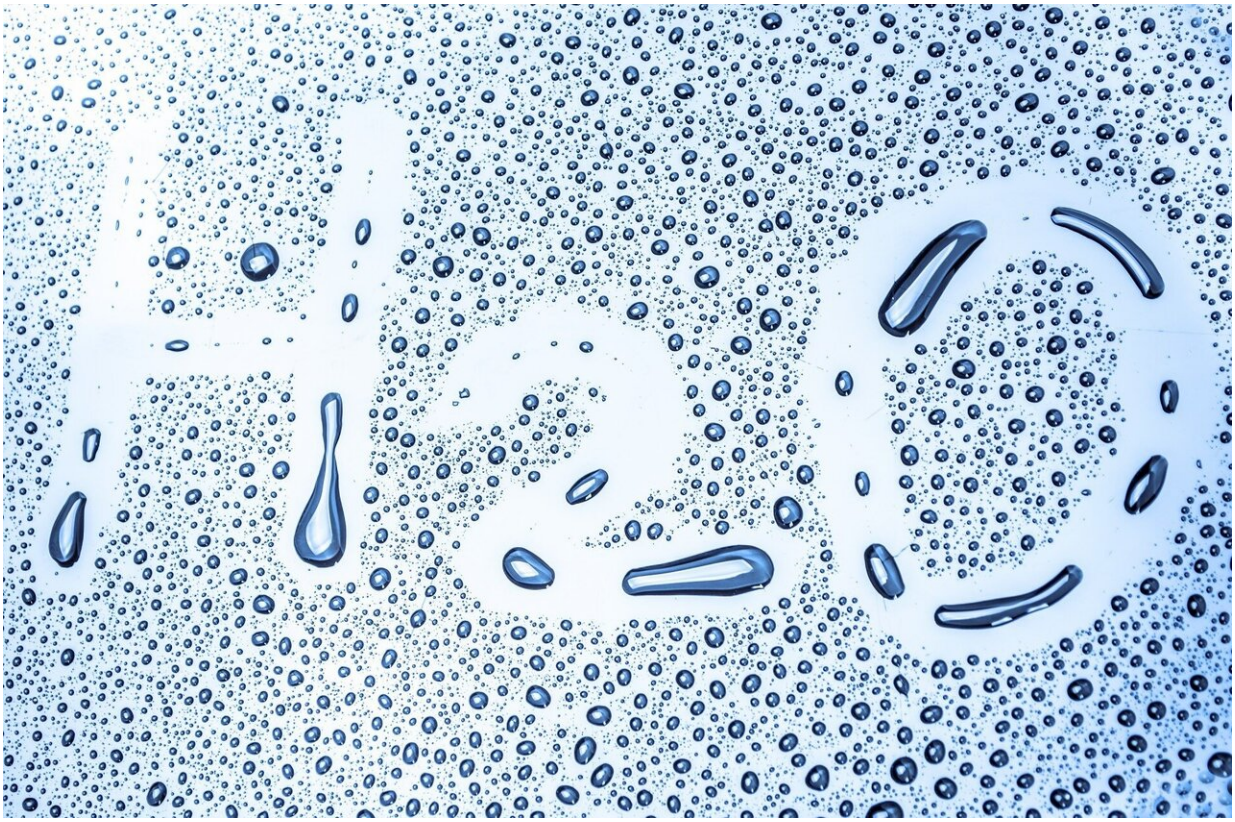
Water watchdog: Using the Internet of Things for water security

November 20 2019, by David Bradley



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A cluster of internet-enabled devices, including a water-flow sensor, pH sensor, ultrasonic sensor and "PIC" microcontroller, can be used together as a watchdog system for water quality, thanks to work by a team in

India who describe details of the system in the *International Journal of Environment and Waste Management*.

R. Jothikumar of Shadan College of Engineering and Technology, in Hyderabad, G. SivaShanmugam of VIT in Tamil Nadu, and S. Susi Department of Shadan Women's College of Engineering and Technology, also in Hyderabad, explain the growing pressures on water with rising global population, climate change, and increasing pollution. They point out that an Internet of Things (IoT) approach to water quality control could be the answer to many of the problems we face concerning drinking-water supply and ensuring people have security of this vital resource.

The simple and low-cost system being developed by the team makes water quality assessment and water security widely available without the need for sophisticated technical knowledge. It can facilitate planned water management as well as allowing sources to be assigned to particular outlets depending on demand without compromising the quality of supply for any users. The team also points out that implemented across the globe such an approach would allow monitoring of ponds, lakes, and rivers, as well as water utility facilities and so, might allow us to manage waterways and water sources better for wildlife and ecosystems.

More information: R. Jothikumar et al. Watch dog system for water management, *International Journal of Environment and Waste Management* (2019). DOI: 10.1504/IJEWM.2019.103644

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