WISA 2020 CONFERENCE
Water Institute of Southern Africa
31 May - 4 June 2020 | JHB | South Africa

#allhandsondeck

Manage resources for a capable ecology

Workshop: #allhandsondeck for integrating green and grey to secure water

WISA 2020 Virtual Conference
4 December 2020
Programme director: Sarlet Barnard, Young Water Professionals (YWP)

Since South Africa is categorised as a water stressed country, there should be no argument when it comes to improving our water use efficiency. We cannot afford to waste our water. If we want to manage our water resources optimally and use water sparingly, we need to know where every drop of water goes. To measure is to know. This task has become increasingly easier over the years considering the technology that is available nowadays. Water flow can be recorded/logged on site by using smart metering. Data can then be transferred from such a device to an internet-based platform. Alarms can be configured to remotely inform water users or managers about potential problems. Correct interpretation of data is vitally important. Water regulators, managers, service providers, consultants and users alike will benefit from this workshop since it is in everyone's interest to take responsibility and keep each other accountable for the efficient use of our water resources.

1. The water industry, be it commercial, mining or agricultural, needs an authorisation to legally use water. If a water user does not have an existing lawful water use or uses water within the limits of the General Authorisation, a **water use license** is required. One of the conditions in a water use licence is the **measurement of water use as well as the logging and storing of water use data**. With the latest technology improvements in battery, logging, GPRS data transfer and other measurement devices, it becomes economical and beneficial to install the relevant equipment. It is also easier and possible to comply with the conditions of the water use licenses and regulations. **Water balances**, for example water going in and out of a mine or wastewater plant, need to be updated regularly. **Inflow** to such plants typically include clean water, borehole water, raw wastewater, rainfall and stormwater. Flumes, weirs, flowmeters, rain gauges etc. are typically used for measurement. **Internal processes** in such plants may include recycling for which magnetic, mechanical or ultrasonic flowmeters are ideal to measure flow. The final **outflow** from such plants can be measured in either a final overflow weir, canal, flume or flowmeter. Record should be kept of flow data and therefore on-site data logging, transmitting, reporting and evaluation is necessary. Automated Meter Readers (AMR) are very useful in this regard.

2. Worksop attendees will be introduced to the role and mandate of the Young Water Professionals (YWP) as well as that of the Management and Institutional Division of WISA. The Department of Human Settlements, Water and Sanitation, the custodian and regulator of South Africa's water resources, will elaborate on the water use regulations. More information will be given on flow measurement and monitoring, the importance of measuring water use and the types of water meters. Flowmetrix will share information and give a practical demonstration of their locally manufactured water meters and measuring devices.

Workshop Progamme: Friday, 4 December 2020

Venue: Virtual Platform

Time: 14h00 to 16h00

To Measure is to know		
Time	**Topic**	**Speaker**
14h00	**Welcome and Introduction**	**Ms Sarlet Barnard** **Young Water Professionals**
14h10	**WISA YWP role and mandate**	**Mr Sivuyile Pezulu,** Water Treatment Specialist **Milton Roy**
14h20	**Regulation of water use**	**Ms Abashoni Nefale,** Directorate Agriculture & Afforestation, **Department of Human Settlements, Water and Sanitation**
14h40	**Flow measurement and monitoring**	**Ms Sarlet Barnard,** Water Resource Management Specialist **Private Consultant**
15H00	**Flowmetrix products – practical presentation**	**Mr Theo Dormehl,** Pr Eng Tech **Flometrix**
15h20	**Discussion**	

Key speakers:

Sarlet Barnard,

Private Consultant

Sivuyile Pezulu,

Milton Roy

Dr Nelzar Eldidy,

WISA

Abashoni Neftale,

Department of Human Settlements, Water and Sanitation

Theo Dormehl,

Flowmetrix