

Schools, plumbing graduates benefit from new water innovation

Twenty Johannesburg schools are benefiting from an innovative new technology that is set to help them identify leaks and save water.

The Aquatrip is a new technology that was selected for testing by the Water Technologies Demonstration Programme (WADER) – a joint programme of the Department of Science and Technology (DST) and the Water Research Commission (WRC). WADER, in partnership with the South African Local Government Association (SALGA), put out a call for innovative water and sanitation technologies and solutions that will contribute to improving water conservation, efficient use, cost-effectiveness and efficient management of water and waste in the municipal environment.

The AquaTrip device, which functions in a similar way to an electricity trip switch, identifies unknown leaks and plumbing failures, including, taps left running, leaking toilets and urinals, leaking or failed appliances, and cracked pipes or leaking fittings. The device also identifies and prevents all inadvertent or accidental over-use. For example, forgetting the hosepipe on when refilling the pool, not turning off the garden sprinkler, or having the hoze nozzle pop off in the sun.

According to WADER Manager, Dr Manjusha Sunil, the Aquatrip technology could assist the end consumer to manage their water in a sustainable manner. This will also assist municipalities in reducing their non-revenue water.

Johannesburg Water helped to identify 20 schools where the technology is now being tested on a pilot scale. An exciting part of the initiative is the fact that six plumbing graduates from South West Gauteng College have been brought into the project and are now being trained on the installation of the device. They will be involved in the plumbing work at the various sites.

Going forward, SALGA would continue collaborating with WADER to explore innovative technological solutions that are informed by science and practical application. Lastly, and more importantly SALGA pledges to act as an enabler and facilitator for technology demonstration sites. In a statement the association said it looked forward to a festival of ideas from all South Africans in taking the water sector to greater heights.



SPECIALIST ONE-DAY COURSE:

Dissolved Air Flotation for Water & Wastewater Treatment



The course is presented by Dr Gerhard Offringa, a Professional Engineer with 30 years of practical experience in research, development, design and implementation of DAF. During this period, he has designed more than 30 DAF plants for water and wastewater treatment, varying from bench units, to 30 MI/d plants, operating successfully, both in South Africa and in other parts of the world.

Venue: Rosenview, a wine farm venue situated near Stellenbosch. A limited number of rooms are also available on the farm itself, www.rosenview.com, with a variety of other accommodation within a 10 km radius.

Date: Thursday, 5 May 2016 **Time:** 9:00 – 17:00

Cost: R3 800 per person. This includes copies of the course, morning and two other tea/coffee breaks, as well as a cooked farm lunch.

The course covers:

- Background to DAF.
- Applications and potential use.
- Pretreatment & preparation of particles for bubble attachment.
- Air saturation & bubble generation.
- Contact zone & bubble attachment analysis.
- Separation zone analysis.
- Float layer principles & removal.
- Process selection, requirements & design.

Who should attend:

The course will be most beneficial to engineers and water technologists who have to (or would like to) select, design and manage DAF systems, as well as at all persons who wish to obtain a more fundamental understanding of the DAF process.

Please obtain your enrolment form and book your place directly with Dr Offringa at gowater@mweb.co.za. He can also be contacted at 021 855 3755.