



12TH ZIMBABWE INTERNATIONAL RESEARCH SYMPOSIUM PROGRAMME 13 TO 15 FEBRUARY 2019

VENUE: HARARE INTERNATIONAL CONFERENCE CENTRE

Registration and collection of badges

Date: 12 February 2019

Venue: HICC Foyer

Time: 1500 – 1900 hours

Day One: 13 February 2019

Time	Activity
0730 - 0830	Arrival, Registration and Teas
Plenary Session : Director of Ceremonies :Dr G. T. Hapanyengwi:Director ICT, University of Zimbabwe	
0830 - 0840	Welcome Remarks: Dr D. Garwe, 12 th ZIRS Organising Committee Chairperson
0840 - 0900	12 th ZIRS Objectives and Overview: RCZ Executive Director, Mrs S. Muzite
0900 - 0920	Research and Industrialisation : Zimbabwe Energy Regulatory Authority, Chief Executive Officer
0920 - 0940	The Role of Intellectual Property in National Innovation Systems: DNM Attorneys, Mr M. Nkomo
0940 - 1000	Research, Innovation and Entrepreneurship Ecosystem of Zimbabwe: RCZ
1000 - 1005	Parallel Sessions Logistics : Africa Exchange
1005 – 1030	Tea Break

Parallel Sessions

		Social Sciences and Humanities	Sustainable Environment and Resource Management (SERM): 1	National Security (NS)	Sustainable Environment and Resource Management (SERM): 2	Promoting and Maintaining Good Health (PMGH)
	Time					
	Sub-theme, Venue & Session Chairperson	Infrastructure Development, Education, & Entrepreneurship (MA) Prof. G. Kabanda	Crop Science Climate Change and Biodiversity (BAR 1) Dr D. Kutuyayo	Cyber and Information Security, Food Security, Terrorism (BAR 2) Prof. C. Manyeruke	Animal Science (BAR 3) Prof. W. Manyangarirwa	Promoting and Maintaining Good Health (BAR 4) Dr P. Manangazira
1.	1030-1045	Promoting business incubation programmes for sustainable development in	Assessment of medium staple cotton genotypes for tolerance to jassids Rangarirai Mapuranga	Command Agriculture in Zimbabwe: Examining the Nexus between National Security, Human Security and Food Security	CUT Bank – the first national farm animal cryobank for Zimbabwe Eddington Gororo	Risk modelling for blood safety: concepts and application perspectives Tonderayi Mapako



		Zimbabwe- The case of Harare. Yeukai Dzapasi Mercy Masunda		Bassi Lucky Bangidza; Herbert Sobha and Godwin Vumba		
2.	1045-1100	Relevant science Education as a key factor to fight youth unemployment: A case of Bulawayo Metropolitan Province Zanamwe Zandile, Mkwelie Nhlanhla	Effect of integrated use of chemical and organic fertilizers on wheat (<i>Triticum aestivum</i>) yield in the south eastern Lowveld of Zimbabwe Mutaki Mathias	A review of Cyber Security in Zimbabwe Tavengwa Masamha, Paul Goronga	Effect of culturing media on the growth of <i>Cercospora coffeicola</i> in-vitro N. Mwatsiya	Evaluation of anaemia in prospective blood donors deferred at National Blood Service Zimbabwe (NBSZ) Tatenda Dorothy Parawira, Menard Mutenherwa
3.	1100-1115	Harnessing Social Entrepreneurship role in Poverty Reduction for Sustainable Development: Sources of success and best practices in Zimbabwe Ngorora G.P.K Tsegaye A	Effect of planting dates on the performance of four sugar bean (<i>Phaseolus vulgaris</i> L.) varieties Collen Chohunoita	Towards a Food Security and National Security Nexus Strategic Model: A Case of Zimbabwe G. Chipanga	Effect of Potassium chloride (MOP) on the management of <i>Cercospora coffeicola</i> N. Mwatsiya	Knowledge, attitudes, and practices concerning biological hazards among health care workers. A case study of Harare central Hospital. Rangarirai Innocent Gono, Mark Matsa
4.	1145- 1200	Public Infrastructure as a Tool for Destination Image Recovery and Performance of the Tourism Sector in Zimbabwe. Phillip Kanokanga	Growth and yield response of sorghum transplants to in-field water-harvesting methods. Collen Chohunoita	Information Security In The 21st Century: A Focus On Public Libraries In The Midlands And Masvingo Province, Zimbabwe Mthokozisi Masumbika Ncube	Relative Growth and Health Performance of Pre- weaned Piglets on <i>Moringa oleifera</i> Partially Substituted Creep Diets. B. Chikasa	Children Obesity and Fitness levels relationship: Harare Northern Central District survey. Tafadzwa Chibade
5.	1200-1215	Nanomaterials application in tar binders modification for production of non-toxic High Modulus Coal Tar. Actor Zonde	Household welfare impacts of sorghum production differentials in semi-arid Zimbabwe: Towards strengthening climate change adaptation. Joseph Musara	Responding to climate Change and variability through Research and Development: A case of Malipati Community in Southern Zimbabwe. Itai Dhliwayo	The efficacy of various processing methods on cowpeas (<i>Vigna unguiculata</i>) for use as a protein source for feeding grower finishing pigs in smallholder production. Tinashe Trevor Tekedza	Zimbabwe's Primary Health Care System: Does it Work? Vincent Itai Tanyanyiwa Esther Mufunda



6.	1215-1230	Multi-storey Automated Car Parking System (MACPS): Towards Smart City Parking. Kingmore Chipwanya Lovemore Gunda	Assessing the performance of the kapenta fishing industry using local stakeholders perceptions and knowledge and historical data in Lake Kariba, Zimbabwe. Munyaradzi P. Nzvenga	Determination of the host status of avocado fruit to pestiferous thrips (Thysanoptera: Thripidae) Gracian T. Bara		Development of an Online Medical Diagnostic and consultation system Case of Gweru Provincial Hospital. Attalia Mbewe, Noreen Sarai
7.	1230-1245	Sustainable town planning and development is key to mitigating urban land degradation. Pure Maswoswere	An assessment of woody vegetation structure and composition within a peri-urban park: a case-study of Sable Game Park, central Zimbabwe. Sithabile Bafana			Lived experiences of Inmate mothers regarding quality of care of their children who reside with them at Chikurubi female prison, Zimbabwe. Precious Shumba
	1245 - 1400	LUNCH				
		Social Sciences and Humanities	Sustainable Environment and Resource Management	Social Sciences and Humanities	Sustainable Environment and Resource Management	Promoting and Maintaining Good Health (PMGH)
	Sub-Theme, Venue & Session Chairperson	Intellectual Property (MA) Mr C. Chimombe/Prof Chisaka	Renewable Energy (BAR 1) Dr E. Kapuya	Economics (BAR 2) Prof. A. Makochekanwa	Environment (BAR 3) Dr C. Benhura	Promoting and Maintaining Good Health (BAR 4) Prof A. Chideme Munodawafa
	1400 - 1415	Intellectual Property Rights in the Global Market: The Dilemma of Young Technopreneurs Tendayi Caroline Mati	Biodiesel From Macadamia Nut Oil Itai Mutadza	How Is Fiscal Policy Effective In the Eyes Of The People Of Zimbabwe. Ngonidzashe Mukwepa	The Effectiveness of Fire Management Practices In Accelerated Land Reform Programme Farming Areas: The Case of Ward 1, Hwedza District, Mashonaland East Province, Zimbabwe Edmore Bowora	Randomized Trial of Safety of Isoniazid Preventive Therapy During or After Pregnancy Tsungai Chipato



11.	1415 - 1430	Research and Development in a Changing Environment: Perceptions from Research and Extension Personnel Dorah Mwenye	Design Of A Bio-Digester Blair Toilet System That Produces 10000 Cm3 Per Day Of Biogas From Human Waste. Nyadzayo Tatenda Joyleen Primrose	Contribution Of Selected Indigenous Vegetables To Household Income In Hwedza District, Zimbabwe. Constance Nyaruwata	Land Degradation Mapping in the Ume Sub-catchment of Sanyati Catchment in Zimbabwe Ntandokamlimu Nondo	Association of maternal viral load and CD4 count with perinatal HIV-1 transmission risk during breastfeeding in the PROMISE postpartum component. Lynda Stranix-Chibanda
12.	1430 - 1445	The purpose and applicability of inclusion-ecclesiastical approach. Gilbert Nyabadza	Microalgae Biofixation Technology For Biodiesel Production, Mitigation Of Greenhouse Gas Emissions. Piolo M. Manyon	Youth empowerment through land reforms: The case of Ward 24 Mutasa District in Manicaland. Bvumisani Tecla Chido	Challenges and opportunities for disaster risk reduction in Priority 1 of the new Sendai Framework. A case study of Tsholotsho, Zimbabwe. Nobuhle Sibanda	Disability, Social Functioning and School Inclusion Among Older Children and Adolescents Living with HIV In Zimbabwe . Ruramayi Rukuni
13.	1445 - 1500	Determinants of Intensity Consumption of Selected Indigenous Vegetables in Zimbabwe Constance Nyaruwata	Compositional Analysis Of Zimbabwean Sugarcane Bagasse Ash Towards The Production Of Nano Silicon For Solar Cell Application. Fortunate Farirai		Suitability of municipal solid waste in African cities for thermochemical waste-to-energy conversion: Case of Harare Metropolitan City, Zimbabwe. Luke Makarichi	Patterns of visual function among commuter omnibus drivers in Harare. Douglas Zirima
14.	1500 - 1515	Effect of rainwater harvesting practices on resource conservation and growth and yield of aonla (Emblica officinalis) in agroforestry system in red soils in central India. Dev Narayan	Evaluation Of Solar Photovoltaic Design And Installation Training Conducted In Four Major Cities In Zimbabwe. Fortunate Farirai		In Pursuit Of Energy Efficiency: Development And Evaluation Of A Low Cost, Energy Efficient Barn For Tobacco Curing. Wisdom Munanga	HIV Drug Resistance among Adolescents and Young Adults Failing HIV Therapy in Zimbabwe. Vinie Kouamou
15.	1515 - 1530		Performance Evaluation Of Parabolic Dish Solar Cooker Of Different Materials In Harare, Zimbabwe. Fortunate Farirai		Biomass Residue Densification: A Review Of Briquetting Practices In Nigeria Gordon T. Madamombe	Fabrication Of Antiretroviral Drug Loaded Nanoparticles And Investigation Of Their Pharmaceutical. Faithful Makita-Chingombe



16.	1530 – 1545		Production of fuel briquettes from stock feed waste (case study national foods Zimbabwe) R. Chiramba		Clean Energy: Zimbabwe's Untapped Potential Elia Chipfupi	Clinical Profile, Intensive Care Unit Course and Outcome of Children Aged Under 12 years Admitted to the Pediatric Intensive Care Unit of a Tertiary Referral Hospital, Harare, Zimbabwe Presenting Dr Svitlana Austin
17.	1545 - 1600		Production copper cathodes using scrap copper. Rosina Chandimhara		Black granite mining and the environment: Socio – economic and biophysical costs and benefits. The case of black granite mining in Mutoko, Mashonaland East Province, Zimbabwe. Edmore Bowora	Incidence and progression of echocardiographic abnormalities in HIV infected older children and adolescents taking antiretroviral therapy: A prospective cohort study. Edith Majonga

Day Two: 14 February 2019

Activity	
0730 - 0830	Arrival, Registration and Teas
Plenary Session : Session Chairperson : Mr C.A Samkange: RCZ Board Member	
0830 - 1000	International Presentation : From Innovation to Commercialisation Workshop Amir Butt, Chief Executive Officer Lancor Scientific and Member of Accelerace, United Kingdom
Tea Break	
Plenary Session : Session Chairperson : Mr C.A. Samkange: RCZ Board member	
1030 - 1050	Presentation : Overview of the ICT Innovation Drive: Mr. Tichafa Rixon Mujuru, HEAD-ICT, POTRAZ
1050 – 1100	Testimonial: An Innovation Drive Success Story
1100 - 1115	Discussion



Parallel Sessions

	Time	Social Sciences and Humanities (SSH)	Sustainable Environment And Resource Management (SERM)	Social Sciences and Humanities (SSH)	Sustainable Environment And Resource Management (SERM)	Promoting and Maintaining Good Health (PMGH)
	Sub-theme, Venue & Session Chairperson	Information Communication Technology, and Entrepreneurship (MA) Dr G. T. Hapanyengwi	Parasitology, Entomology and Invasive Species (BAR 1) Prof. I.Sithole-Niang	Governance, Legal and Policy (BAR 2) Prof. A. Makochekanwa	Crop Science (BAR 3) Prof. U. Mazarura	Health (BAR 4) Prof. C. Nhachi
1.	1115-1130	Synchronisation of Computer Science syllabi between teachers' colleges and schools. A case of Mutare Teachers' College. Luke Marwa	Efficacy of Emamectin Benzoate against Fall Armyworm, Spodoptera frugiperda in Maize (Zea mays L) Collen Chohunoita	Towards sustainable industrialisation and modernisation in Zimbabwe through universities-industry linkages: Policy, research, practice. Crispen Bhukuvhani	Determinants of coffee yield and quality among smallholder farmers in Zimbabwe: a panel data modelling approach Caleb Mahoya	<i>Schistosoma Haematobium</i> Diagnosis In Urine And Blood Samples: A Polymerase Chain Reaction Based Approach. Masceline J. Makuwaza
2.	1130-1145	Factors influencing the adoption of internet banking by students in higher education institutions in South Africa Muswaka Charlene, Chimucheka Tendai	The use of honey bees Apis mellifera as Bio-indicator of anthropogenic impact on ecosystem. Jeremiah Chakuya	Corporate Governance Issues in the Zimbabwean Small and Medium Enterprises (SMEs) Sector. Gwangwara Edward	Evaluation of 15 locally adapted Guava lines under irrigated and rain fed conditions in the South East lowveld of Zimbabwe. Tapiwa J. Chitakunye	Uptake and yield of index linked HIV testing for children and adolescents aged 2-18 years in Zimbabwe. Chido Dziva Chikwari
3.	1145-1200	Factors influencing utilisation of mobile applications in agricultural marketing among communal farmers in Zimbabwe: The Case of Mashonaland Central Province. Joseph Manzvera	Participatory Identification and Collection of Parasitic Plants (Mistletoes) in Exotic and Indigenous trees in Zimbabwe C. Chapano	Fostering financial inclusion development through agency banking in competitive markets: a conceptual model. Brighton Nyagadza	The effect of cultivar and organic enriched fertilisers on plum (Prunus salicina) growth and development under high density management system. Trish O. Nyarumbu	Local solutions for local problems: The battle between Herbalists and Pharmaceuticals. Beauty Nyamukondiwa



4.	1200 - 1215	A strategy to improve utilisation of SMS-based market information system by smallholder farmers in Zimbabwe: Evidence from Mbare Musika Rebecca Mandaza	Fertilizer and weeding effects on spider abundance and diversity in soyabean under conservation agriculture in a sub-humid environment in Zimbabwe. Nilton Mushavakure	Venture Capital Finance As An Antidote To Dimuniting SMEs. Ishumael Vingirayi	Effect of vermicompost and vermifoliar on growth and related characteristics of fine bean (Phaseolus vulgaris) Joshua Nyamowa	The synergy between non-communicable diseases and traditional foods in Zimbabwe: Opportunities and Challenges. Ruth Mupanda	
5.	1215 - 1230	Special Economic Zones the way to go; Challenges and recommendations: The case of Zimbabwe. Levious Chiukira	The Pesticidal Activity Of Cirsium Arvense (Canada Thistle), Lantana Camara (Lantana) And Lipia Javanica (Lemon Bush) Extracts In Flower Production. Farai S. Chihobvu	Public-Private Sector Partnerships for Destination Image Recovery and Sustainable Performance of the Tourism Sector in Zimbabwe. Phillip Kanokanga	Evaluation of elite chickpea (Cicer arietinum) lines for adaptation and yield potential in Highveld area of Zimbabwe under rain fed conditions Ezekia Svatwa	Feasibility and Sustainability of Community Based Health Insurance in Rural Areas. Case Study of Musana, Zimbabwe. Lazarus Muchabaiwa	
6.	1230 - 1245	The Geography of Universities' Innovation & Foreign Direct Investment (FDI): The Missing Link in Research and Development (R&D) for Zimbabwe. R.G. Ndoda	Yersinia pestis prevalence among captured rodents in a semi-arid tropical ecosystem of Zimbabwe Annabel Banda	Private and public sector participation in state owned enterprises- Implications for the sustainable development of teacher education institutions. Gilbert Nyabadza	Sustainability of coffee production: A case study of the coffee smallholder sector of Zimbabwe Caleb Mahoya	Dietary adequacy of menus served in five Vocational Training Colleges in Matabeleland South Province in Zimbabwe. Stanford Ngwenya and Namo Gwisai	
7.	1245 - 1300	Unbundling mega trending forces driving digital disruption: Digital Vortex evolution. Brighton Nyagadza		National Resources (NR) and Circular Economy (CE): A Strategic Imperative for Industrial Development in Zimbabwe. Marian Tukuta		Prevalence of Typhoid Carrier State among Food Handlers from Public Food Premises in Kadoma City, 2018. Nyasha Adrian Musiya	
8.	1300-1415	LUNCH					



	Time	Sustainable Environment And Resource Management (SERM)	Sustainable Environment And Resource Management (SERM)	Social Sciences and Humanities (SSH)	Sustainable Environment And Resource Management (SERM)	Promoting and Maintaining Good Health (PMGH)
	Sub-theme, Venue & Session Chairperson	Renewable Energy (MA) Dr M. Manyuchi/Prof N. Nhamo	Parasitology, Entomology and Invasive Species (BAR 1) Dr W. Parawira	Governance, Legal and Policy (BAR 2) Prof C. Mahamadi/Prof B. Chisaka	Renewable Energy (BAR 3) Prof. F. Mtambanengwe	Health (BAR 4)
9.	1415 - 1430	A Design Of A 100mw Electricity Plant From Biomass Naome Nyambira	Neem leaf extract for the management of the sweet potato weevil (<i>Cylas formicarius elegantulus</i> (Summers) in semi-arid regions of Zimbabwe. Leonard Muturiki	Corporate Governance In Family Owned (Pvt) Ltd Companies In Bulawayo; Impact On Ability To Attract Investment. Gwangwara Edward, Ndlovu Loveness	Population dynamics of the fall armyworm moth on over the 2017/18 cropping season at Chiredzi Research Station in the south eastern Lowveld of Zimbabwe. Leonard Muturiki	
10.	1430 - 1445	Nanotechnology in Renewable Energy technologies: A Brief Review. T. Madzokere	Distribution of the potentially invasive species <i>Calotropis procera</i> in Zimbabwe Kudakwashe Blessing Mutasa	Emotional Labour Effect on Service Quality: A Theoretical Framework Development. Brighton Nyagadza	Effect Of Installation Configuration On Dust Deposition On Solar Photovoltaic Panels. Kudzanayi Chiteka	
11.	1445 - 1500	Design Of a 10 Mgw Combined Heat And Power Generation Plant Through Co-Digestion Of Organic Municipal Solid Waste, Cattle Dung And Spent Grain G. Dzapasi		Impact Of Public Relations On Students' Enrolment: Evidence From Chitungwiza Private Colleges. Brighton Nyagadza	Solar Water Heaters In Zimbabwean Urban Communities; Opportunities and Prospects. Trenance Khoza	



12.	1500 - 1515	Production Of Dimethyl Ether Fuel From Sawdust: A Case Study Of Zimbabwean Eastern Highlands. F. Mhlanga			Smart Home Powered By Ai Assistant . Mainford Mutandavari	
13.	1515 - 1530	Hybrid Photovoltaic And Concentrated Solar Thermoelectric Model Blessing Mpala			The Production Of Electrode Paste Manufacturing Plant Using Bio Coal, Anthracite And Pitch As The Binder Samantha Saungweme	

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Day Three: 15 February 2019

Official Opening	
0730 - 0830	Arrival, Registration and Teas
0830- 0900	All Guests seated
0900-1330	Official Opening and Awards Ceremony
	National Anthem and Prayer
	Welcome Remarks, Presentation of the Board and Organising Committee Members Dr Michael James Tumbare , Board Chairman: RCZ
	Overview of the 12 th ZIRS and Introduction of the International Guest Speaker: Mrs Susan Muzite , RCZ Executive Director
	Presentation by the International Guest Speaker: Mr Aamir Butt ,Chief Executive Officer,Lancor Scientific Limited,United Kingdom
	Official Opening by the Guest of Honour: The President of the Republic of Zimbabwe His Excellency Cde. Emmerson Dambudzo Mnangagwa
	Awards Ceremony
	Presentation of Gifts : Dr Dahlia Garwe
	Vote of Thanks: TBA
1330 -1500	Networking Cocktail and Departure

Key

MA: Main Auditorium

BAR: Breakaway Room