The 2018 LIFT Intelligent Water Challenge: Using a Challenge Prize to Drive Adoption of Intelligent Water Technology

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SUBMISSION TYPE

_x__ 30 minute presentation

___ 6-12 page paper plus 30-minute presentation

___ 3 foot wide x 4 foot high large format poster

KEYWORDS

Put Keywords Here, Separated by commas, Should be at least 5 keywords

ABSTRACT

Today's water industry operates complex treatment, collection, and distribution systems to protect public and ecological health. With the advent of the Internet of Things, these systems are increasingly instrumented to monitor key process indicators, thereby facilitating operation of the system. The water industry, however, recognizes that the growing store of big data collected across these new "intelligent" water systems may deliver value in unforeseen ways as utilities work to address complex issues such as stormwater management, flooding, eutrophication and algae blooms, aging infrastructure, CSOs, SSOs, process optimization and asset management.

The Leaders Innovation Forum for Technology (LIFT), a joint effort of The Water Research Foundation and the Water Environment Federation (WEF), is holding its first-ever Intelligent Water Challenge to demonstrate the value of intelligent water systems to utilities and thereby foster the adoption of smart water technologies. The Challenge will be supported by American Water Works Association (AWWA), Smart Water Networks Forum (SWAN), and the International Society of Automation's (ISA) Water and Wastewater Division. The intent of the Challenge is to give students, professionals and technology aficionados the opportunity to showcase their talents and innovation, with a focus on leveraging data using the best available tools to help utilities better understand the dynamics of complex systems for making better decisions.

The Challenge, which will run from March to August 2018, will provide general problem statements and example datasets for participants, along with a series of informational webinars to introduce them to the datasets and underlying systems. Possible problem categories are Collection Systems, Wastewater

Treatment Systems, Drinking Water Treatment Systems, Source Water/Watershed, and Distribution Networks.

Teams with exceptional and innovative solutions will be invited to present their results in person at WEFTEC 2018 in New Orleans, LA for final judging. The winning teams in each category will receive cash and other prizes.

An update of the status of the finalists, and potentially even presentations by some of the final teams, will be provided (pending discussions with ISA WWD challenge representatives).

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