TECHNEAU project.

Importance

For some source water monitoring applications, other parameters than can be provided with the UV/Vis spectrophotometer probe are required. The combination of instruments, however, into a single measurement system is often cumbersome. A modular system, using a single controller and various probes that can be selected on demand, would enhance the spectrum of applications that can be covered, while retaining the highly versatile core of the UV/Vis spectrometer probe, but filling in blind spots that can not be covered using spectroscopy alone.

Approach

Building upon the successful scan spectro:lyser™ submersible UV/Vis spectrometer and its controller, the con::stat, additional probes were integrated both on the hardware as well as on the software level.

Result

A modular monitoring station, combining a UV/Vis spectrometer with a probe for measurement of dissolved oxygen as well as two multi-parameter probes, one for ammonium, potassium and pH and one for conductivity, salinity, ORP and free chlorine, was designed based on existing instruments. The monitoring station was built and is now available as a commercial product.

More information

Full details on this deliverable can be found under D3.2.7. Further information can be requested from:
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