

Time	Monday	Tuesday	Wednesday	Thursday
08:00	Registration		OP 13	<i>Short Course Day 2</i> <i>A methodology for calculating biomass residue's theoretical, technical and economic potentials.</i> <ul style="list-style-type: none"> • <i>Fundamentals of hydrocarbon energy resources</i> • <i>Energy transition, solar and wind source variability and bioenergy.</i> • <i>World land availability for bioenergy</i> • <i>Residues availability and circular economy.</i> • <i>Global bioenergy potentials</i> • <i>Bioenergy potentials in Brazil.</i> • <i>Technological maturity (TRL) of biomass based generation technologies.</i> • <i>Multicriteria methods for the selection of biomass residues for bioenergy (AHP).</i> • <i>A methodology for technology selection in technical bioelectricity potential studies.</i> • <i>Residues logistics (harvesting and transport) and pretreatment.</i> • <i>Levelized cost of electricity and economic potential.</i>
08:20			OP14	
08:40	Opening and Welcome	IL7	OP22	
09:00	PL1	PL2	PL3	
10:30	KN1	KN3	KN5	
11:00	KN2	KN4	KN6	
11:30	Tea Break			
11:40	IL1	IL3	IL5	
12:05	IL2	IL4	IL6	
12:30	OP1	OP15	OP24	
12:50	OP2	OP16	OP25	
13:10	OP3	OP17	OP26	
13:30	Lunch			
14:10	OP4	OP18	OP27	
14:30	OP5	OP19	OP28	
14:50	OP6	OP20	OP29	
15:10	OP7	OP21	OP30	
15:30	Tea Break		Closing and Announcements	
15:40	OP8	PL4	Short Course Day 1	
16:00	OP9			
16:20	OP10			
16:40	Break			
17:00	Bio hydrogen; Challenges and prospects	Sunset Cruise Cape Town	Table Mountain	
18:00	OP11			
18:20	OP12			
18:40				
19:00	Welcome Dinner			
19:00				

Click to join online sessions: [Monday](#) [Tuesday](#) [Wednesday](#) [Short course](#)

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Title	Presenter	Scheduled
Biomass , circular economy and energy transition	Electo Eduardo Silva Lora	PL1
Sustainability and Bio-economy Development in the Context of Sugarcane Diversification.	Johann Görgens	PL2
Benign-by-design methodologies for sustainable bioenergy production	Rafael Luque	PL3
Reinventing solventless chemistry: New opportunities in nanoparticle synthesis and polymer functionalization	Audrey Moores	PL4
Gasification of biomass; a key technology in energy transition: Challenges and successes	Bilainu Oboirien	KN1
Unpacking Anaerobic Digestion, a Toolbox for Circular Economy	Seun Oyekola	KN2
Mechanism on catalytic conversion of biomass through ketonization for production of high-quality platform chemicals	Shu Zhang	KN3
Advanced materials for process intensification: borrowing from nature	David Lokhat	KN5
Enhancement of India's Energy Security for Transportation Sector using Biofuels	K A Subramanian	KN6
State-of-the-art of trends in the development of biomass gasification	Alexandra Kozlov	KN7
Bioenergy cooperative as an initiative to reduce energy poverty and to sustainable use of local biomass products- BECOOP project	Arkadiusz Dyjakon	IL1
Preparation of super capacitor carbon materials by microwave pyrolysis of kitchen waste	Paigao Duan	IL2
Assessing the Economic and Environmental Impacts of different Integrated Biomass Conversion Processes: Current Status And Future Prospects	Jude Okolie	IL3
Mathematical modelling of tar conversion in downdraft biomass gasification processes	Igor Donskoy	IL4
Incineration of Mixed Municipal Sewage and Paper Mill Sludge in a Fluidized Bed	Karel Soukup	IL5
Challenges in photocatalysis and role of biochar	Vimal Ghandi	IL6
Fe ₂ O ₃ /CaO catalyst from iron-ore dust and chicken drumstick bones for biodiesel production from fried cooking oil	Kabir Garba	IL7
Hydrophobic properties of Agro-Biomass residues after torrefaction process	Arkadiusz Dyjakon	OP1
Structural and Ethylene Oligomerization Reactions of Homogeneous and Heterogeneous N [^] O-Donor Fe(II), Ni(II) and Co(II) Catalysts	Makhosonke Ngcobo	OP2
Technical and socio-economic potentials of multi-feedstock biorefineries based on biomass residues from cereal-legume intercropped farming for the production of ethanol, biogas and bioelectricity in Malawi	Msiska Stanley	OP3
Catalytic Conversion of Bioethanol over Transition Metal-modified HZSM-5 Zeolite Catalysts	Smarte Anekwe	OP4
The effect of varying fractions of agricultural waste in co-digestion to produce biogas	Nqobile Mkhize	OP5
Attainable and Operating Regions for Production of Hydrogen from Biomass	Tshepo Mothudi	OP6
Application of magnetite-nanoparticles and microbial fuel system on anaerobic digestion: Influence of external resistance	Nhlanganiso Ivan Madondo	OP7
Correlation between biocrude yield, solid residue, gas yield and biomass conversion on parametres affecting hydrothermal liquefaction of orange peels.	Ishaq Karim	OP8
Non-Catalytic and Catalytic Fast Pyrolysis of Giant Reed for Bio-oil Production	Manqoba Shezi	OP9

Sustainable Bioenergy and Processes Conference. 12th-15th December 2022. Cape Town, South Africa.

Effects of Molybdenum addition to activated carbon supported Ni - based catalysts for CO ₂ methanation	Akpasi Stephen	OP10
The theoretical and technical potential of residual biomass in Brazil	Laura Veiria Maia de Sousa	OP11
Response surface optimization of up-flow anaerobic sludge blanket reactor for biodegradation of wastewater into bioenergy	Ngema Lindokuhle	OP12
Modelling the linear flow tubular reactor for high sulphate water treatment	Jan Bonakele Wibooi	OP13
Automation of a lab scale integrated anaerobic-photocatalytic system for wastewater treatment	Devona Sathiyah	OP14
Experimental Investigations on performance, combustion, and regulated and unregulated emissions of ethanol fuelled spark ignition engine with hydrogen.	Akshay Marwaha	OP15
Modelling and simulation of an integrated biomass gasification and solid oxide fuel cell combined heat and power (SOFC-CHP) process.	Mxolisi Mtshali	OP16
Activated carbon derived from tree fibre: synthesis and application as a bactericide	Mahlangu Thembisile Patience	OP17
Application of banana peels as biosorbent for wastewater treatment: Characterisation and cost-benefits analysis	Sibiya Nomthandazo Precious	OP18
The effects of operating conditions on the conversion of ethanol over Zn-ZSM-5	Asiphile Nonqubeko Hlope	OP19
Bioenergy and Sustainability Challenges and opportunities: An overview	Mohamed Almihat	OP20
Catalytic Depolymerization of Municipal plastic wastes using commercial and synthesized ZSM-5	Olusegun Olagunju	OP21
Fe ₂ O ₃ /CaO catalyst from iron-ore dust and chicken drumstick bones for biodiesel production from fried cooking oil	Kabir Garba	OP22
Experimental Study of Extended Knock Limit in CRDI Compression Ignition Engine under Dual Fuel Mode (DME-Diesel) using a Split Injection System.	Alikuma Shere	OP24
Synthesis and characterisation of magnetic nanoparticles via co-precipitation: Application and assessment in anaerobic digested wastewater	Amo-Duodu Gloria	OP25
Syngas fuel from Cape Town municipal solid waste	Adefeso Ismail Babatunde	OP26
Green synthesis of crystalline silica from sugarcane bagasse ash: Physico-chemical properties	Ntallane Sello Seroka	OP27
Valorisation of sewage sludge for sustainable bioenergy and bioresources recovery through hydrothermal treatment	Boldwin Mutsevene	OP28
Comparative study on the conversion of ethanol over Ni/ZSM-5 and Ni/Activated Carbon	Thembaletu Mazibuko	OP29
Effect of Ageing on Properties of Synthesized HZSM-5	Tshovelo Maluleke	OP30