

PROGRAMME

Owsd-Africa Regional Conference, 2018

Theme: Women In Science, Engineering And Technology For Sustainable Development

5th – 7th September, 2018 At *Icipe*, Kasarani-Duduvile Campus, Nairobi, Kenya

PROGRAMME CO-ORDINATOR (PC): Dr Zipporah Wanjiku			
CONFERENCE DAY ONE WEDNESDAY 5 TH SEPTEMBER, 2018			
VENUE	OUTSIDE MAIN THEATRE		
8.00am- 8.45am	REGISTRATION: In-Charge – Dr Emily Chemoiwa & Rose Nyambura		
VENUE	MAIN THEATRE		
Chair Rapporteur/ Time keeper	Prof. Elizabeth Njenga Dr Anne Barmao		
8.45am– 8.50am	Call for Order and Housekeeping - Chair		
8.50am – 9.10 am	Welcoming speech – OWSD-Kenya National Chapter President Dr Patriciah Wambugu		
9.10am– 9.30am	Welcoming Speech <i>icipe</i> DG		
9.30am– 9.50am	Welcoming speech OWSD		
9.50am– 10.00am	GROUP PHOTO Coordinators: Lucy Mureithi & Pamela K. Kilavi		
10.00am– 10.30am	Tea Break, Exhibition, Networking		
VENUE	THEATRE I	THEATRE II	THEATRE III
SUB THEME	Science, Technology & Innovation For Development	Climate Change, Global Warming & Environment	Science, Technology & Innovation For Development
Chair	Dr Phyllis Muturi	Dr Hannah Karuri	Dr Winifred Mutuku
Rapporteur	Dr Gladys Njoroge	Elizabeth Muoria	Dr Lexa Gomezgani
10.30am– 10.45am	Application of biotechnology to revitalize coffee production in kenya: evaluation of endogenous factors promoting direct somatic embryogenesis in coffee (<i>coffea arabical.</i>) <i>mayoli, r.n.^{1,2}, isutsa, d.k.^{2,3*}, nyende, a.b.⁴ and mweu, c.m.⁴</i>	Understanding rainfall variability from Continuous Wavelet Transform analysis in a changing climate <i>L.W. Gachahi</i>	Multi-Drug Resistant Efflux Pump Among Clinical Isolates of <i>Staphylococcus Aureus</i> ^{*1} <i>Agbakoba, Nneka R.,</i> ¹ <i>Imouokhome, Eghonghon I.,</i> ² <i>Ezeanya, Chinyere C.</i>

10.45am– 11.00 am	Application of Additive Manufacturing for Improved Thermal Management of Hot Sheet Metal Forming Tools <i>*R Muvunzi, DM Dimitrov, S Matope</i>	Reared Edible Cricket <i>Scapsipedussp. nov.</i> asa Novel strategy to Mitigate food insecurity and Protein and Energy Malnutrition in Kenya <i>Magara H. J. O.^{1,2}, M. A. Ayieko¹, C. M. Tanga², S. Subramanian², J. Kinyuru, Sylvain Hugel⁴, S.A. Mohamed², F. M. Khamis², D. Salifu², S. Niassy², K. K. M. Fiaboe², N. Roos, and S. Ekesi²</i>	Concurrent Detection Of Six Sexually Transmitted Pathogens From Female Students In A Tertiary Institution In Benin City, Nigeria <i>Ezeanya C. C.^{1*}, Agbakoba N. R.², Enweani I. B.²</i>
11.00am– 11.15am	The importance of National Chapters in advancing STI for development, OWSD SA as an example. <i>Elzarie Swanepoel-</i> Academy of Science of South Africa (ASSAf), South Africa	The Effect Of The Environment On Building Finishing Materials In Lagos Island Residential District <i>F. Jegede¹, B. Adewale², O. Olaniyan³</i>	Census Of Opada Forest Reserve Wild animals For Tourism Conservation And Promotion <i>Ebiloma, Stella O.</i>
11.15am– 11.30am	Development of an Online Lunch Portal <i>*Chikodili H. Ugwuishiwu, Emmanuel K. Okenwa, Caroline N. Asogwa and Modesta. E. Ezema.</i>	Use of diatom communities as indicators of conductivity and ionic composition in a small Austral temperate river system <i>TinotendaMangadze[*], Ryan J. Wasserman, Tatenda Dalu</i>	Mechanical Properties Of Bamboo Fibre Polypropylene Compared To Those Of Hybrid Bamboo/Wheat Straw Fibre Polypropylene <i>Nzioka Beatrice Mueni, Dr.AbdallahS.Merenga¹, and Dr.CharlesM.Migwi¹</i>
11.30am– 11.45pm	Emerging Issues In Rights Of Child, Gender And Family Livelihood In Nigeria <i>Stella O.Odebode</i>	Impacts of Climate Change on Crop Production and its Adaptation in Sub-Saharan Africa <i>Margaret Njeri Mwangi*</i>	Spin polarization of $\alpha - Fe$ and $\beta - Fe$ Using DFT <i>Wilkister .M.Ondigi¹, Kimani John¹, Daniel.K.Thuo¹, Brian.M.Munene¹ and Muthui Zipporah¹</i>
11.45pm– 12. 00pm	Investigation of <i>Trichoderma longibrachiatum</i> and NPK Fertilizer on Agronomic Parameters of Lettuce: Implications for Sustainable Food Security <i>^{1*}Kehinde T. Kareem, ²Esther O. Ugoji and ²Olusimbo O. Aboaba</i>	Analyzing the Effect of Climate Variability, Farmers Perception and Adaptation Mechanism on Production of Major Crops in Four Districts of Western Shoa Zone. <i>Solomon Tamiru and Hirut Getachew*</i>	Ab – Initio Investigation Of Structural And Electronic Properties Of A – Sn And B – Sn Using DFT <i>Mbae Jane Kathure^{1*}, Micheni Morris¹, Gitonga Eunice¹, Kamweru Paul¹, Muthui Zipporah¹</i>
12.00pm– 12.15pm	Low pass filter linked frequency sensitive ear muffs <i>Ann Mwikali</i>	<i>Length Weight Relationship And Relative Condition Factor Of Smooth Head Catfish, Clariasiocephalus (Boulenger 1898) From University Of Eldoret Reservoir, Kenya</i> <i>Wanderi, E., W^{1*}, Barasa, J.,¹m.O.F.,¹olendi, R.,¹raburu, P.O.,¹ronoh, E. K².</i>	Electronic and Structural Investigation of α -B and β -B Using Density Functional Theory (DFT) <i>Gitonga Eunice^{1*}, MbaeJane¹, MuthomiMorris¹, PaulKamweru, and Muthui Zipporah¹</i>
12.15pm– 12.30pm	Benchmark numerical solutions for complex fluids governed by the Rolie-Poly constitutive model <i>Jade Abuga</i>	Electronic Waste Management In Nakuru Municipality, Kenya: An Environmental Health Risk. <i>Muoria E. W. ¹, Moturi W.N. ², Ndiritu F. G. ³</i>	Effects of seasonal variation on accumulation of anthocyanins and catechins content in <i>Camellia sinensis</i> (L.) O. Kuntze in Kenyan cultivars. <i>L.C .Cheptol^a, L.G .Matasyoh^a, R.M.Chalo^b, T.K. Martin^b</i>
12.30pm– 12.45pm	Factors Militating Against Wide Adoption Of Innovative Materials And Technologies For Housing Development In Nigeria <i>Opoko, Akunnaya Pearl</i>	Environmental drivers of nematode distribution in Kenyan sweet potato fields <i>*Hannah Karuri, EditahNjeri, Marciano Mutiga</i>	Ethylene Glycol (EG)@Based Nanofluids as A Coolant For Automotive Radiator Winifred Nduku Mutuku

12.45pm– 1.00pm	Inheritance of Resistance In Sorghum To The Spotted Stem Borer, (Swinhoe) (Lepidoptera; Crambidae) <i>P. W. Muturi</i> ^{*1} and <i>M. Mgonja</i> ²		
1.00pm– 2.00 pm	LUNCH BREAK		
VENUE	MAIN THEATER		
Chair Rapporteur/ Time keeper	Dr Lexa Gomezgani Elizabeth Muoria		
2.00pm– 3.00 pm	<i>Accessing E-Resources (online journals and books).....icipe librarian</i>		
3.00pm– 3.30 pm	<i>International Science Council Regional Office for Africa Science Plans Dr Richard L. K. Glover</i>		
AFTERNOON BREAK OUT SESSIONS			
VENUE	THEATRE I	THEATRE II	THEATRE III
SUB THEME	Science, Technology & Innovation For Development	Climate Change, Global Warming & Environment	Role of research and scientific community in the achievement of SDG's
Chair	Dr Salinah Rono	Dr Emily J. Chemoiwa	Dr Joyce Kiplimo
Rapporteur	Lucy Mureithi	Ruth Chepkirui	Jane Mugwe
3.30pm– 3.45pm	Haematological Parameters In Cattle Kept Under Natural Free Range Management In Kerio Valley, Kenya <i>Ngetich Emmily, NgwenaMagak Gideon and Ngeiywa Moses.</i>	Reducing the effects of Travel Carbon footprints on the environment through improved Agricultural productivity: A Review ^{1*} <i>Funmilayo O. Bamigboye</i> and ² <i>Emmanuel O. Ademola</i>	Influence Of Co-Educational Secondary School Gender Streamed Classes On Mathematics Teachers Classroom Practices In Four Counties Of Kenya. <i>Anne C. Barmao</i>
3.45pm– 4.00pm	Numerical Range For Finite Linear Operators In Banach Spaces <i>*Priscah Ohuru</i>	Elucidating Factors Underpinning Technology Adoption And Benefits Among Targeted Communities; Lessons From Ecosystem Alliance Promoted Interventions In Uganda <i>Priscilla Nyadoi¹, Laster Stoney Ogola¹, Teddy Namirimu¹, Nicholas K²., Rajab Bwenjye²., Frank Muramuzi², Micheal Busingye³ And, Dickens, Kamugisha³</i>	Research For Sustainable Development In Africa: Challenges And Implications <i>Mandillah K.L Lucy¹; Kadima D Zablou²</i>
4.00 pm – 4.15 pm	Co-Infection Of HIV And Malaria Parasites Among Pregnant Women In Owerri Imo State <i>Orji, N.M^{*1}, Okongwu, L.E¹.And Kamalu,A.N²</i>	Population, The Environment And The Implication On Climate Change <i>*Sale, F. A.</i>	Evaluation Of Genotypes And Cyto-Immunological Profiles In Human Papillomavirus And Human Immunodeficiency Virus Co-Joint Infections Among Women Attending Kisii Teaching And Referral

			Hospital, Kenya Lucy Karani * ¹ , Dr. Anthony Kebira ² , Dr. Benson Nyanchongi ¹ And Dr. Stanslaus Musyoki ¹
4.15pm– 4.30pm	Ab-initio investigation of the half metallic gap of X ₂ VAI (X = Co, Mn) Heusler Compounds Zipporah Muthui ^{1,2} , Robinson J. Musembi ¹ , Julius M. Mwabora ¹ , and Arti Kashyap ²	Evaluation of use of Green Products to minimize impact on the environment Ruth Chepkirui Kosgei	Improving Agricultural Productivity Through Effective Teaching Of Agriculture Science To Girls In Secondary School Mary M. Waiganjo
4.30pm– 4.45 pm	Antibiotic Susceptibility and Clinical outcomes of in-vitro assays against Diarrheagenic agents from Children at Moi Teaching & Referral Hospital, Kenya Rono Salinah J. *, Kakai Rose ² , Esamai Fabian ³	Influence Of Land Use And Riparian Conditions On The Food Composition Of Fresh Water Crabs Of Nzoia River Basin Emily J. Chemoiwa ^{1*} Edith J. Kibet ¹ , Frank Masese ²	Circulatory Cytokine Profiles As Predictive Biomarkers Of HIV And AIDS Progression In HIV Positive Patients Jane N. Mugwe ¹ , Michael Gicheru ² And Joseph Mwatha ³
4.45pm– 5.00pm			Phytochemistry Of The Kenyan <i>Vepris</i> And Their Biological Activities. Joyce J. Kiplimo ^a , Md. Shahidul Islam ^b And Neil A. Koobanally ^c
5.00pm– 5.30 pm	TEA BREAK		
5.30pm– 6.30 pm	NETWORKING		
6.30pm– 8.30pm	WELCOME RECEPTION – ICEPE TERRACE Dr Salinah Rono, Christine Njue, and Eunice Muriithi		
CONFERENCE DAY TWO THURSDAY 6TH SEPTEMBER, 2018			
VENUE	OUTSIDE MAIN THEATRE		
8.00am– 9.00am	REGISTRATION: In-Charge – Dr Anne Barmao & Dr Clare Muhanji		
VENUE	MAIN THEATRE		
Chair Rapporteur/ Time keeper	Dr Florence Kamonjo Mary Waiganjo		
9.00 am– 9.05 am	Call for Order and Housekeeping - Chair		
9.05am – 9.30am	Etiquette in communication OWSD		
9.30am– 10.00am	icipe’s Capacity Building programme Dr Rob Skilton		
10.00am –	Tea Break, Exhibition, networking		

10.30am			
VENUE	THEATRE I	THEATRE II	THEATRE III
SUB THEME	Science, Technology & Innovation for development	Role of research and scientific community in the achievement of SDG's	Implementing strategies to address science and technology issues in Africa
CHAIR	Prof. Elizabeth Njenga	Dr Grace Ndeke	Rose Nyambura
Rapporteur	Eunice Muriithi	Pamella K. Kilavi	Christine Njue
10.30am– 10.45am	Application of Additive Manufacturing for Improved Thermal Management of Hot Sheet Metal Forming Tools <i>*¹R Muvunzi, DM Dimitrov, S Matope</i>	HIV/AIDS Prevention and Care Awareness: The Response amongst Youth Corpers' and Young People in Nigeria <i>*¹Ofor, M.O., ¹Okwu, G.N. and ²Ben-Chendo, G.N.</i>	The Role Of Science Academies In Strengthening The National System Of Innovation (NSI) <i>Phyllis Kalele*</i>
10.45am– 11.00 am	Effect of Fungal Infection on the Anatomical Integrity of Cells of Some Selected Tubers (<i>Colocasia esculenta, Dioscorea alata</i> and <i>Ipomoea batatas</i>) <i>*¹Samuel, T.O., ²Ebabhi, A. M. AND ¹Kadiri, A.B</i>	Investigations of Experiential Cooperative Concept Mapping Instructional Approach (ECCA) on Secondary School Girls' Achievement in Physics <i>Patriciah W. Wambugu*</i>	Communicating Observational Skill To Secondary School Chemistry Students' In Nigeria Through Explanations And Integration Of Ideas <i>Ngozi Okafor*</i>
11.00am- 11.15am	Effect of insect pest management under push-pull cropping system on maize ear rots and associated mycotoxins in Western Kenya <i>N. K. Njeru^{1,2*}, C. A. O. Midega², J. W. Muthomi¹, M. J. wagacha³, Zeyaur R. Khan²</i>	Assessment of Production System, Resource availability and Poverty Status of Cassava Farmers in Imo State. <i>Osuji M.N¹, Ben-Chendo G.N², Oshaji I.O³, Nwashiole .B.N⁴, Ejtogu, C.C⁵</i>	Building Women Capacity In Science, Technology, Engineering And Mathematics (Stem) Through Mentoring: Implications On Primary Education In Nigeria <i>Bernadette A. Ezeliora, Teresa U. Okafor And Regina Obiadazie</i>
11.15am- 11.30am	Bamboo Fibre Composites: A Suitable Alternative to Plastics <i>Mwangi Leah Wanjiru</i>	Factors Influencing Level Of Customer Satisfaction As A Result Of Rebranding: A Case Study Of Kenya Power – Nakuru <i>Purity Kimani*</i>	Effect Of Using Mastery 5e Learning Cycle Aproach On Students' Academic Achievement And Motivation In Chemistry <i>Cherotich Ednah¹ And Grace .C. W.Ndeke¹</i>
11.30am- 11.45pm	Changes In Anthropometric Indices And Lipid Profile Of Hiv, Diabetic And Diabetic-Hiv Patients In Owerri, Nigeria. <i>*Emejulu, A.A.,¹ Onwuliri, V. A.,¹ Ojiako, O. A.,¹ Nwaoguikpe, R. N. ¹and Akamnonu, O.A.²</i>	Creating Shared Value in communities at the Base of the Pyramid in Sub-Saharan Africa <i>¹ZJ Chihambakwe, ¹GA Oosthuizen, ¹S Matope</i>	Creativity Level In Chemistry Education By Gender Among Secondary School Students In Kenya <i>^{1*} Kamonjo W. Florence</i>
11.45pm- 12.00pm	Innovation in transportation and storage of fresh fruits and vegetables for reduction in postharvest losses in Nigeria: Case study Lagos State. <i>Egobude U. Okonkwo*¹, Adaora N. Osegbo¹, Olusola B. Benson¹, Isaac Ambee¹, Patricia</i>	Incidence of <i>Trichomonas vaginalis</i> among pregnant women attending ante-natal clinic at Obio Cottage Hospital, Trans Amadi Industrial Layout, Port Harcourt, Rivers State <i>*Uchechi N. Ekwenye and Beatrice C. Anyanwu</i>	Effects of Experiential Learning Approach on Students Mathematical Creativity by Gender in Kericho East Sub County, Kenya <i>*Chesimet, M C.</i>

	<i>O. Pessu² and Olufemi Peters²</i>		
12.00pm- 12.15pm	Development And Performance Evaluation Of An Energy-Saving Briquette Stove <i>Isabel Musula Matasyoh</i>	Bioefficacy Of Organic Extracts Of Fish Poison Bush (<i>Gnidia Glauca</i> , Fresen) Against Cowpea Weevil (<i>Callosobruchus Maculatus</i> , Fabricius) <i>Wilhelmy Marion Jebet*</i>	Effective Implementation of strategies to Address Science and Technology (ST) Issues in Africa <i>Okafor, Blessing I.¹ & Osuafor, Abigail M.²</i>
12.15pm- 12.30pm	Traditional Probiotic Foods And Their Health Benefits In Kenya <i>J. Karuku^a, L.G. Matasyoh^a</i>	Optimal Split-Plot Design For Mixture-Process Experiments: An Application To Diabetes Mellitus Herbal Treatment <i>Gladys Gakenia Njoroge*</i>	Women Scientists As Role Models: Forging Forward With The Girl-Child Education Agenda In Africa <i>Christine Njue and Eucharika Kenya.</i>
12.30pm- 12.45pm	Clarification of Pear (<i>Pyrus communis</i>) Juice with Pectinase obtained from <i>Aspergillus niger</i> <i>*Ajayi, A.A., Salubi, A.E., Lawal, B., Onibokun, A.E., Olasehinde, G.I.</i>	Application of Total X-Ray Fluorescence in Assessing Trace Elements levels in Formulated Indigenous Complementary Infant Flour from Kenya <i>P. K. Kilavi</i>	Social Impediments to Women Engineers Participation in Engineering Workplaces in Selected Organizations in Nakuru County <i>Rhoda Kipkebut</i>
12.45pm- 1.00pm	Why Study Medicinal Plants? <i>Elizabeth W. Njenga¹* Alvaro Viljoen² and Sandy Van Vuuren³</i>	Students' Perception of the Influence of Instructors' Non Verbal Communication on Their Uptake of Science, Technology, Engineering and Mathematics Related Courses. <i>Anne Barmao and Grace Ndeke</i>	Students' Self- Perception And Relationship With Achievement In Biology Among Secondary School Students In Nakuru County, Kenya. <i>Nyambura Rose*</i>
1.00pm– 2.00 pm	LUNCH BREAK		
	Excursion – Kenya National Museum, ride through Nairobi town (Optional) Elizabeth Muoria, Dr Lydia Gachahi, Dr Zipporah Wanjiku		
	CONFERENCE DAY THREE FRIDAY 7TH SEPTEMBER, 2018		
VENUE	OUTSIDE MAIN THEATRE		
8.00am- 9.00am	REGISTRATION: In-Charge Dr Gladys Njoroge & Dr Grace Ndeke		
VENUE	MAIN THEATRE		
Chair Rapporteur/ Time keeper	Dr Emily Chemoiwa Dr Winnie Mutuku		
9.00am – 9.05am	Call for Order and Housekeeping - Chair		
9.05am– 10.05am	Balancing career with family – Panel Dr Gladys Njoroge, Dr Lexa Gomezgani, Lucy Mureithi, 2 guests.		
10.05am – 10.30 am	Plenary Session Q/A		
10.30 am –	Tea Break, Exhibition, networking		

11.00 am	
Chair Rapporteur/ Time keeper	Dr Zipporah Wanjiku Dr Joyce Kiplimo
11.00am– 12.00 pm	Female boss syndrome – Panel Prof. Elizabeth Njenga, Prof. Eucharika Kenya, Dr Patricia Wambugu, Prof Olubukola Babalola, 1 guest
12.00pm– 12.20 pm	Plenary Session Q/A
12.20pm– 1.00 pm	OWSD –Kenya History
1.00 pm – 2.00 pm	LUNCH BREAK
2.00p.m – 4.00 pm	OWSD 25th Anniversary Celebration Activities <ul style="list-style-type: none"> • OWSD Coordinator – About OWSD • OWSD Secretariat – How to join OWSD • OWSD Alumni & Fellows- My story
4.00pm– 4.30 pm	Tea Break
4.30 p.m- 6.00 pm	Move to venue of Launch
6.30p.m.– 10.00 p.m	OWSD 25 th Anniversary Celebration and Launch of OWSD- Kenya