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WaterTOP: Taste and Odour in early diagnosis of source and drinking Water Problems. COST Action CA18225

PARTICIPANTS

31 COST countries and 3 International Partners (Canada, Australia, USA), participate in the Management Committee of WaterTOP (Figure 1).

Figure 1 Geographical coverage of WaterTOP (as of October 2019)

WORKING GROUPS

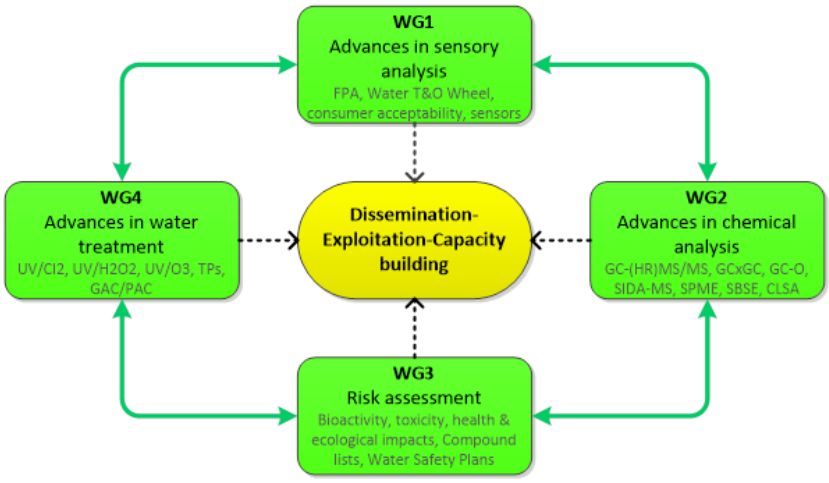

Figure 2 Working Groups of WaterTOP (from the Action's MoU).

WG1: Advances in sensory analyses

Detection, identification and quantitation of water T&O is an analytical challenge, since very low detection limits must be achieved.

WG1 will provide guidance on the appropriate use and interpretation of different methods (e.g. FPA, Total Intensity and Odour) to characterize water T&O. Other tools, such as the water Taste & Odour Wheel, the emerging technologies (e-noses, e-tongues) will be distributed and further developed. WG1 will carry out training of water industry personnel and trainers in the European water sector.

WG2: Advances in chemical analyses

WG2 works on improvement and evaluation of emerging and advanced chemical analysis methods for detection and characterization of T&O compounds. Advanced sample extraction-preconcentration techniques combined with state-of-the art GC-MS techniques (e.g. GC-MS-Olfactometry, GCxGC, GC-HRMS) are applied for identification and quantitation of water T&O. WG2 will contribute to developing laboratory capabilities in Europe and to discovery of new water T&O compounds.

WG3: Risk assessment/management of water T&O

WG3 will focus on: a) health-related effects of water T&O and other impacts on water environment, b) the potential to use water T&O as markers of other possible water quality problems and c) coordination work to assess T&O problems associated with migration of compounds from construction products and materials in contact with water. It will contribute to integration of water T&O risk assessment and management into the Water Safety Plans.

WG4: Advances in water treatment

WG4 will focus on spreading knowledge on the emerging advanced oxidation processes, such as UV/H_2O_2, UV/O_3/H_2O_2, UV/Cl_2, homogeneous photocatalysis (UV/Fe^{3+}/H_2O_2) and heterogeneous photocatalysis (UV/TiO_2), for improving the efficiency and effectiveness of T&O removal. The scope of application and cost implications of conventional technologies (e.g. GAC/PAC) or common disinfectants and oxidants (e.g. Cl_2, ClO_2, $KMnO_4$) will be evaluated.

The activities, outcomes and deliverables of WaterTOP are described in the Memorandum of Understanding (MoU) that can be found in the Action's webpage in COST website https://www.cost.eu/actions/CA18225/.

CONTACT WATER TOP

WaterTOP has an integrated communication strategy that is realized mainly through its website, www.watertop.net and its presence in Facebook, Twitter and Instagram @watertopcost; email: costwatertop@gmail.com

WaterTOP will remain open to participation of experts and stakeholders during its lifetime (2019-2023).

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DISCLAIMER

This article is largely based on the Memorandum of Understanding (MoU) of COST Action CA18225.