Determination of characteristic odour compounds in drinking water resources

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Biostability, defined as the inability of a water or material to support microbial growth, is a crucial aspect in public water supply [1]. Currently, global climate changes causes that the temperature of most water resources permanently rises, which can affect growth of microorganisms. This may have negative influence on the organoleptic properties of water. Commonly, consumers associate any perceptible odours in drinking water with potential health risk [2].

This work presents the results of the investigation dedicated to determination of odour compounds in drinking water resources in Lower Austria by the use of gas chromatography coupled to mass spectrometry (GC-MS). In these studies, we performed trace analysis of several odour compounds and secondary metabolites produced by microorganisms, characterized by earthy, musty and unpleasant flavours.

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