

URANIUM 2017 INTERNATIONAL CONFERENCE ABSTRACTS RECEIVED

General

Trends, developments and opportunities in the extraction and recovery of uranium

A. Taylor, *ALTA Metallurgical Services, Australia*

The impact of depressed uranium prices on the Namibian uranium industry

P. Shava and L. Madziwa, *Namibia University of Science and Technology, Namibia*

Mineralogy/Geology/Geometallurgy

Remaining uranium resources: where and how much?

M. Fairclough, *International Atomic Energy Agency, Austria*

Determining uranium mineral compositions through electron probe micro analysis

G. Freemantle and J. Kinnaird, *University of the Witwatersrand, South Africa*

Geometallurgy of gangue mineral–reagent interaction and implications for uranium heap leaching

R.J. Howell, *SRK, United Kingdom*

Geometallurgy of the Manyingee *in situ* recovery uranium deposit, Western Australia

A. Wilde, *University of Western Australia, Australia*

Mining

Adjustment options in mine planning to survive low commodity prices - uranium

L. Madziwa, T. Ipinge, J.S. Addai-Mensah, and T. Hollenberg, *Namibia University of Science and Technology, Namibia*

Ventilation considerations in underground uranium mines

M. Pillalamarry, *Namibia University of Science and Technology, Namibia*

Implementation of drilling and blasting improvements in calcrete formations at Swakop Uranium Mine

T. Aipanda, *Swakop Uranium, Namibia*

Minerals Processing

U-pgrade™: a technological breakthrough for surficial uranium ores

M.P. Hill, *Marenica Energy Ltd, Australia*

Innovation technologies that can be applied to uranium processing

C. O'Keefe, *CiDRA Minerals Processing, USA*

The separation of carbonates from uranium minerals by flotation for the Karoo Sandstone deposits in South Africa

K. Pillay, M. Dlamane, and S. Pillay, *Mintek, South Africa*

Evaluation of polythionate formation during uranium recovery from sulphide flotation concentrate

V. Yahorava and V. Bazhko, *Mintek, South Africa*

Flotation of gypsum and calcite from Trekkopje uranium ore

C. Magombedze, L. Eimann, and A. Handuba, *Namibia University of Science and Technology, Namibia*

Leaching

Minimizing reagent and utility consumption in uranium agitation and heap leaching operations

G. Miller, *Miller Metallurgical Services, Australia*

Investigation of the impact of uranium mineralization on alkaline leaching conditions

S. Burling, M. Maley, and R. Ring, *ANSTO Minerals, Australia*

Uranium alkaline leaching: oxidative leach study of a uraninite-bearing ore

N. Syna and R. Ring, *ANSTO Minerals, Australia*

Heap leaching of uranium: the good, the bad and the ugly

J. Petersen, *University of Cape Town, South Africa*

Modelling of uranium leach kinetics

B.L. Sililo and D.R. Groot, *Namibia University of Science and Technology, Namibia*

Separation/Purification

Influence of radiation on a polypropylene membrane contactor used during membrane-based solvent extraction of uranium from nitric acid solutions

M. Fourie, W.C.M.H. Meyer, D.J. van der Westhuizen, and H.M. Krieg, *Necsa, South Africa*

Uranium recovery from H₂SO₄ eluates using strong acid cation resins

J. Bester, S. Corbet, S. Delameilleure, and E. Zaganiaris, *Dow Water & Process Solutions, Netherlands, France*

Uranium recovery from high chloride arid regions – treated water vs saline water

E.L. Forner, A. Naidoo, S.J. Archer, V.E. Coetzee and K. Soldenhoff, *DRA Projects, South Africa and ANSTO Minerals, Australia*

Uranium recovery from acid mine drainage generated by gold mines in South Africa

M. Kgora and V. Yahorava, *Mintek, South Africa*

Removal of uranium at the low ppm or µg/L range – a possible solution to decontamination of active or depleted mine site effluents

J. Bester and S. Delameilleure, *Dow Water & Process Solutions, Netherlands, France*

Recovery of uranium from waste matrices and mine process water using weak-base polyamine functionalized ion-exchange resins

J. Amphlett, R. Foster, C. Sharrad, and M. Ogden, *The University of Manchester, Korean Atomic Energy Research Institute, The University of Sheffield, UK, Korea*

Uranium purification by ion-exchange resins in batch and column system

K. Skolo, *Necsa, South Africa*

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Effect of impurities on the selective extraction and recovery of uranium from nuclear conversion plant waste

M. Potgieter, J.C. Barry, D.J. van der Westhuizen, and H.M. Krieg, *Uranium Chemistry Group, Necsa, Membrane Technology Group, Chemical Resource Beneficiation, North-West University, South Africa*

Nano-filtration technology for reagent recovery

M. Peacock, S. McDougall, P. Boshoff, D. Butcher, M. Ford, S. Donegan, and D. Bukunkwe, *BMS Engineers, Paladin Energy Ltd, Langer Heinrich (Pty) Ltd, Australia*

Separation of contaminants from uranium by ion exchange and solvent extraction

R.J. Howell, *SRK, United Kingdom*

Advances in precipitation

G. Jobling, *Adelaide Control Engineering, Australia*

Plant Optimization

Applications of dynamic simulation for Husab Uranium Mine

A. Lebedev, J. Duvenhage, and J. Duvenhage, *Lebedev Consulting, Swakop Uranium, South Africa, Namibia*

Capacity upgrades and leaching circuit modifications at the McClean Lake mill

A. McCombe, *Hatch, Canada*

Rejuvenating the giant thickeners of yesteryear

A. Krassnokutski, *South Africa*

Optimization of the Rössing counter-current decantation circuit for high calc ore

C. Anderson, S. Rabie, and N. Jansen van Rensburg, *Hatch, South Africa*

SOMAÏR: Soon 50 years of uranium production in Niger

N. Durupt, *Areva Mines, France*

Nuclear

Behaviour and fate of uranium in high-level nuclear waste processing system

J. Addai-Mensah and H. Musiyarira, *Namibia University of Science and Technology, Namibia*

The shift from HEU to LEU for MTRs and the difficulties of U recovery from LEU fuel using wet chemical methods

J.S. Gama, J.C. Barry and P.L. Crouse, *Necsa, University of Pretoria, South Africa*

Projects

Preferred uranium–gold (U–Au) co-production approach to unlock value and create environmental sustainability of the Louis Moore tailings dump, near Giyani, South Africa

N.K. Singo and J.D. Kramers, *University of Johannesburg, South Africa*

Flowsheet development of the Karoo Uranium Project

A. Naidoo and S.J. Archer, *DRA Projects, South Africa*

The impact of phosphates on the Mkuju River Uranium process flowsheet development

J. Scheepers and S.J. Archer, *DRA Projects, South Africa*

Uranium circuit development for a West African polymetallic deposit

A.J. du Toit, and S.J. Archer, *DRA Projects, South Africa*

Health and Safety

Challenges and opportunities for sustainable rehabilitation of abandoned uranium mines in Namibia

T. Ipinge, L. Madziwa, T. Hollenberg, and J. Addai-Mensah, *Namibia University of Science and Technology, Namibia*

Radiation exposures at Namibian uranium mines – what are the risks?

G. von Oertzen, *Rössing Uranium Limited, Namibia*

Advanced monitoring of dust emission at Rössing

B. Schleicher, *Rössing Uranium Limited, Namibia*

The Namibian Uranium Association, the environment and sustainable development

G. Schneider, *Namibian Uranium Institute, Namibia*

Radiation-related compliance – a practitioner's perspective

D. von Oertzen, *VO Consulting, Namibia*

Water management in Namibian uranium mines

H. Musiyarira, D. Groot, and K. Harding, *Namibia University of Science and Technology, Namibia, University of Pretoria, South Africa, University of the Witwatersrand, South Africa*

Process water supply to uranium mines in Namibia: problems and solutions

H. Musiyarira, S. Mitropolskaya, and O. Kachepe, *Namibia University of Science and Technology, Namibia*

Investigation of magnesium potassium phosphate cement for stabilization of uranium wastes

S.M.M. Nelwamondo, W.C.M.H. Meyer, H. Krieg, and J. Markgraaff, *Necsa, North West University, South Africa*