

Following an active science-meets-industry approach on dealing with biomass and organics waste streams, this timely book foregrounds key issues facing South African policy makers, industry practitioners and scholars.

The editors drew together a wide pool of experts in the biomass and organic valorisation industry and research, offering the most recent research, development and innovation undertaken by South African universities and science councils. Spanning twelve chapters and divided into the following four key parts, the book offers solutions to industry and research on

- **Quantifying organic waste:** An overview of potential sources and volumes is offered, with an identification and characterisation of solid biowaste residues.
- **Biological treatment, covering** the latest norms and standards; a biorefinery approach for the sugar industry; an integrated waste management approach for municipal sewage treatment; biogas production from abattoir waste; optimisation of biogas production from animal waste; and integrated bioremediation and beneficiation of bio-based waste.
- **Mechanical and chemical treatment, covering** the beneficiation of sawdust waste; developing sustainable biobased polymer and bio-nanocomposite materials; and the valorisation of waste mango seeds.
- **Thermal treatment, which** evaluates different municipal solid waste recycling targets in terms of energy recovery and CO₂ reduction.



OPPORTUNITIES FOR BIOMASS AND ORGANIC WASTE VALORISATION

Finding alternative solutions to disposal in South Africa



Editors

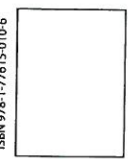
Linda Godfrey
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