# Introduction

Nuisance off-flavours and odors are the "tail that wags the dog" of drinking water supplies and the treatment of waste streams. For example, water supplies that meet a country's primary drinking water standards may be considered unsafe by the public if the taste and odor quality of the water is compromised. Thus, water supplies try to develop source, treatment and distribution system controls over taste and odor problems.

The IWA Off-flavours in the Aquatic Environment Specialist Group is interested in all aspects of off-flavours including environmental sources from surface and ground water, wastewater, drinking water, sludges and composts; impacts and causes from aquatic organisms including algae, cyanobacteria, and fish; chemical and biological measurement and detection of off-flavours; and understanding human senses, perception, and acceptance. The IWA Off-flavours Specialist Group has always prided itself on producing rigorous peer-reviewed papers of excellence for *Water Science and Technology* as a one-journal volume. With the change of editorial policy of the journal, the Off-flavours group decided to have a symposium set of papers prepared for the participants, publish selected papers in *Water Science and Technology* and culminate its 8th Conference with a capstone set of papers for *Journal of Water Supply: Research and Technology: AQUA*. The papers included in this Taste and Odors Theme Issue of the Journal represent the choice of a committee of peer reviewers at the 8th IWA Symposium on Off-flavours in the Aquatic Environment, October 5–9, 2008, Daejeon, Korea. The symposium was managed by Dr. Hang-Sik Shin (Professor, KAIST) along with Dr. Byung-Uk Bae (Daejeon University, Korea) who served as the symposium secretariat. Diverse topics were chosen to highlight the areas considered most important by the committee as well as the outstanding presentations at the symposium. We thank the authors for their participation in this theme issue.

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The last 30 years has seen great advances in solving taste and odor problems as defined by the "Drinking Water -Taste and Odor Wheel" (Suffet *et al.* 1999). Control of the problems described on the Drinking Water Wheel has helped define control of water resources, water treatment plants and water distribution systems. This volume of *Journal of Water Supply: Research and Technology: AQUA* further defines the geosmin and methyl isoborneol (MIB) odor problems that are the major earthy and musty odors found in drinking water, respectively. Two papers evaluate the biological production of geosmin and MIB (Lin *et al.* 2009 and Zuo *et al.* 2009). One paper describes the synergism/antagonism relationships of geosmin and MIB with chlorine species (Curren *et al.* 2009) and another paper presents a reassessment of MIB and geosmin perception by the public (Piriou *et al.* 2009). The four remaining papers describe recently identified drinking water taste and odor problems including: aldehyde transformation of odors (Jo & Dietrich 2009), private network effects on odors (Maillet *et al.* 2009), the metallic perception of odor by ortho-nasal and retro-nasal perception (Dietrich 2009) and the occurrence of odor causing problems in mainland China related to different source waters (Yu *et al.* 2009).

I would like to thank the committee of the IWA Off-flavours in the Aquatic Environment Specialist Group who helped choose the papers for this "Taste and Odors" theme issue of the Journal from the papers that were presented at 8th IWA Symposium on Off-flavours in the Aquatic Environment. Thank you Gary Burlingame and

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