

## Managing Resources Through Chemistry: Wealth not Waste

University of Nairobi, Chiromo Campus, Nairobi, Kenya

6-8<sup>th</sup> November 2018

Tuesday 6<sup>th</sup> November 2018

9.00	Registration open (Coffee available from 9.30 am)
10.30	<p><u>Opening Ceremony</u>  <i>Chair: Jacob Midiwo, PACN Chair, Kenya</i></p> <p>10.30 - David Rees, Astex Pharmaceuticals and Royal Society of Chemistry, UK            10.40 - Susie Kitchens, British Deputy High Commissioner for Kenya            10.50 - Catherine Lukhoba, NAPRECA            11.00 - Leonard Gitu, Kenya Chemical Society, Kenya            11.10 - John Onyari, Chairman, Department of Chemistry, University of Nairobi, Kenya            11.20 - Christopher Nyamai, Dean, School of Physical Sciences, University of Nairobi            11.30 - Bernard Aduda, Principal, College of Biological and Physical Sciences, Uni of Nairobi, Kenya</p>
11.45	Conference photograph for all delegates
	<p>SESSION 1: <u>Green Chemistry: Environmentally Sustainable Practices</u>  <i>Chair: Dulcie Mulholland University of Surrey, UK</i></p>
12.00	<p><b>Green Chemistry and Sustainable Development Goals: Exploiting Unavoidable Food Supply Wastes for Re-nutrition</b>            Avtar Mathuru  <i>University of York, UK</i></p>
12.30	<p><b>New Bioplastics from Iron Weed (<i>Vernonia Galamensis</i>): A supercritical approach</b>            Yonas Chebude  <i>Addis Ababa University, Ethiopia</i></p>
13.00	<p><b>Biochemical catalyst in anaerobes: Untapped Novel energy conserving mechanisms for enhancing Biofuels and biogas productions in anaerobic reactors</b>            Samuel Muturi  <i>University of Eldoret, Kenya</i></p>
13.20	LUNCH
14.20	<p><b>Transformation of waste biomass into platform chemicals and bio-fuels: The role of catalysts and green approaches to the chemicals transformations</b>            Gershon Amenuvor  <i>University of Johannesburg, South Africa</i></p>
14.40	<p><b>Potential of Green Nanotechnology in Kenya</b>            Naumih M. Noah  <i>United States International University Africa, Kenya</i></p>
15.10	<p><b>Cashew nut shell in the production of value-added eco-friendly products and sustainable energy applications</b>            Sixberth Mlowe  <i>University of Dar es Salaam, Tanzania</i></p>

15.30	COFFEE BREAK
16.00	<b>Anthocyanins as green indicators of end points in acid – base titrations</b> Robert Byamukama <i>Makere University, Uganda</i>
16.30	<b>The Pan Africa Chemistry Network</b> Aneesa Ahmed <i>Royal Society of Chemistry, UK</i>
17.00	Flash Presentations: <b>Greener approaches to remediation of food contamination</b> Alemayehu Washe <i>Hawassa University, Ethiopia</i> <b>Environmentally Benign Extraction Processes in Analytical Separation of Essential Oils</b> John Kiratu <i>University of Embu, Kenya</i> <b>Biosynthesis of gold and silver nanoparticles using Kenyan medicinal plants and their antibacterial activity</b> Jackson Kilonzo <i>Kenyatta University, Kenya</i>
17.30	PANEL DISCUSSION – all speakers from this session
18.00	Poster Session and Drinks Reception for all delegates
19.45	Speakers Dinner (for speakers and invited guests only)

Wednesday 7<sup>th</sup> November 2018

	SESSION 2: <u>Waste Reduction, Capturing and Recycling</u> <i>Chair: David Rees, Astex Pharmaceuticals and Royal Society of Chemistry</i>
9.00	<b>Potential for Chitosan Recovery from Crustaceans Wastes in East African Coast</b> Agatha Wagutu <i>Mwenge Catholic University, Tanzania</i>
9.20	<b>The challenges of managing plastic waste in Zambia</b> Kenneth Maseka <i>Copperbelt University, Zambia</i>
9.50	<b>The three fates of air pollution: Tales of organic and black carbon</b> Delphine Farmer <i>Colorado State University, USA</i>
10.20	<b>Synergising International Research Studies into the Environmental Fate and Behaviour of Toxic Organic Chemicals in the Waste Stream (INTERWASTE)</b> Stuart Harrad <i>University of Birmingham, UK</i>
10.50	COFFEE BREAK
11.20	<b>Distribution of activity of carbonic anhydrase in typical basins and its significance in carbon sinks</b>

	Sila Onesmus Nzung'a <i>Technical University of Kenya, Kenya</i>
11.40	<b>Electronic Waste Recycling in Ghana and Interventions to Reduce its Impact on Human Health and Environment</b> Kwadwo Ansong Asante <i>CSIR Water Research Institute, Ghana</i>
12.00	<b>Towards a Cleaner Environment in Nigeria: An Assessment of the Status of Use, Regulation and Management of Chemicals and Waste in Nigeria</b> Chukwuemeka Isanbor <i>University of Lagos, Nigeria</i>
12.20	Flash Presentations: <b>Application of microbial fuel cells in the degradation of 2,4,5,6-tetrachloroisophthalonitrile (Chlorothalonil)</b> James Kamau <i>University of Nairobi, Kenya</i> <b>Electricity Generation From Septic Waste Water Using Septic Tank As Microbial Fuel Cell</b> Ihesinachi Kalagbor <i>Ken Saro-Wiwa Polytechnic, Nigeria</i> <b>Polyethylene and Polyvinylchloride Wastes as Adsorbents for the Sorption of Pb<sup>2+</sup> from Aqueous solution</b> Ikechukwu Ejidike <i>Vaal University of Technology, South Africa</i>
12.50	PANEL DISCUSSION – all speakers from this session
13.20	LUNCH
	SESSION 3: <u>Sustainable Management of Plastic Waste: The Case of Kenya</u> <i>Chair: Dr Geoffrey Otieno, Kenya Chemical Society</i>
14.20	<b>Management of plastic waste in urban Kenya – Niche innovations in production and recycling.</b> Leah Oyake-Ombis <i>University of Nairobi, Kenya</i>
15.10	<b>Catalytic conversion of post-consumer polyethene wastes and fractionation to substitute petrol and diesel fuels for automobile use in Kenya</b> Jane Mburu <i>Jomo Kenyatta University of Agriculture and Technology, Kenya</i>
15.30	<b>Managing Plastic Waste at the Kingtom dumpsite in Freetown and elsewhere in Sierra Leone</b> Ronnie Frazer-Williams <i>University of Sierra Leone, Sierra Leone</i>
15.50	COFFEE BREAK
16.20	<b>Sustainable recycling of waste plastics into Plastic Composite Materials for construction industry applications in developing countries</b> Alex Kumi-Larbi Jnr <i>Imperial College, UK</i>

16.50	<b>Title TBC</b> Francis Kihumba <i>Ministry of Environment, Government of Kenya, Kenya</i>
17.20	<b>Africa's role in the Global 100 Plastic Rivers Network</b> Holly Nel <i>University of Birmingham, UK</i>
17.50	<b>Chemistry for Drug Discovery</b> David Rees <i>Astex Pharmaceuticals and Royal Society of Chemistry, UK</i>
18.20	<b>The Royal Society of Chemistry's Local Section in Nigeria</b> Chukwuemeka Isanbor <i>University of Lagos, Nigeria</i>
18.30	PANEL DISCUSSION – all speakers from this session
19.00	Congress dinner for all delegates who registered online in advance (Venue: University of Nairobi)

Thursday 8<sup>th</sup> November 2018

	<b>SESSION 4: <u>Biomaterials and Natural Products</u></b> <i>Chair: Prof John Onyari, University of Nairobi, Kenya</i>
9.00	<b>(2R,5S)-Theaspirane Identified from Banana Leaves and Palm wine Extract for Integrated Pest Management of Banana Weevil, <i>Cosmopolites s.</i>, on Smallholder farms</b> Samson Abagale <i>University for Development Studies, Ghana</i>
9.20	<b>Rotenoids from East African Plants–Structure, Stereochemistry and Biological Activity</b> Abiy Yenesew <i>University of Nairobi, Kenya</i>
9.50	<b>Compounds from Wild Mushrooms with Anti-tumor Potential</b> Alice Njue <i>Egerton University, Kenya</i>
10.10	COFFEE BREAK
10.40	<b>Extraction &amp; Characterisation of Volatile Compounds from the Essential Oils of <i>Sida Acuta</i> Burm. f. Leaves &amp; their Larvicidal Activity against Malaria Vectors</b> Isaac Njoku <i>University of Lagos, Nigeria</i>
11.00	<b>Lead Compounds from African and European Plants: From Discovery to Commercialization</b> Dulcie Mulholland <i>University of Surrey, UK</i>
11.30	<u>Flash Presentations:</u> <b>Anti-inflammatory and Cytotoxic Phytochemicals from <i>Lannea rivae</i> and <i>Lannea Schweinfurthii</i></b> Souaibou Yaouba <i>University of Nairobi, Kenya</i>

	<p><b>A novel anthocyanidin with C-ring methoxylation from pink-mauve flowers of <i>Erlangea tomentosa</i> (Asteraceae) as a potential functional food and nutraceutical</b></p> <p>Christopher Adaku <i>Mbarara University of Science and Technology, Uganda</i></p> <p><b>From waste to wealth: Switenia mycrophylla gum, a new gum, for commercial explorations (synthesis, purification, characterization and utilization)</b></p> <p>Olusola Adeyanju <i>University of Jos, Nigeria</i></p>
12.00	<p><b>Research4Life Training</b></p> <p>Angeline Djampou <i>United Nations Environment Programme, Kenya</i></p>
12.30	PANEL DISCUSSION – all speakers from this session
13.00	Lunch
14.00	TBC
14.30	Closing Ceremony and Poster Prize Awards
	CLOSE

#### Research4Life Training Session:

15.00	<p>Led by Angeline Djampou, <i>United Nations Environment Programme, Kenya</i></p> <p>Research4Life provides access to up to 85,000 peer-reviewed international scientific journals, books, and databases from up to 175 world's leading science publishers, and counts more than more than 8700 registered institutions in over 115 countries and territories.</p> <p>This now includes the entire journal portfolio from the Royal Society of Chemistry.</p> <p>During the Pan Africa Chemistry Network Congress 2018, participants will have an overview of the scientific resources available on the five programmes' portals. They will learn how to browse, search, download and save/print the resources. They will also learn about the eligibility criteria and process that they can begin to use the resources as soon as their institution's registration is processed.</p>
-------	---