

Water Conference 10–11 July 2017 — Abstracts Received

Treatment of brine for the recovery of drinking water, calcium carbonate and sodium sulphate

J.P. Maree and T. Mtombeni, *ROC Water Technologies, FlowCentric*

Acid mine drainage as a wicked problem: A South African perspective

J. Broadhurst, *University of Cape Town*

Saving water and energy

P.D. Fraser, *Hydro Power Equipment (Pty) Ltd*

Continuous ion exchange for value recovery from mine water

C. Van der Walt, R. Clugston, and J. Carr, *Multotec Process Equipment, CleanTeQ*

Case Study: Utilizing underground settlers as precipitation reactors for the removal of metals from the mining water circuit

J.C. Wagner and G.R. Pretorius, *Sibanye Gold*

Case Study: Softening of underground fissure water through Crystalactor® fluidised bed precipitation for potable consumption

G.R. Pretorius and J. Wagner, *Sibanye Gold*

How South Africa's acid mine drainage dilemma can positively impact the water-energy-food nexus

T. Grewar, *Mintek*

Sustainable reuse of water in mining – some case studies

J.P. Tucker, M. Crozier, and S. James, *WesTech Process Equipment Africa*

The effect of magnesite on extraction of metal species and sulphates in acid mine solution

K. Tshoane, P. Hlabela, V. Masindi, M.M. Ramakokovhu, R. Mbaya, and L. Maropeng, *CSIR, Tshwane University of Technology*

The use of ion exchange resins in purifying process and waste water streams

J. van Deventer, *Purolite*

Tit bits on the application of the waste regulations to mine residue deposits and stockpiles (MRDS)

L. Ochieng, *SRK*

Alternate solutions to acid mine drainage – making profit from waste

K.L. Morton, *Kym Morton Consulting Services*

The business case for accurate mine water management – illustrated with case studies

K.L. Morton; *Kym Morton Consulting Services*

Adsorption of chromium species from industrial effluent using magnesium-bentonite clay composite: Kinetics, equilibrium and risk assessment study

F.H. Tjiaa, M.M. Ramakokovhu, and V. Masindi, *Tshwane University of Technology, CSIR*

Evolution of the SAVMIN™ process of treatment of AMD

M. van Rooyen and Y. Govender, *Mintek*

Pervasive metering of minewater flows and process water using distributed acoustic sensor technology

D. Finfer, P. Newman, N. Rein, C. Naicker, and M. Amir, *Silixa Ltd, Anglo American PLC*

The design of a multi-variable model predictive control law for clarifying water in Letseng Diamonds Plant 2.

K.G. Nqhoaki, *Letseng Diamonds*

Technology options for the treatment of water and soil sediments impacted by acid mine drainage at Robinson Lake:

A case study

Y. Govender and M. van Rooyen, *Mintek*

Coal mine pit lakes in South Africa

A. Johnstone and L. Kennedy, *GCS*

Assessment of groundwater quality status in mabudu village

K.N. Mulivha and F. Sengani, *University of Venda, South Deep Gold Mine*

Comparison of physical and chemical characteristics of two thermal springs and their influence on thermal water utility of Sagole and Siloam in Limpopo Province, South Africa

K. Randau and F. Sengani, *University of Venda, South Deep Gold Mine*

The study of the environmental impact of sand mining; case study of Letaba river at Ka-Majosi village in Limpopo province, South Africa

Z. Muruge and F. Sengani, *University of Venda, South Deep Gold Mine*

The assessment of the in-house developed capillary ultrafiltration membranes on acid mine drainage (AMD)

P. Matabola, B. Mlasi, and K. Sikhwivhilu, *Mintek*

Mine water management lessons learnt at the Emalahleni water reclamation plant

N. Rein and M. Malan, *Anglo American*

Aquifer characterization and fracture delineation using aeromagnetic data in the bushveld complex

R. Gebrekristos, *Digby Wells Environmental*

Removal of heavy metal ions from industrial effluent using adsorbent resins

L. Nematodzi and K. Sikhwivhilu, *Mintek*

Adapting a minerals thickener to acid mine water treatment application

I. Cronje, *Tecroveer*

Environmental monitoring at Mintek

S.M. Graham, *Mintek*

Water quality effects on froth stability and implications on true flotation and entrainment of gangue from a merensky ore of South Africa

M.S. Manono, K.C. Corin, J.G. Wiese, and C.T. O'Connor, *University of Cape Town*

Challenges in the prediction of acid-mine drainage

J. Fourie and A. Fourie, *Geostratum Groundwater and Geochemistry Consult (Pty) Ltd*

Acid mine drainage occurrence in the Western Basin (Witwatersrand Basin)

M. Mpanza and P. Nelwamondo, *University of Johannesburg*

Water use licence application success and lessons learnt

L. Dell, *Sibanye Gold*

Water reuse in the mining industry - a resource, financial and socio-economic imperative. The BRPM case study

J.J. van der Walt, *Bigen Africa*