

Water Monitoring Systems: the Daphnia- and Algae Toximeter under the Aspect of Quality Assurance and Routine Practice

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Abstract

Safeguarding water quality is a key responsibility of municipal authorities and water utilities. Online biotests have proved reliable for recognition of acute toxic substances in real time and are being used in many cases to monitor drinking water and other freshwaters. Multiple combined biotests complement one another at different monitoring stations in the Netherlands. Based on a two-year period of operation the quality assurance for the monitoring station Keizersveer, the Netherlands, is described. Operating effort for daily routine activities is reported. From technical status and maintenance data the system "operationality" is determined. Addition of chemical and physical data from multiple sensors into the real time analysis system provides new ways to detect significant events.