

HMC2025

THIRTEENTH INTERNATIONAL
HEAVY MINERALS CONFERENCE

**18-19 AUGUST 2025 - CONFERENCE
SUN CITY RESORT, RUSTENBURG,
SOUTH AFRICA**

ECOSA Validated CPD Activity,
Credits = 0.1 points per hour attended

The Value Chain of Heavy Minerals for the
Future – From Mine to Market

ABSTRACTS RECEIVED



Ilmenite recovery from a low grade sulphide containing ore

G. Marape¹, E. Ncongwane¹, R. Mariba¹, M. Kevin², ¹Mintek, South Africa, ²Dextrait Engineering, Western Australia

The effect of retention time in mineral sands recovery

F. Bornman, Multotec, South Africa

Recovery of fine (-0.1mm) beach sand minerals using spiral separators

E. Raffailac¹, S. Patra², J. Agenbag³, ¹Mineral Technologies Pty Ltd, Australia, ²Mineral Technologies, India, ³Mineral Technologies, South Africa

Quality assured characteristics of middle group chromitite materials for their possible sustained optimised beneficiation

B. Chauke¹, A.F. Mulaba-Bafubandi^{1,2}, ¹University of Johannesburg, South Africa, ²Universite de Mbuji-Mayi, Republique democratique du Congo

Advancing slurry transport in mineral processing

M. Xulu, Multotec, South Africa

The characterisation of heavy mineral sands with the tescan timax

F.M. Letswalo, SGS SA, South Africa

Exploring the recovery of magnetite from the copper and magnetite tailings by magnetic separation at Palabora Mining Company

K. Mlambo^{1,2}, N. Mulaudzi¹, F. Mulenga², ¹Palabora Mining Company, ²University of South Africa, South Africa

Evaluating the performance of the multi gravity separator in the beneficiation of monazite at different size fractions

J.O. Mogalanyane, J.A. Venter, CoreMet Mineral Processing, South Africa

Connecting reliability silos to achieve a digital approach to asset performance management

S. Reeve, Baker Hughes, United Arab Emirates

Solid-state reduction of ilmenite using hydrogen-enriched syngas

N.E. Magida, X.C. Goso, Mintek, South Africa

High-tension roll technology comparison using factorial design as evaluation tool

R. Musewe, Mineral Technologies (Pty) Ltd, South Africa

A factorial design approach to performance optimization and comparison of high-tension roll electrostatic separators on heavy mineral sands from the West Coast

B.K. Mmotla, Mineral Technologies (Pty) Ltd, South Africa

The importance of Mineralogical characterisation in Minerals Processing

J.M. Khosa, Mineral Technologies (Pty) Ltd, South Africa