

Day 1: 13 December 2021		
7:30	Registration	
8:20	<p style="text-align: center;">Opening and Welcome Meeting ID: 95632996391</p>	
	Plenary session	
9:00	Plenary: Transformation of biofuels into syngas and hydrogen in reactors with structured catalysis and hydrogen permselective membranes.	V Sadykov Novosibirsk State University, Russia
10:00	Coffee	
	Session 1A Meeting ID: 95 893 876 918	
10:30	Keynote: Biomass For Energy Potentials and Technology	E Silva Lora Federal University of Itajubá, Brazil
11:00	OP1: Catalytic pyrolysis of torrefied olive stone for production of potential petrochemical alternatives	E Ganda Università degli Studi di Napoli Federico II, Italy
11:20	OP2: Effect of FA and Dissolved Oxygen concentration as controlling parameters on partial nitritation using lab scale sequencing batch reactors	SL Kiambi Durban University of Technology, South Africa
11:40	OP3: Development of Castor oil jet fuel catalysed by bi-functional Ni-Zn metals on carbon support	S Ratshoshi University of the Witwatersrand, South Africa
12:00	OP4: Anaerobic co-digestion of sewage sludge with sugar wastewater for biomethane production using Optimal design	J Adedeji Durban University of Technology, South Africa
12:20	OP5: Optimization of Organic Loading Rate Using Biomethane Potential Test	D Mampane University of Johannesburg, South Africa
12:40	OP6: Biogas-fuelled absorption refrigeration as a means of reducing post-harvest losses in rural Sub-Saharan Africa	L Wentzel University of Stellenbosch
13:00	Lunch	
	Session 1B Meeting ID: 97809339872	
14:00	Keynote: Rethinking municipal waste management using a thermochemical approach	Sanette Marx North-West University, South Africa
14:30	OP7: Quest for the key to malic acid production by <i>Aspergillus oryzae</i>	H Brink University of Pretoria, South Africa
14:50	OP8: Modeling and experimental study of the combustion of tarred producer gas in an ejector	Alexander Kozlov Melentiev Energy Systems Institute of Siberian Branch of the Russian Academy of Sciences, Russia
15:10	Coffee Break	
	Session 1C Meeting ID: 93898100827	
15:30	Keynote: Gasification of biomass; a key technology in energy transition: Challenges and successes	B Oboirien University of Johannesburg, South Africa
16:00	OP9: Multi-criteria assessment of biomass gasification-based hybrid energy systems in remote areas	V Shakirov Melentiev energy systems institute, SB RAS
16:20	OP10: Wastewater remediation using municipal solid waste-derived hydrochar	C Dewah North West University, South Africa
16:20	Presentation	Presentation by Hiden
WELCOME DINNER		

Day 2: 14 December 2021			
Opening			
Plenary Session Meeting ID: 92 549 586 533			
9:00	Plenary: Transformation of lignocellulosic biomass into energy products	Prof Bruce Sithole	Council for Scientific & Industrial Research (CSIR), South Africa
Coffee Break			
Session 2A Meeting ID: 91655707584			
10:30	Keynote: Assessment of fast pyrolysis for extended-value-chain vaporization of residual biomass and organic wastes	P Salatino	Università degli Studi di Napoli Federico II, Italy
11:00	OP1: Biogas as a feedstock for renewable hydrogen and carbon generation – a circular approach	A Swartbooi	Council for Scientific & Industrial Research (CSIR), South Africa
11:20	OP2: Effect of reaction conditions on bio-oil produced from sodium lignosulphonate	D Bartlett	North West University, South Africa
11:40	OP3: Cogasification of biomass and plastic waste: a mini review	Z Mazhandu	University of Johannesburg, South Africa
12:00	OP4: impact of life cycle assessment for municipal plastic waste treatment in South Africa	O A Olagunju	Durban University of Technology, South Africa
12:20	OP5: Production of bio-coal from wastewater sludge-biomass feedstock	Z Mkhwanazi	Durban University of Technology, South Africa
12:40	OP6: Extraction of caffeine from spent coffee grounds.	Nikita Singh	Durban University of Technology, South Africa
Lunch			
Session 2B Meeting ID: 97322428743			
14:00	Keynote: The Importance of carbon structure in biochar as catalysts/support from reforming tarry compounds	Prof Shu Zhang	Nanjing Feorestry University, China
14:30	OP7: Effect of operating conditions on the hydrothermal valorisation of sewage sludge	Mbaliyewe Madikizela	Durban University of Technology, South Africa
14:50	Presentation	Swagelok Southern Africa	
Coffee Break			
Session 2C Meeting ID: 93013253404			
15:30	Keynote: Creating Community microgrids containing biomass gasifiers	N V Tomin	Institute of the Russian Academy of Science (ESI SB RAS), Russia
16:00	OP9: Catalytic Valorisation of Sugarcane Bagasse to Energy Carriers	I Anekwe	University of the Witwatersrand, South Africa
16:20	OP10: Evaluation of in-situ and ex-situ hybridization study in the optimised transesterification of waste and pure vegetable oils	A Etim	Durban University of Technology, South Africa
16:40	OP11: Development of silica gel catalyst support for fast pyrolysis of biomass using layered double hydroxide	D Maree	University of Pretoria, South Africa
Plenary Session Meeting ID: 98970072899			
17:00	Plenary: The role of biofuels in a sustainable circular bioeconomy	Prof Daniela Thran	University of Leipzig, Germany
Poster Session Meeting ID: 97932056124			
18:00			

P1: Waste to energy and circular economy as a way to mitigate the problem of municipal solid waste in Brazil	L de Santos	Universidade Federal da Bahia
P2: Characterization of sugar effluent from a sugar milling industry in the KwaZulu-Natal province of South Africa for biogas production	Z Tshemese	Durban University of technology, South Africa
P3: Revisiting energy storage systems through the lens of quantum field theory	A R Kader	University of Pretoria, South Africa
P4: Production of phenol from co-pyrolysis of cellulose and sodium borohydride	Y Huang	Nanjing Forestry University
P5: Hydrothermal liquefaction of lignocellulosic biomass into biofuels and its utilisation in energy	T Makhado	University of the Western Cape, South Africa
P6: Cellobiohydrolase I assisted refining: Impact on energy consumption and pulp quality	N Makubo	North west University, South Africa
P7: Hydrothermal synthesis of hierarchical ZSM-5 and evaluation as catalysts in the catalytic cracking of hexane	L Nqakala	University of the Western Cape, South Africa
P8: Mass spectrometry data processing method for calculation of kinetic coefficients	V Badenko	Melentiev Energy Systems Institute SB RAS, Irkutsk, Russian Federation
P9: Characterization and Analysis of Keratinous Material for Animal Feed Production	M Kekana	University of KwaZulu-Natal, South Africa
P10: Assessment and feasibility of converting municipal organic waste into biogas using Anaerobic Digestion: A South African case-study	J Gaogane	University of KwaZulu, South Africa
P11: A Simulation Study of the Combined Process of Torrefaction and Gasification of Lignocellulose Biomass (Bagasse) for Syngas and Methanol Production	L Fajimi	University of Johannesburg, South Africa
P12: Comparative study on the effect of Biosorbent (Calcined banana peels) and magnetic nanoparticles (magnetite) on wastewater treatment via biochemical methane potential tests	N P Sibiya	Durban University of Technology, South Africa
P13: Biostimulation of anaerobic digested wastewater using magnetic nanoparticles and an external magnetic field for biogas enhancement	G. Amo-Duodu	Durban University of Technology, South Africa
P14: Kinetics of wood fuel pyrolysis of different torrefactions	I Sosnovsky	Melentiev Energy Systems Institute
P15: Comparison of biodiesel production routes parameters using castor bean and jatropha oils	G B e Silva	Federal University of Itajubá, Brazil
P16: Renewable diesel sustainability potential as a complementation for diesel and biodiesel mixtures in Brazil	A A. V. Julio	Federal University of Itajubá, Brazil
P17: Removing impurities from biomass gasification: a BTL review	D C. de Oliveira	Federal University of Itajubá, Brazil
P18: Evaluation of residual biomass for bioenergy production using GIS-MCDM methodology in the state of Minas Gerais	F B D Filho	Federal University of Itajubá, Brazil
P19: Use of residual gases from continuous carbonization of wood for electricity generation	P H M Santos	Federal University of Itajubá, Brazil
P20: Evaluation of environmental impacts of charcoal production: A case study	S A e Silva	Federal University of Itajubá, Brazil
P21: Experimental investigations on utilisation of ethanol-methanol (M25E75) blend as fuel in an automotive spark ignition engine	N Chaudhary	Indian Institute of Technology , Delhi, India

Day 3: 15 December 2021		
Opening		
9:00	Discussion : Bioeconomy in the midst of conventional energy resources; Challenges and Prospects Meeting ID: 91672208439	
Coffee Break		
Session 3A Meeting ID: 98446279950		
10:30	Keynote: Application of Biofuels in Automotive Engines	K.A. Subramanian
11:00	OP 1: Synergistic co-conversion of biomass and biogas to hydrogen – Performance Targets and Simulation Analysis.	S Dube
		University of South Africa, South Africa
11:20	OP 2: BIOGAS VALORISATION TO LIQUID FUELS: MODELLING AND SETTING UP PROCESS TARGETS	S Ncube
		University of South Africa, South Africa
11:40	OP 3: Natural Sorbents from Amarula Wastes Biomass and their Activated Carbons for Sorption of Dibenzothiophene in Model Diesel Fuel	T Kabi
		University of South Africa, South Africa
12:00	OP 4: Selective removal of Pb(II) from wastewater using modified cellulose nanocrystals (CNCs) with ethylenediaminetetraacetic acid (EDTA): isotherm, kinetics, and thermodynamic studies	J B Musamba
		Vaal University of Technology, South Africa
12:20	OP 5: Edible and cosmetic oil refining using activated carbon from marula shells	P Sigauke
		Botswana International University of Science and Technology
12:40	OP 6: Experimental investigations on utilisation of ethanol (E100) in an automotive spark ignition engine	N Chaudhary
		Indian Institute of Technology , Delhi, India
13:00	Lunch	
Session 3B Meeting ID: 95908321964		
14:00	Keynote: Recent advances on sustainability and production of bioenergy through integrating hydrodynamics and process culturing using advanced measurement, experimentation and computing techniques	M H. Al-Dahhan
		Missouri Univ. of Science and Technology, USA
14:50	OP8: Synthesis of carbon nanotubes over iron based metal organic frameworks (MIL88B & MIL101)	K Mosupi
		Council for Scientific & Industrial Research (CSIR), South Africa
15:10	Poster Awards Announcement Closing Meeting ID:98 047 441 138	