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DzymeTech to launch lead-detecting device this fall

By Don Dodson

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CHAMPAIGN – DzymeTech plans to launch its first product – a fluorometer that can detect lead in water – in October, its vice president of engineering said.

Speaking at a University of Illinois Research Park forum, David Kellner said the portable instrument will do in 30 seconds what conventional detection technologies take 20 minutes to do.

In addition to detecting lead, the instrument will be able to detect uranium, and eventually it's expected to detect copper and mercury as well, Kellner said.

DzymeTech, founded by University of Illinois chemistry Professor Yi Lu, has been around several years. But it experienced a complete turnover in staff after a new chief executive officer, Bill Thalheimer, was installed a couple of years ago.

That's when Kellner – who was previously associated with another local technology company, Caviton Inc. – got involved, first as a consultant, then as an employee.

Today he oversees DzymeTech's operations in Champaign, while the company's CEO, chief operations officer and director of sales and marketing are based in the Boston area.

The fluorometer is expected to debut Oct. 12 at WEFTEC, the Water Environment Federation's technical exhibition and conference in Orlando, Fla., Kellner said.

Public water supplies are expected to be the initial market for the instrument, he said.

Pricing has yet to be determined, but the company aims to sell it for less than $1,000, he added.

DzymeTech – which may eventually adopt a new name – uses catalytic DNA biosensor technologies to detect heavy metals and other chemicals.

Using the fluorometer is a relatively simple process. The water tester uses a syringe to inject a sample into a glass tube in the device. After closing the lid, the tester pushes a "start" button, and in about 30 seconds, the instrument shows the concentration of the substance being tested for.

There's a water-conditioning step prior to the test that will likely involve dropping a tablet into the sample, Kellner said.

Current alternatives for testing, he said, include:

– Sending the sample to an Environmental Protection Agency lab and getting results in a week to 10 days at a cost of $35, or

– Performing an on-site, chemical-based test that includes about 15 steps and takes 20 minutes.

"This is comparable in price (to the on-site test), easier to use and eventually it will be much more sensitive," Kellner said.

Kellner, who spoke on the subject of "Starting a Company and Making It Work," was chief executive officer of Caviton Inc. from 2001 to 2008. That company designed and developed microsensors and analytical equipment.

Caviton at one time employed as many as eight, but it eventually ran into both "financial issues and business personality issues," Kellner said.

Founder Cy Herring, who had a 51 percent interest in the business, took a job in North Carolina before the company was able to become "product-oriented," Kellner said. But the company did a lot of work through Small Business Innovation Research grants.

Kellner, whose background is in biochemistry, has since formed his own consulting company, Cogent Innovations Inc.
