



Press Release

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OPTIQUA TECHNOLOGIES AND PUB COLLABORATE ON DEVELOPMENT NEXT GENERATION RAPID SAMPLE ANALYSIS TECHNOLOGY MINILAB

May 5, 2015 - Optiqua Technologies Pte Ltd, the Singapore-based provider of innovative water quality monitoring solutions, and PUB, Singapore's national water agency, have entered into an R&D collaboration to develop the next generation of Optiqua's rapid sample analysis technology MiniLab.

Optiqua's MiniLab technology provides a rapid sample analysis platform for a range of contaminants in treated water and has been developed in an ongoing partnership between Optiqua and PUB. The optical sensor technology is based on Optiqua's patented and awarded optical chip technology and measures minute changes in refractive index (RI). By applying a biochemical interface to the optical chip surface (a receptor layer) that binds with specific compounds, the MiniLab instrument is able to rapidly analyze samples for specific compounds at highly sensitive levels. Chips are housed in a test cartridge and can be re-used over 100 times, making the system very easy to use and resulting in a low cost per test.

The development of the next generation MiniLab technology will add a number of unique features that will make the technology suitable for rapid and efficient water sample analysis in the field. Multi-chip test cartridges instead of single test cartridges will allow users to perform up to 8 tests in parallel, within a single test cycle of less than 10 minutes. Innovations in a novel biochemistry concept, based on the use of synthetic receptors, will provide very robust and sensitive test assays that can be designed for a wide variety of compounds. These can range from small molecules like proteins and other cellular products to bacteria, all based on the same basic protocol. The briefcase-sized dimensions of the new generation MiniLab will allow mobile use of the instrument, while the option of a battery pack supports the use of MiniLab in field conditions.

Melchior van Wijlen, Managing Director of Optiqua Technologies said, "The new MiniLab generation will be a major step forward in on-site sample analysis. A single protocol for different types of compounds, all performed in parallel in one short test cycle is unique and will offer our clients important operational benefits. We are very pleased that we have the opportunity to closely collaborate with PUB and benefit from their expertise in this project, as part of our long term partnership".

"Singapore enjoys safe drinking water because of our comprehensive water treatment processes and rigorous water quality monitoring programme. In spite of this, PUB is always on the look-out for new reliable and faster methods for water quality monitoring. Optiqua's Mini-Lab is expected to complement PUB's ongoing efforts in real-time water quality monitoring. Such a system will further enhance safety for all our water consumers," said Harry Seah, PUB's Chief Technology Officer.

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About Optiqua (www.optiqua.com <<http://www.optiqua.com>>)

Optiqua Technologies develops innovative tools for online and sample based water quality monitoring. All Optiqua products leverage our award winning and patented lab-on-chip sensor technology, offering highly sensitive real time detection in multiple sensor applications.

Optiqua applications include the real time online monitoring of water distribution grids, the protection of critical assets and rapid detection of specific target contaminants. Based in Singapore and The Netherlands, we serve international drinking water companies and communities to safeguard the distribution of safe drinking water.