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SUSTAINABLE DEVELOPMENT OF WATER RESOURCES, WATER SUPPLY AND ENVIRONMENTAL SANITATION

Aquatest: Designing a low-cost water test for the developing world

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Disease spread through drinking water contaminated with microbial pathogens is responsible for an estimated 1.8 million deaths every year, largely among children under five in developing countries. Consequently, there is a clear need for water quality diagnostics that are optimized for resource-poor and disaster settings. The AQUATEST project is a preparatory study funded under the European Union's FP6-GLOBAL programme that will identify optimum detection strategies for microbial contamination in water that can be developed in the near term. The project began in July 2006 and is expected to produce a detailed funding proposal for the full development of such a test by mid-2007. Most current advances in diagnostics technology are targeted for use in the developed countries. As a result, many of the current water quality tests assume that skilled personnel are available to carry out the testing and that laboratories exist with electricity, autoclaves, incubators, glassware and reagents. A few water diagnostics, however, have been designed for use in the field or in developing countries; the AQUATEST project seeks to improve upon these existing tests by utilizing appropriate advances in technology and by designing a water quality information management system that will guide the implementation of water quality improvement programs. AQUATEST consists of an international consortium of researchers and practitioners that are focused on identifying all necessary criteria for the new low-cost water test and producing blueprints for the diagnostic technology. This test will be focused on detecting microbial contamination of water rather than chemical contamination. Once a test specification has been drawn up, the AQUATEST team plans to implement the design in a follow-up project. We would like to consult with as many people as possible – both researchers and end users – on the design of a new, low-cost water quality diagnostic. To join our network and interact with other water professionals from around the world, please visit our website: www.aquatest-research.org

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