

SESSION 7:

INNOVATIVE SANITATION: DEVELOPMENTS TOWARDS A NEW SANITATION CIRCULAR ECONOMY

Chair: Charmaine Twala (WRC) | Venue: Ballroom 2

Global water demand is on track to outpace supply by 40% within the next two decades (McKinsey.com) and in the South African context, water supply is severely constrained by low levels of seasonal rainfall. Water shortages pose a challenge not only to existing sanitation infrastructure and current sanitation technology paradigm, but also to the ability to roll out appropriate and decent sanitation facilities to sections of the population without adequate sanitation. This poses a challenge as well as opportunities for the local South African sanitation industry. In response to these challenges, the South African Sanitation Technology Evaluation Programme (SASTEP) was initiated by the Water Research Commission in conjunction with Department of Science and Technology and the Bill and Melinda Gates Foundation. The mandate of the programme is to pilot and demonstrate local and international innovative sanitation technologies in South Africa, foster the development of a local sanitation industry (manufacturing and services) that would increase access to proper sanitation, reduce pollution, improve water security, create jobs and entrepreneurial opportunities and contribute to the country's GDP.

This session, Innovative Sanitation: Developments Towards A New Sanitation Circular Economy, will showcase one of the partnerships on the SASTEP platform between academia and business to bring a nutrient recovery solution from the laboratory to the market. While highlighting one of the key components of the sanitation circular economy, the recovery nutrient from urine into valuable products such as fertilizer, the session will also highlight the academia-business partnership in play to bring about a sustainable business model that would enable the beneficiation of a waste material into a valuable product. This will include but not limited to the challenges, benefits and business model that is currently being developed.

PROGRAMME

14:00 – 14:05	Welcome and session introduction	Charmaine Twala (WRC)
14:05 – 14:20	SASTEP – A paradigm shift in translating innovation to the marketplace	Valerie Naidoo (WRC)
14:20 – 14: 35	Nutrient recovery from urine – Production of valuable products such as fertilizer and bio-bricks	Vukheta Mukhari (UCT)
14:35 – 14:50	Fertilizer from urine – A business case and social franchising opportunities	Orion Herman (LiquidGold)
14:00 – 15:00	Discussion and closing	Charmaine Twala (WRC)